FIVE TOWNS DRAINAGE IMPROVEMENTS: INWOOD AND WOODMERE PROJECTS TOWN OF HEMPSTEAD

Environmental Review Record

U.S. Department of Housing and Urban Development
New York State Homes and Community Renewal
New York State Governor's Office of Storm Recovery

December 2, 2019

Five Towns - Inwood and Woodmere Drainage Improvement Projects

Environmental Review Record

December 2, 2019

Project Name:	Five Towns - Inwood and Woodmere Drainage Projects
Project Location:	Hamlets of Inwood and Woodmere, Town of Hempstead, Nassau County, NY
Federal Agency:	US Department of Housing and Urban Development
Responsible Entity:	New York State Homes and Community Renewal (HCR) Governor's Office of Storm Recovery
Responsible Agency's Certifying Officer	Lori A. Shirley, Certifying Officer Governor's Office of Storm Recovery 38-40 State Street, Hampton Plaza Albany, New York 12207 (518) 474-0755 Lori.Shirley@nyshcr.org
Project Sponsor: **Primary Contact:**	Town of Hempstead Douglas L. Tuman, P.E., Commissioner 350 Front Street Hempstead, NY 11550 (516) 812-3484 dtuman@tohmail.org

Project NEPA Classification: **24 CFR 58.35 (a) Categorical Exclusion Subject to 58.5**

Certification	The undersigned hereby certifies that New York State Homes and Community Renewal has conducted an environmental review of the project identified above and prepared the attached environmental review record in compliance with all applicable provisions of the National Environmental Policy Act of 1969, as amended (42 USC Sec. 4321 et seq.) and its implementing regulations at 24 CFR Part 58.	
Signature	Lori A Shirley _____ Lori A. Shirley, Certifying Officer, Director, Bureau of Environmental Review and Assessment, GOSR	
Date	December 2, 2019	
Environmental Review Prepared by:	CSA Group, PC 55 Broadway New York, New York 10006	GOSR 500 Bi-County Blvd. Farmingdale, NY 11735

CERTIFICATION OF NEPA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activities proposed in its 2017 NYS CDBG-DR project, Five Towns - Inwood and Woodmere Drainage Projects are:

Check the applicable classification.

☐ Exempt as defined in 24 CFR 58.34 (a).

☐ Categorically Excluded as defined in 24 CFR 58.35(b).

☐ Categorically Excluded as defined in 24 CFR 58.35(a) and no activities are affected by federal environmental statues and executive orders [i.e., exempt under 58.34(a)(12)].

☒ Categorically Excluded as defined in 24 CFR 58.35(a) and some activities are affected by federal environmental statues and executive orders.

☐ "Other" neither exempt (24 CFR 58.34(a)) nor categorically excluded (24 CFR 58.35).

☒ Part or all of the project is located in an area identified as a floodplain or wetland. For projects located in a floodplain or wetland, evidence of compliance with Executive Orders 11988 and/or 11990 is required.

For activities excluding those classified as "Other", attached is the appropriate Classification Checklist (Exhibit 2-4) that identifies each activity and the corresponding citation.

Lori A Shirley

Signature of Certifying Officer

December 2, 2019

Date

Lori A. Shirley

Print Name

Certifying Environmental Officer

Title

NEPA CLASSIFICATION CHECKLIST FOR
CATEGORICALLY EXCLUDED ACTIVITIES [24 CFR 58.35(a)]

☒ Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and improvements (other than buildings) when the facilities and improvements are in place and will be retained in the same use without change in size or capacity of more than 20 percent (e.g., replacement of water or sewer lines, reconstruction of curbs and sidewalks, repaving of streets).

☐ Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and handicapped persons.

☐ Rehabilitation of buildings and improvements when the following conditions are met:

(i) In the case of a building for residential use (with one to four units), the density is not increased beyond four units, and the land use is not changed;

(ii) In the case of multifamily residential buildings:

a. Unit density is not changed more than 20 percent;
b. The project does not involve changes in land use from residential to non-residential; and
c. The estimated cost of rehabilitation is less than 75 percent of the total estimated cost of replacement after rehabilitation.

(iii) In the case of non-residential structures, including commercial, industrial, and public buildings:

a. The facilities and improvements are in place and will not be changed in size or capacity by more than 20 percent; and
b. The activity does not involve a change in land use, such as from non-residential to residential, commercial to industrial, or from one industrial use to another.

☐ An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units can be four one-unit buildings or one four-unit building or any combination in between. (This does not apply to rehabilitation of a building for residential use).

☐ An individual action on a project of five or more housing units developed on scattered sites when the sites are more than 2,000 feet apart and there are not more than four housing units on any one site. (This does not apply to rehabilitation of a building for residential use).

☐ Acquisition (including leasing) or disposition of, or equity loans on an existing structure, or acquisition (including leasing) of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.

☐ Combinations of the above activities.

Lori A Shirley

Signature of Certifying Officer

December 02, 2019
Date

Lori A. Shirley
Print Name

Certifying Officer
Title

CERTIFICATION OF SEQRA CLASSIFICATION

It is the finding of the New York State Housing Trust Fund Corporation that the activities proposed in its 2019 NYS CDBG-DR project, Five Towns - Inwood and Woodmere Drainage Projects constitute a:

Check the applicable classification:

- ☐ Type I Action (6NYCRR Section 617.4)
- ☒ Type II Action (6NYCRR Section 617.5)
- ☐ Unlisted Action (not Type I or Type II Action)

Check if applicable:

- ☐ Environmental Impact Statement (EIS) Prepared
  - ☐ Draft EIS
  - ☐ Final EIS

Lori A Shirley

Signature of Certifying Officer

December 02, 2019

Date

Lori A. Shirley

Print Name

Certifying Officer

Title

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**
The Town of Hempstead is proposing improvements to its existing stormwater drainage system within the hamlets of Inwood and Woodmere in Nassau County, New York (Figure 1). The proposed project within the hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet (NAVD 88): Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive (Figure 2). Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property (see attached Inwood Drainage Improvements Site Plans).

Proposed stormwater drainage improvements within the hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere (Figure 2). The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property (see attached Woodmere Drainage Improvements Site Plans).

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:
The storm surge created by Hurricane Sandy caused significant stormwater back-up in the Five Towns Community, including Inwood and Woodmere. The south shore of New York City and western Long Island experienced record-high water elevations, as these areas were to the immediate right of the storm's center of circulation as it made landfall. Widespread record coastal flooding occurred in Lower New York Bay, Jamaica Bay, and the western bays along southern Nassau County. The peak water levels recorded at all stations in these areas also exceeded the Federal Emergency Management Agency (FEMA) 100-year base flood elevations. In all cases, the peaks from Sandy surpassed anything documented previously in Inwood and Woodmere, including the Oct. 31, 1991 and Dec. 11, 1992 storms and Hurricane Irene. The purpose of the project is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Project is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage disrupting ingress and egress areas. The Proposed Project would also provide for better access for emergency vehicles during and after flooding events.

Existing Conditions and Trends [24 CFR 58.40(a)]:
The project area roadways in Inwood mainly serve residential dwellings. The west end of Bayswater Boulevard leads to the Inwood Marina, owned by Town of Hempstead; and the north end of Peppe Road is the entrance to the Inwood Country Club. All areas within the work limits are zoned as C- Residential

with the exception of the west end of both Davis Avenue and Bayswater Boulevard which are both zoned as Industrial. The roads within the work limits are fully developed and occupied, with the exception of a grass athletic field on Bayswater Boulevard in-between Peppe Road and Chestnut Road. The current terrain within the work limits is flat with no major wooded areas. The western end of the work limits border along the Motts Basin which makes its way to the Atlantic Ocean.

The existing stormwater management system for the three project areas in Woodmere relies on positive drainage that collects surface runoff and conveys it to various outfalls located around Cedar Point Lake. The elevation of the surface water is controlled by tide gates and a pump station that maintains the elevation of the surface water of the Lake. Under extreme rainfall events, these control mechanisms can become overwhelmed and the elevation of the lake rises. This increase in the surface water elevation has led to flooding in the streets within the project area in Woodmere. This trend will continue based on current climate models and sea level rise and will only worsen as extreme weather events become more common. The proposed infrastructure improvements will help mitigate and moderate these worsening conditions.

Standard Conditions for All Projects

Any change to the approved scope of work will require re-evaluation by the GOSR Environmental Certifying Officer for compliance with the National Environmental Policy Act (NEPA), State Environmental Quality Review Act (SEQRA) and other laws and Executive Orders.

This review does not address all federal, state, and local requirements. Acceptance of federal funding requires the recipient to comply with all federal state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding

Funding Information

Estimated Total HUD Funded Amount: $6,723,000.00

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:** $6,723,000.00

Compliance with 24 CFR 58.5 and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	Based on guidance provided by the Department of Housing and Urban Development (HUD) in Fact Sheet #D1, the National Plan of Integrated Airport Systems was reviewed for civilian, commercial service airports within the vicinity of the project sites. No known civil airports are located within 2,500 feet and no known military airports are located within 15,000 feet of the project site (see **Appendix A, Figure 11)**. No impacts would result. https://www.michigan.gov/documents/mshda/mshda_cd_nsp2_air_accident_315724_7.pdf
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The project site is not located within a coastal barrier resource area (see **Appendix A, Figure 5**). Therefore, a consistency determination is not required. http://www.fws.gov/ecologicalservices/habitatconservation/cbra/Maps/index.html
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	Based on the review of the FEMA Flood Insurance Rate Maps (FIRM Panels 36059C0213G and 36059C0214H, effective September 11, 2009), the project sites are situated within the 100-year floodplain (see **Appendix A, Figure 3)**. However, flood insurance is not required for the project. No further analysis is required. https://www.fema.gov/flood-mapping-products
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	The proposed project is located in Nassau County, which is within a maintenance area for inhalable particulate matter (PM2.5) and carbon monoxide, a marginal non-attainment area for the eight-hour Ozone standard and considered an area source for hazardous air pollutants (HAPs) emissions.

		The Proposed Project involves the implementation of storm water drainage improvements as well as roadway reconstruction. Delivery of construction materials, installation of devices as well as roadway reconstruction would require the use of heavy equipment and trucks. Thus, temporary emissions from construction equipment may have the potential to impact air quality. To comply with the requirements of 40 CFR 93, Subpart B (federal general conformity regulations), a screening study for the Proposed Project was conducted. The screening study utilized the assumption that the emission intensity per expenditure (tons per dollar) for the Proposed Project would be similar to the average intensity of the construction sector in Nassau County. Projects with projected construction expenditure substantially lower than the average construction *de minimis* expenditure would clearly not exceed *de minimis* emissions levels for general conformity purposes. Utilizing construction expenditure data published by the U.S. Census along with construction emission data for Nassau County published by the NYSDEC, the construction expenditure threshold for Nassau County is $410 million. This number must be exceeded before any project may be expected to exceed the *de minimis* thresholds requiring further analysis or conformity determination. The estimated construction cost of the project is approximately $6,723,000 which is far below the $410 million threshold; therefore, the Proposed Project would not require further analysis for conformity determination. Following construction, the Proposed Project would not generate any increase in traffic. Therefore, no significant impacts on air quality due to vehicular traffic would occur. Operation of the Proposed Project would not result in any major new stationary source of air pollutants. The project would not adversely affect the State Implementation Plan (SIP). No significant impacts on air quality would occur. http://www.epa.gov/airquality/greenbook/adden.html http://www.epa.gov/region1/rice
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☒ No ☐	The majority of the project area is contained within previously disturbed ROWs located within the boundary of the New York State Coastal Zone. (See **Appendix A**, **Figure 4**). The Town of Hempstead does not have a Local Waterfront Revitalization Program (LWRP). A New York State Coastal Consistency

		Assessment form and supporting documentation was submitted to the New York State Department of State (NYSDOS) on September 23, 2019. On September 30, 2019, the NYSDOS concurred with GOSR's assessment that the proposed project was consistent with the State Coastal Zone management policies (see **Appendix B**). http://www.dos.ny.gov/opd/atlas/ http://www.nyc.gov/html/dcp/html/wrp/wrpcoastalmaps.shtml
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☐ No ☒	The project sites are not listed on a U.S. Environmental Protection Agency (EPA) Superfund National Priorities or CERCLA List, or equivalent State list, located within 3,000 feet of an active toxic or solid waste landfill site (see **Appendix A, Figure 6)**. However, several EPA and NYSDEC listed facilities are situated within 3,000 feet of the project site. A Contamination and Toxic Substances Supplemental Report detailing the location and potential for contamination to the Subject Properties is available as **Appendix C**. The Proposed Project is located in Radon Zone 3 which is predicted to have average indoor radon screening levels less than 2 pCi/L, (or low concentration potential) for radon. Since the Proposed Project does not involve construction of indoor facilities, radon mitigation measures are not necessary. To summarize, the Proposed Project would not result in the exposure of people or sensitive environmental resources to facilities identified in the environmental databases. http://www.dec.ny.gov/chemical/8437.html http://nepassisttool.epa.gov/nepassist/entry.aspx
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	Review of the USFWS IPaC database system (accessed September 23, 2019) indicates three avian species with the potential to occur near the project vicinity: piping plover *(Charadrius melodus),* red knot *(Calidris canutus rufa),* and roseate tern *(Sterna dougallii dougallii).* In addition, the FWS indicates the potential presence of two plant species: seabeach amaranth *(Amaranthus pumilus* and sandplain gerardia *(Agalinis acuta).* One mammalian species: Northern long eared bat (*Myotis septentrionalis*) may also occur in the project vicinity. There are no critical habitats for these or any other species within the project area. GOSR submitted notice of the Proposed Project and documentation of Section 7 compliance to the USFWS on September 24, 2019. On September 30,

		2019, the USFWS provided an acknowledgement of the No Effect determination. A request for species records within the project area was sent to the New York State Natural Heritage Program (NYSNHP) on September 23, 2019. A response was received on October 7, 2019 indicating that the NYSNHP has no records of rare or state-listed animals, plants or significant natural communities at the project sites. The USFWS Official Species List and agency correspondence relative to rare, threatened and endangered species, natural communities and fish habitat are included as **Appendix D**. No further analysis is required. https://ecos.fws.gov/ipac/ http://www.dec.ny.gov/eafmapper/
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	This criterion is applicable to HUD-assisted projects that involve new residential construction, conversion of nonresidential buildings to residential use, rehabilitation of residential properties that increase the number of units, or restoration of abandoned properties to habitable condition. The Proposed Project involves stormwater improvements, primarily within existing ROWs. Proposed activities will not result in an increased number of people being exposed to hazardous operations by increasing residential densities, converting the type of use of a building to habitation, or making a vacant building habitable, therefore, the provisions of 24 CFR Part 51 Subpart C do not apply. No hazardous operations, including handling conventional fuels or chemicals of an explosive or flammable nature were identified in the vicinity of the project site. No impacts would result, and no further analysis is required.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	The project site is situated on active roadways and immediately adjacent areas that have been disturbed for many years. Impacts would only occur to soils that have been previously impacted. None of the site soils are identified as Prime, Unique, or Statewide Important Farmland pursuant to the U.S. Department of Agriculture (USDA) soil classifications. The Proposed Project is not located within an Agricultural District. Therefore, the Proposed Project would not violate the Farmland Protection Policy Act. No further analysis is required. http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

		http://www.agriculture.ny.gov/ap/agservices/agricultural-districts.html
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☒ No ☐	FEMA Flood Insurance Rate Maps (FIRM Panels 36059C0213G and 36059C0214H indicate the project sites are situated within the 100-year floodplain (see **Appendix A, Figures 3a and 3b)**. The 8-step floodplain and wetland management decision making process was followed pursuant to 24 CFR 55. This process found that the Proposed Project would not have an impact on floodplain values. A 15-day "Early Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland" was published in The Nassau Herald on November 7, 2019. The 15-day comment period expired on November 22, 2019. The 8-Step Floodplain and Wetland Management Plan, Early Floodplain and Wetland Notice and Affidavit of mailing are attached (see **Appendix E**). No further analysis is required. https://msc.fema.gov/portal
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800; Tribal notification for new ground disturbance.	Yes ☐ No ☒	Consultation with the New York State Historic Preservation Office (SHPO) and the Division for Historic Preservation (DHP) in the Office of Parks, Recreation and Historic Preservation (OPRHP) in accordance with Section 106 of the National Historic Preservation Act of 1966 was initiated through the Cultural Resource Information System. In a letter dated September 23, 2019, the SHPO indicated on DATE that there will be No Historic Properties Affected by the Project (see **Appendix F**, SHPO Correspondence.) No further analysis is required. https://cris.parks.ny.gov http://www.dec.ny.gov/eafmapper/
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	The policies of 24 CFR 51.101(a)(3) do not apply to any action or emergency assistance under disaster assistance provisions or appropriations which are provided to save lives and protect public health and safety. The Proposed Project involves stormwater improvements underneath and adjacent to active roadways which would not result in new development that would generate increased noise on the project site, nor would it introduce any new or rehabilitate any existing noise sensitive uses. The Proposed Project would cause temporary increases in noise levels during construction that will be mitigated by complying with local noise ordinances using construction best practices. Therefore, no significant noise impacts would occur. http://www.nyc.gov/html/dep/html/noise/index.shtml

Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☒ No ☐	The project site is located over the Nassau-Suffolk County Sole Source Aquifer (SSA) (see **Appendix A, Figure 7**). In accordance with NEPA environmental review procedures, projects in the SSA area are subject to review by the U.S. Environmental Protection Agency (U.S. EPA) according to the terms of the HUD/EPA Memorandum of Understanding (MOU). A consultation request was submitted to EPA on September 24, 2019 along with the completed Initial Screen Criteria evaluation forms. On October 16, 2019 EPA replied that the Proposed Project will not pose a significant threat to public health or ground water resources and complies with Section 1424(e) of the SDWA (see **Appendix G** for EPA correspondence). No further action is required. https://www.epa.gov/dwssa/map-sole-source-aquifer-locations http://www.epa.gov/region02/water/aquifer/
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☒ No ☐	The Proposed Project would not impact federal or state designated wetlands. The eight-step floodplain and wetland management decision making process was followed pursuant to 24 CFR 55 and found that the Proposed Project would not have an impact on floodplain or wetland values. The Eight-Step Floodplain and Wetland Management Plan is attached (see **Appendix E**). No further analysis is required. https://www.fws.gov/wetlands/Data/Mapper.html http://www.dec.ny.gov/eafmapper/
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The proposed activity does not occur in proximity of a listed Wild and Scenic River (**see Appendix A, Figure 9)**. No further analysis is required. http://www.rivers.gov/maps/conus.php
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	The project site is not located in or adjacent to potential environmental justice areas identified by the New York State Department of Environmental Conservation **(see Appendix A, Figure 10**). The Proposed Project would not raise environmental justice issues and has no potential for new or continued disproportionately high and adverse human health and environmental effects on minority or low-income populations. No additional review is required. http://www.dec.ny.gov/docs/permits_ej_operations_pdf/ulsterej.pdf

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:
Cameron Engineering and Associates, Comprehensive Drainage Plans, February 2019
EPA NEPAssist http://nepassisttool.epa.gov/nepassist/entry.aspx
EPA Region 2 Sole Source Aquifers http://www.epa.gov/region02/water/aquifer/
EPA, Greenbook – Federal Register Notices http://www.epa.gov/oaqps001/greenbk/adden.html
EPA, Radon Zones https://www.epa.gov/radon/find-information-about-local-radon-zones
FEMA Mapping Service Center https://msc.fema.gov/portal
Military and Civilian Airports
https://www.michigan.gov/documents/mshda/mshda_cd_nsp2_air_accident_315724_7.pdf
National Wild and Scenic Rivers System http://www.rivers.gov/maps/conus.php
New York City Noise Code http://www.nyc.gov/html/dep/html/noise/index.shtml
NYS DEC Environmental Justice Areas
http://www.dec.ny.gov/docs/permits_ej_operations_pdf/kingsejdetail.pdf
NYS DEC Environmental Site Database Search http://www.dec.ny.gov/chemical/8437.html
NYS DOS Coastal Zone http://www.dos.ny.gov/opd/atlas/
NYSDEC EAF Mapper http://www.dec.ny.gov/eafmapper/
NYSDEC Environmental Resource Mapper http://www.dec.ny.gov/animals/38801.html
U.S. EPA Status of SIP Requirements for Designated Areas
http://www.epa.gov/air/urbanair/sipstatus/reports/ny_areabypoll.html
U.S. Fish & Wildlife Service Coastal Barrier Resource System http://www.fws.gov/ecologicalservices/habitat-conservation/cbra/Maps/index.html
U.S. Fish & Wildlife Service NWI Wetlands http://www.fws.gov/wetlands/
USDA NRCS Web Soil Survey http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
Map sources are listed on Figures.

List of Permits Obtained or Required/Involved Agencies:
Section 106 Consultation, National Historic Preservation Act of 1966
Section 14.09, New York State Historic Preservation Act
Section 7 ESA Project Review
Coastal Consistency Review, Consistency Review Unit, New York State Department of State
Sole Source Aquifer, EPA Review
State Environmental Quality Review Act (New York Environmental Conservation Law Article 8)
GOSR, Lead Agency

Standard Conditions for All Projects
Any change to the approved scope of work will require re-evaluation by the Certifying Officer for compliance with NEPA and other laws and Executive Orders. This review does not address all federal, state and local requirements. Acceptance of federal funding requires the recipient to comply with all federal state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

Preparer Signature: Cristy L. Boyd Date: December 2, 2019

Name/Title/Organization: Cristy Boyd, Principal Scientist, CSA Group NY

Lori A Shirley

Certifying Officer Signature: _____ Date: December 02, 2019

Name/Title: Lori A. Shirley, Certifying Environmental Officer

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

SITE PLANS

TOWN OF HEMPSTEAD
DEPARTMENT OF ENGINEERING
NASSAU COUNTY, NEW YORK

CONTRACT DRAWINGS FOR

INWOOD DRAINAGE IMPROVMENTS

INWOOD, N.Y.
JANUARY 2019

SCALE: 1" = 800'

LOCATION PLAN

SHADED AREA INDICATES CONTRACT LIMITS

NASSAU COUNTY FILE NO.

NASSAU COUNTY APPROVALS

WARNING - It is a violation of the Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter any item on these plans in any way.

P.W.#

APPROVED BY

DOUGLAS L. TUMAN, P.E., ESQ.
COMMISSIONER OF ENGINEERING

DATE

THOMAS TOSCANO
COMMISSIONER OF HIGHWAYS

DATE

SUBMITTED FOR APPROVAL BY

JEFFREY M. TIERNEY
DEPUTY COMMISSIONER OF ENGINEERING

DATE

BASE MAP LEGEND

DRAINAGE STRUCTURES

- EXISTING CATCH BASIN
- EXISTING CATCH BASIN TO BE REMOVED
- EXISTING STORM MANHOLE
- NEW STORM MANHOLE
- NEW CATCH BASIN

UTILITIES

- STORM DRAINAGE PIPE (18" D.)
- EXISTING STORM DRAINAGE PIPE TO BE REMOVED (18" D.)
- NEW STORM DRAINAGE PIPE
- ELECTRIC (E)
- GAS MAIN (G)
- SANITARY SEWER PIPE (SAN)
- TELEPHONE (T)
- WATER (WS)

UTILITY HARDWARE

- GAS MAIN VALVE
- HYDRANT
- WATER MAIN VALVE
- WOODEN UTILITY POLE
- GUY WIRE
- SANITARY SEWER (S)
- GUARD RAIL
- CHAIN LINK FENCE
- RETAINING WALL
- WOODEN FENC
- VINYL FENCE

MISCELLANEOUS

- BASELINE & STATION (0+00, 1+00)
- CURB
- CURB & GUTTER
- EDGE OF PAVEMENT
- FIRST FLOOR ENTRANCE
- FLAGPOLE
- GARAGE ENTRANCE
- ENTRANCE STAIRS
- HANDICAP RAMP
- LOT LINE
- MONUMENT
- ROADWAY CENTERLINE
- SIGN POST
- TREE
- TEST HOLE
- WORK/CONTRACT LIMITS

ABBREVIATIONS

ABAND.	ABANDONED
ALUM	ALUMINUM
A.O.B.E.	AS ORDERED BY ENGINEER
APT.	APARTMENT
ASPH.	ASPHALT
BOP	BEGINNING OF PROFILE
BBC	BELGIAN BLOCK
B.C.	BOTTOM OF CURB
B.T.	BLACKTOP
BIT	BITUMINOUS
BLK	BLOCK
B.M.	BENCH MARK
BRK	BRICK
B.W.	BACK OF SIDEWALK
CB	CATCH BASIN
CL	CENTERLINE OF ROADWAY
CONC.	CONCRETE
C.L.F.	CHAIN LINK FENCE
D.I.C.B.	DOUBLE INLET CATCH BASIN
DILAP.	DILAPIDATED
(E)	EAST
EL	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST.	EXISTING
FFL: 7.25	FIRST FLOOR ELEVATION
FE	FENCE
FR	FRAME
F.W.	FRONT OF SIDEWALK
G	GUTTER
GFL: 7.00	GARAGE FLOOR ELEVATION
GVL	GRAVEL
H.C.R.	HANDICAP RAMP
HP 5.90C	HIGH POINT ELEVATION AT CURB
H.D.P.E.	HIGH DENSITY POLYETHELENE PIPE
INV. = 7.00	INVERT ELEVATION
L.	LEFT
L/C	LEFT CURB
MH	MANHOLE
MID C.L.	MIDCENTERLINE OF ROADWAY
(N)	NORTH
N.I.C.	NOT IN CONTRACT
PLTR	PLANTER
PC	POINT OF CURVATURE
RAIL FE.	POST AND RAIL FENCE
#107	RESIDENCE NO. 107
RCP	REINFORCED CONCRETE PIPE
RET	RETAINING
R.	RIGHT
ROW	RIGHT-OF-WAY
R/C	RIGHT CURB
R=32.65	RIM ELEVATION OF MANHOLE
S.I.C.B.	SINGLE INLET CATCH BASIN
SSHC	SANITARY SEWER HOUSE CONNECTION
SLT.	SLATE
(S)	SOUTH
STA	STATION
STOCK FE.	STOCKADE FENCE
STY	STORY
T.B.M.	TEMPORARY BENCH MARK
T.C.	TOP OF CURB
TH #3	TEST HOLE
THEO.	THEORETICAL
TTC	THEORETICAL TOP OF CURB
TYP.	TYPICAL
U.G.	UNDERGROUND
VAC.	VACANT
VPI	VERTICAL POINT OF INTERSECTION
(W)	WEST
W/	WITH
WD	WOOD

GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AN ENGINEER'S FIELD OFFICE FOR THIS PROJECT. THE ENGINEER SHALL APPROVE THE LOCATION OF THE ENGINEER'S FIELD OFFICE.
2. ALL TRAFFIC SIGNAL EQUIPMENT WORK SHALL BE APPROVED BY THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS, DIVISION OF TRAFFIC ENGINEERING (TELEPHONE NO.572-0465).
3. CONSTRUCTION SHALL BE RESTRICTED TO ONE SIDE OF ANY STREET OR INTERSECTION UNTIL THAT SIDE IS COMPLETED AND OPENED TO ALL TRAFFIC.
4. NO SIDEWALK SHALL BE REMOVED WITHIN ANY ONE BLOCK UNTIL COMPLETION OF NEW CURB CONSTRUCTION FOR THAT BLOCK. THE ENGINEER WILL THEN ESTABLISH REMOVAL LIMITS.
5. ALL DRIVEWAY APRONS ARE TO BE CONCRETE EXCEPT AS NOTED ON THE PLANS OR AS ORDERED BY THE ENGINEER.
6. RAMPS FOR THE HANDICAPPED OR DEPRESSED CURBS SHALL BE INSTALLED AT ALL ROADWAY INTERSECTION CORNER QUADRANTS, AT LOCATIONS OPPOSITE "T" INTERSECTIONS AND WHERE DIRECTED BY THE ENGINEER. RAMPS SHALL BE CONSTRUCTED TO MEET LATEST FEDERAL REQUIREMENTS.
7. ALL ELEVATIONS SHOWN ON THE PLANS REFER TO NASSAU COUNTY DATUM. ALL GRADES SHOWN ARE NEW TOP OF CURB GRADES. HOLD CENTERLINE OF ROADWAY EVEN WITH TOP OF NEW CURB UNLESS OTHERWISE NOTED.SEE CROWN LINE LOCATION IN UNSYMMETRICAL CROWN DATA TABLE ON DETAIL SHEET. IN CERTAIN CURB TRANSITION AREAS, THE NEW CURB MAY REQUIRE A REVEAL VARYING FROM THE STANDARD OF FIVE (5) INCHES IN ORDER TO MEET EXISTING CURBING, CATCH BASINS,ETC. SEE PLAN DRAWINGS FOR LOCATIONS AND NEW ELEVATIONS.
8. THE CONTRACTOR SHALL PROTECT ALL TREES ON THE PROJECT FROM DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. ANY TREE DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. ALL TREE REPAIR AND REPLACEMENT WORK SHALL BE PROVIDED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH HORTICULTURAL STANDARDS AND PRACTICES.

   THERE IS NO GUARANTEE AS TO THE ACTUAL NUMBER OF TREES TO BE REMOVED UNDER THE APPLICABLE CONTRACT ITEMS. NO TREE SHALL BE REMOVED UNLESS DIRECTED BY THE ENGINEER ON THE PROJECT SITE. CURBS MAY BE INTERRUPTED TO SAVE TREES AS ORDERED BY THE ENGINEER.

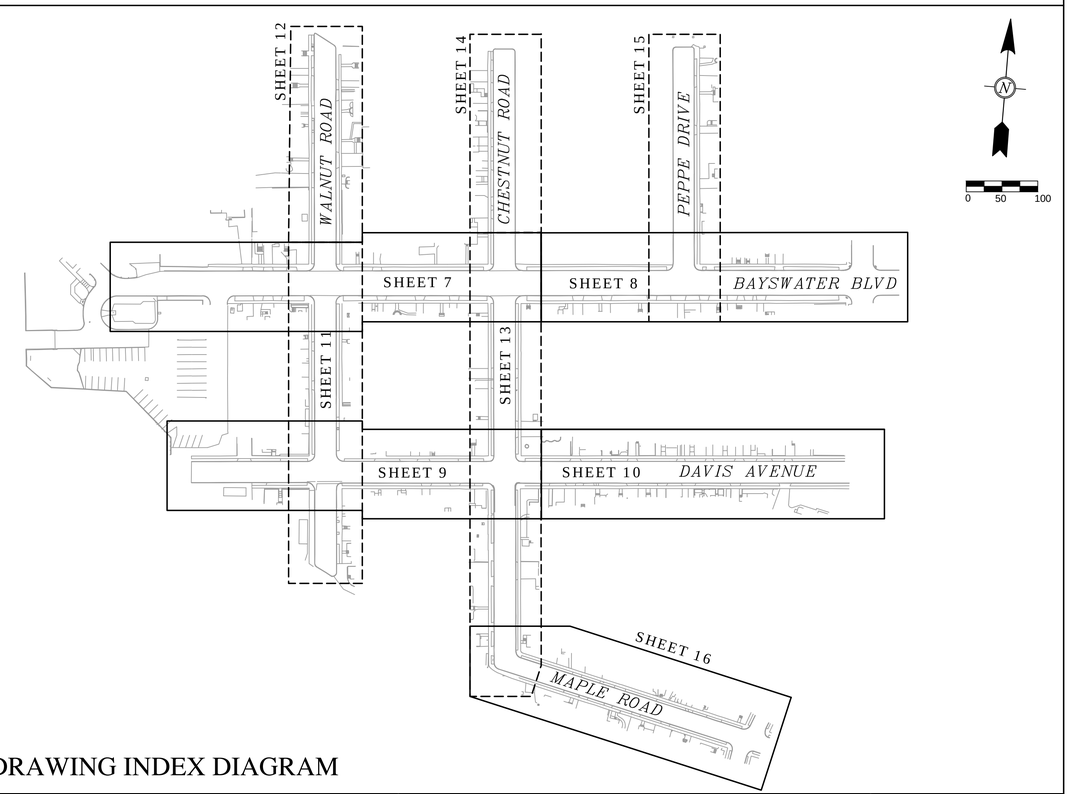
   COST FOR CUTTING, REMOVAL AND DISPOSAL OF TREE ROOTS FOR INSTALLATION OF CURBS AND PAVING TO BE INCLUDED IN PRICE BID FOR VARIOUS CONTRACT ITEMS.

   ALL FALLEN TREE LEAVES AND DEBRIS WITHIN THE CONTRACT AREA SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
9. ALL EXISTING CATCH BASIN APRONS WITHIN THE PROJECT LIMITS ARE TO BE DEMOLISHED AND REMOVED (ITEMS 4AX AND 2X), EXCEPT, AS NOTED. IF AN EXISTING CATCH BASIN APRON CANNOT BE REMOVED WITHOUT DAMAGE TO THE CATCH BASIN TOP SLAB, THEN IT SHALL REMAIN IN PLACE, OR THE COMPLETE CATCH BASIN TOP SLAB SHALL BE REMOVED AND A NEW TOP SLAB POURED IN PLACE (ITEM 15X) AS DIRECTED BY THE ENGINEER.
10. BELGIAN BLOCK, STONE OR WOOD CURB, SLATE, BRICK, STONE OR CONCRETE BLOCK WALKS THAT ARE TO BE REPLACED BY WORK UNDER THIS CONTRACT SHALL BE CAREFULLY REMOVED, SALVAGED AND STORED AT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
11. NOTIFY NASSAU COUNTY DIVISION OF SANITATION (571-6900) TWO (2) WORKING DAYS PRIOR TO ANY CONSTRUCTION WORK INVOLVING SANITATION SEWER FACILITIES.WORK INVOLVING SANITARY SEWER FACILITIES MUST BE DONE IN THE PRESENCE OF A NASSAU COUNTY SEWER INSPECTOR. SEWER FLOW MUST BE MAINTAINED DURING CONSTRUCTION, COST TO BE INCLUDED IN ALL ITEMS OF CONTRACT.
12. ALL EXISTING DRAINAGE APPURTENANCES ARE TO BE SALVAGED AND STORED FOR THE TOWN OF HEMPSTEAD HIGHWAY DEPARTMENT'S USE. DISPOSAL COSTS OF REJECTED APPURTENANCES TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
13. ALL CORNER RADII TO BE 10' UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
14. TWO (2) PROJECT SIGNS SHALL BE PLACED IN THE PROJECT AREA ACCORDING TO THE SPECIFICATIONS, COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SIGNS WITHIN THE CONTRACT AREA FOR THE DURATION OF THE PROJECT. REGULATORY SIGNS MUST BE IN PLACE AT ALL TIMES. ALL STREET AND TRAFFIC CONTROL SIGNS PLACED IN CONCRETE SIDEWALK SHALL BE SET IN A 4" PVC SLEEVE. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS CONCRETE ITEMS.
16. THE CONTRACTOR SHALL INSTITUTE SEDIMENT CONTROL METHODS TO PREVENT SEDIMENT, CONCRETE, OR ANY OTHER MATERIALS OR CONSTRUCTION DEBRIS FROM ENTERING THE DRAINAGE SYSTEM OR ANY WATERWAYS DURING ALL PHASES OF CONSTRUCTION. THE SEDIMENT CONTROL DEVICES AND PROCEDURES TO BE EMPLOYED BY THE CONTRACTOR SHALL MEET CURRENT ESTABLISHED STANDARDS. THE CONTRACTOR SHALL MAINTAIN POSITIVE SURFACE DRAINAGE FLOW AT ALL TIMES DURING CONSTRUCTION. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS. SEE TOWN OF HEMPSTEAD SPECIFICATIONS AND STORM WATER POLLUTION CONTROL PLAN AND EROSION CONTROL DETAILS INCLUDED.
17. ALL EXISTING THRU-CURB APPURTENANCES (E.G. ROOF DRAINS) SHALL BE MAINTAINED AND RESTORED BY THE CONTRACTOR. COST TO BE INCLUDED IN THE PRICE BID FOR ALL CURB AND INTEGRAL CURB AND GUTTER ITEMS.
18. UNDERGROUND STREET LIGHTING MAY EXIST IMMEDIATELY ADJACENT TO THE EXISTING CURB AT VARIOUS LOCATIONS THROUGHOUT THE PROJECT AREA. THE CONTRACTOR SHALL VERIFY THE LOCATIONS. THE CONTRACTOR SHALL INCLUDE THE COST OF PROTECTING, REMOVING, MODIFYING, RELOCATING, REPAIRING AND REPLACING ALL STREET LIGHTING AS REQUIRED IN ORDER TO PROVIDE NEW CURBING AND FLAT WORK. COSTS SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS CONTRACT ITEMS.
19. THE CONTRACTOR SHALL LIMIT HIS HOURS OF OPERATIONS WITHIN THE PROJECT AREA TO REGULAR WORKING HOURS (8 HRS.) BETWEEN 8:00 A.M. TO 4:30 P.M. SEE GENERAL CONDITIONS FOR FURTHER RESTRICTIONS AND INSTRUCTIONS.
20. THE CONTRACTOR SHALL PROTECT ALL EXISTING DRAINAGE AND SANITARY STRUCTURES AND PIPES WHEN ADJUSTING INLETS, FRAMES, AND COVERS. NO SEPARATE PAYMENT SHALL BE MADE. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
21. AT ALL APPROACHES TO THE CONSTRUCTION, THE CONTRACTOR SHALL ERECT, MAINTAIN AND REMOVE CONSTRUCTION WARNING DEVICES, A.O.B.E. AND IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS CURRENTLY REVISED. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM (102SS-C).

DRAWING INDEX

SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	LEGENDS, ABBREVIATIONS, NOTES, AND DRAWING INDEX DIAGRAM
3	COMPREHENSIVE DRAINAGE PLAN
4	HORIZONTAL CONTROL PLAN
5	NEW PAVEMENT PLAN AND TEST HOLE DATA
6	EXISTING SIGNAGE, STRIPING AND TRAFFIC CONTROL PLAN
7	BAYSWATER BLVD PLAN AND PROFILE - STATION 1+00 TO STATION 6+50
8	BAYSWATER BLVD AND PROFILE - STATION 6+50 TO STATION 11+00
9	DAVIS AVENUE PLAN AND PROFILE - STATION 1+00 TO STATION 6+50
10	DAVIS AVENUE PLAN AND PROFILE - STATION 6+50 TO STATION 10+50
11	WALNUT ROAD PLAN AND PROFILE - STATION 1+00 TO STATION 5+50
12	WALNUT ROAD PLAN AND PROFILE - STATION 5+50 TO STATION 8+00
13	CHESTNUT ROAD PLAN AND PROFILE - STATION 1+00 TO STATION 5+00
14	CHESTNUT ROAD PLAN AND PROFILE - STATION 5+00 TO STATION 9+44
15	PEPPE DRIVE PLAN AND PROFILE - STATION 1+00 TO STATION 4+27
16	MAPLE ROAD PLAN AND PROFILE - STATION 1+00 TO STATION 4+50
17	MARINA PLAN
18	ROADWAY DETAILS
19	CONCRETE DETAILS
20	DRAINAGE DETAILS
21	UTILITY DETAILS

NEW CONSTRUCTION LEGEND FOR PLAN & PROFILE SHEETS



DRAWING INDEX DIAGRAM

NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

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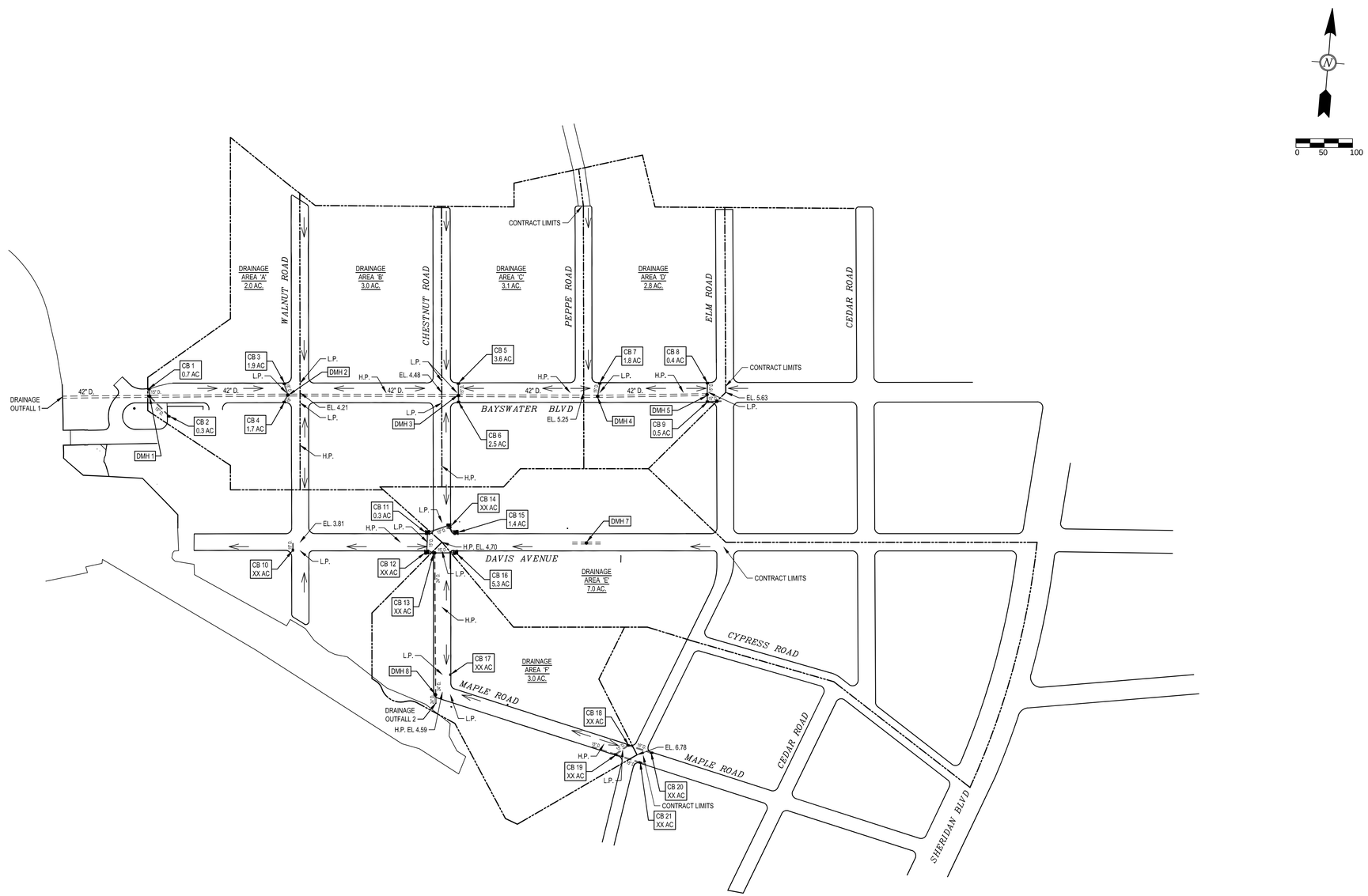
LEGENDS, ABBREVIATIONS, NOTES, DRAWING INDEX, AND DRAWING INDEX DIAGRAM

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

Scale:	AS NOTED
Date:	JAN. 2019
File No.:	
Dwg No.:	
Sheet No.:	2 of 21



NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

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DRAINAGE AREA LIMIT

CATCHMENT LIMIT

CB X 0.00 AC — CATCH BASIN AND CATCHMENT AREA (ACRES)

DMH X 0.00 AC — STORM DRAINAGE MANHOLE AND AREA (ACRES)

COMPREHENSIVE DRAINAGE PLAN

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

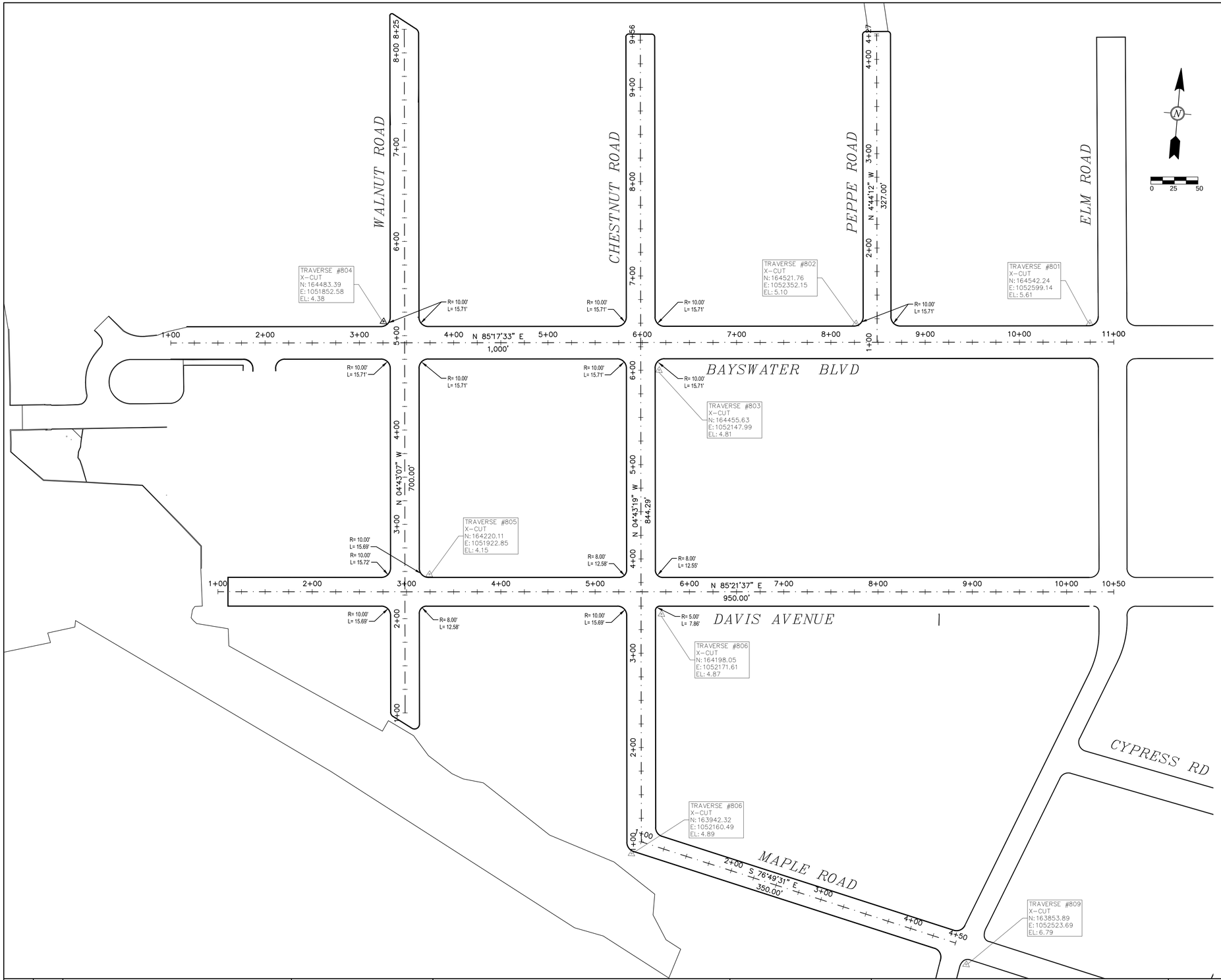
Scale: 1"=100'

Date: JAN. 2019

File No.:

Dwg No.:

Sheet No.: 3 of 21



CENTERLINE CONTROL

STREET	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING
BAYSWATER BLVD	01+00	0+00	P.O.L.-P.O.B.	164,442.2228	1,051,629.5710
BAYSWATER BLVD	11+00	0+00	P.O.L.-P.O.E.	164,524.2918	1,052,626.1982
DAVIS AVENUE	01+00	0+00	P.O.L.-P.O.B.	164,183.4177	1,051,700.7806
DAVIS AVENUE	10+50	0+00	P.O.L.-P.O.E.	164,260.2633	1,052,647.6675
WALNUT ROAD	01+00	0+00	P.O.L.-P.O.B.	164,071.3783	1,051,909.0463
WALNUT ROAD	08+00	0+00	P.O.L.-P.O.E.	164,769.0063	1,051,851.4621
CHESTNUT ROAD	01+00	0+00	P.O.L.-P.O.B.	163,955.4962	1,052,169.8260
CHESTNUT ROAD	09+44	0+00	P.O.L.-P.O.E.	164,796.9277	1,052,100.3222
PEPPE ROAD	01+00	0+00	P.O.L.-P.O.B.	164,503.6953	1,052,376.0791
PEPPE ROAD	04+27	0+00	P.O.L.-P.O.E.	164,829.5786	1,052,349.0775
MAPLE ROAD	01+00	0+00	P.O.L.-P.O.B.	163,955.4962	1,052,169.8260
MAPLE ROAD	04+50	0+00	P.O.L.-P.O.E.	163,875.7236	1,052,510.6138

NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644

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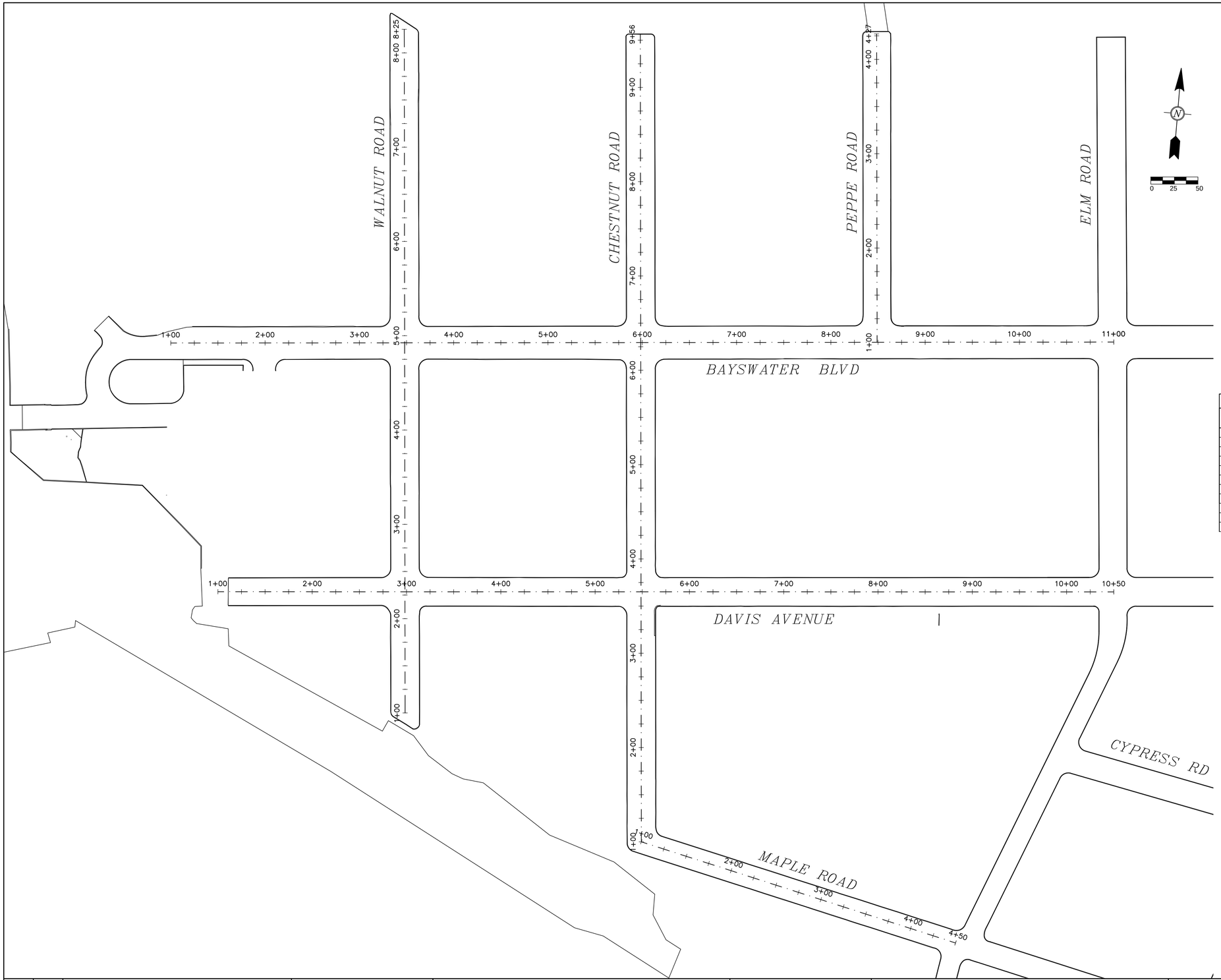
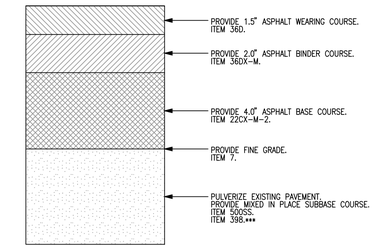
HORIZONTAL CONTROL PLAN

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: 1"=50'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 4 of 21





NOTES:
1. *** INDICATES A CONTINGENCY ITEM TO BE USED WHEN ORDERED BY ENGINEER.

T.O.H.PAVEMENT TREATMENT DETAIL

NOT TO SCALE

EXISTING PAVEMENT INFORMATION

TEST HOLE #	STREET	STATION	SIDE	MATERIAL DESCRIPTION
X	BAYSWATER BLVD	01+00	SIDE	ENTER

NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644

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PAVEMENT PLAN AND TEST HOLE DATA

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

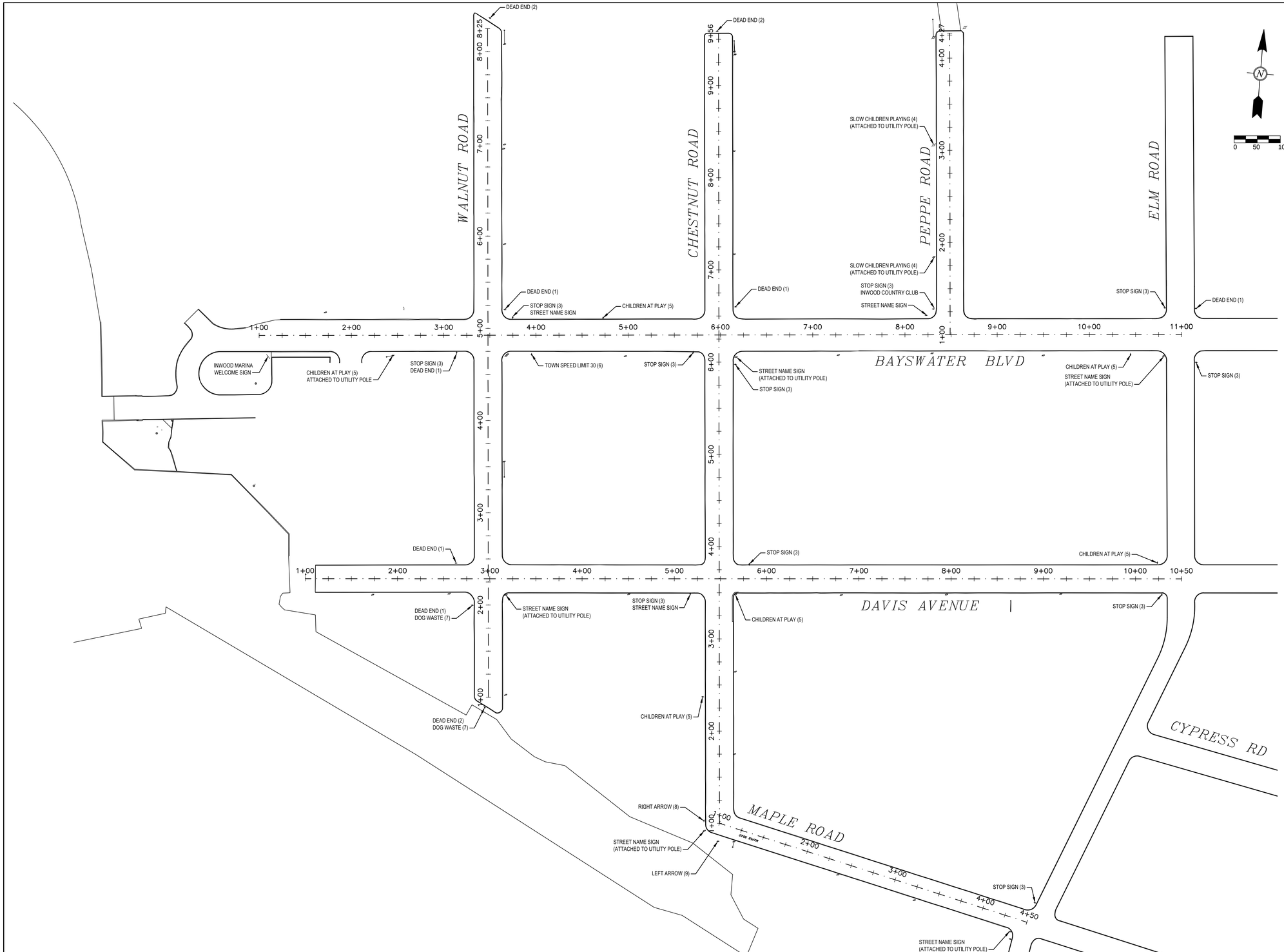
Scale: 1"=50'

Date: JAN. 2019

File No.:

Dwg No.:

Sheet No.: 5 of 21



SIGN LEGEND

(1) DEAD END

(2) DEAD END

(3) STOP SIGN

(4) SLOW CHILDREN PLAYING

(5) CHILDREN AT PLAY

(6) TOWN SPEED LIMIT 30

(7) DOG WASTE

(8) RIGHT ARROW

(9) LEFT ARROW

NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
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EXISTING SIGNAGE, STRIPING AND TRAFFIC CONTROL PLAN

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

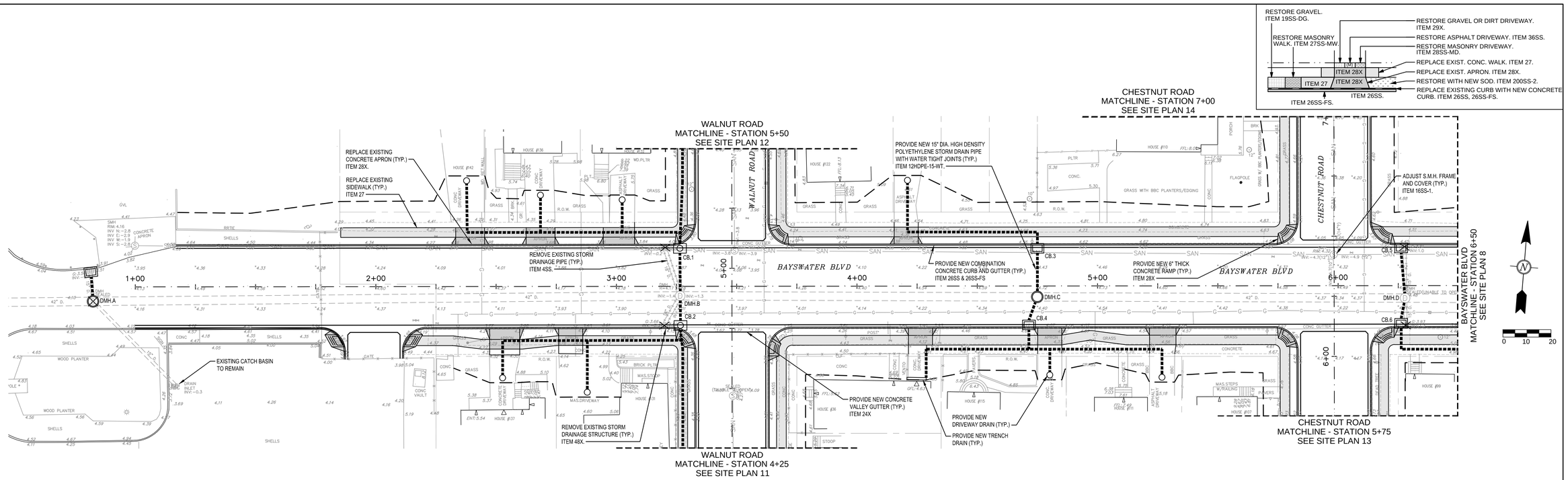
Scale: 1"=50'

Date: JAN. 2019

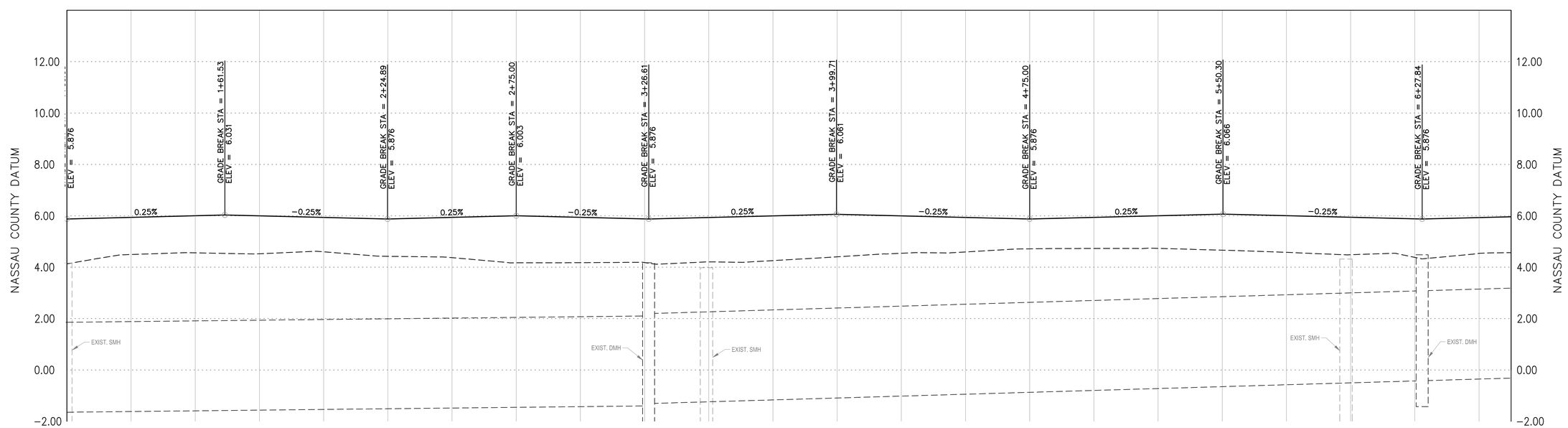
File No.:

Dwg No.:

Sheet No.: 6 of 21



TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	5.92	6.05	5.98	5.92	5.86	5.80	5.73	5.68	5.68	5.62	5.94	6.08	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	5.67	5.80	5.73	5.67	5.61	5.55	5.48	5.43	5.43	5.61	5.69	5.83	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	5.69	5.82	5.96	6.10	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	6.17	6.30	6.23	6.17	6.11	6.05	5.99	5.92	5.91	6.05	6.19	6.32	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	5.69	5.82	5.96	6.10	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	5.67	5.80	5.74	5.67	5.61	5.55	5.49	5.43	5.43	5.61	5.69	5.83	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	5.92	6.05	5.78	5.92	5.86	5.80	5.53	5.68	5.68	5.62	5.94	6.08	TG
STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	04+50	04+75	05+00	05+25	05+50	05+75	06+00	06+25	06+50	STA



NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
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Checked:	X
Reviewed:	X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644

Department of Engineering

PROFILE

GRADE

LEGEND

Proposed Centerline

Existing Centerline

BAYSWATER BLVD
PLAN AND PROFILE
STATION 1+00 TO STATION 6+50

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

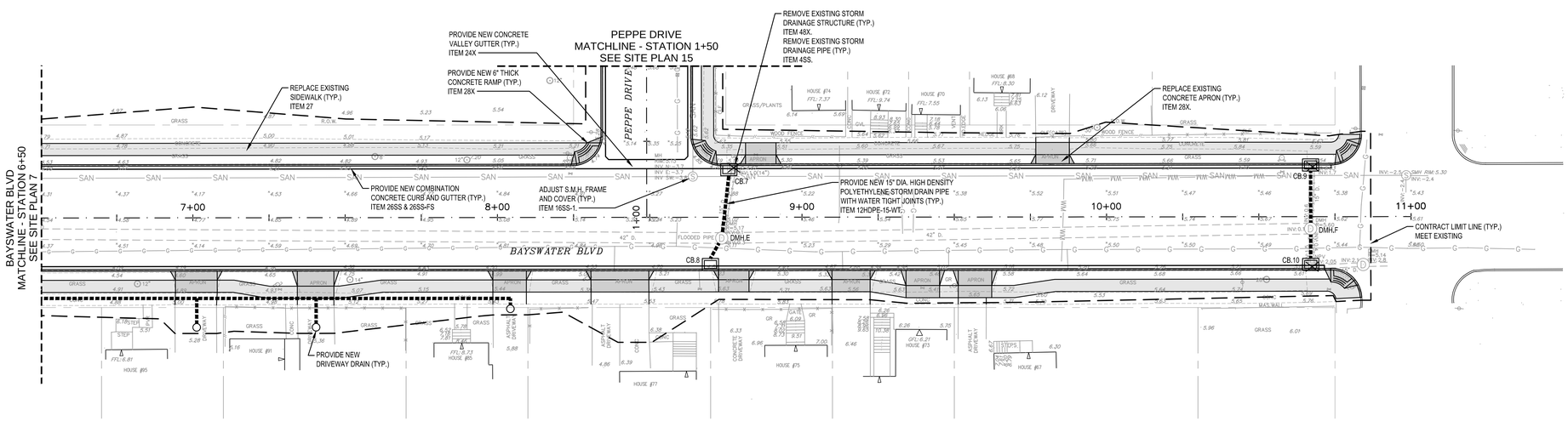
Scale: H : 1" = 20' V : 1" = 2'

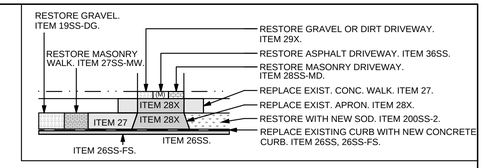
Date: JAN. 2019

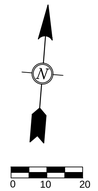
File No.:

Dwg No.:

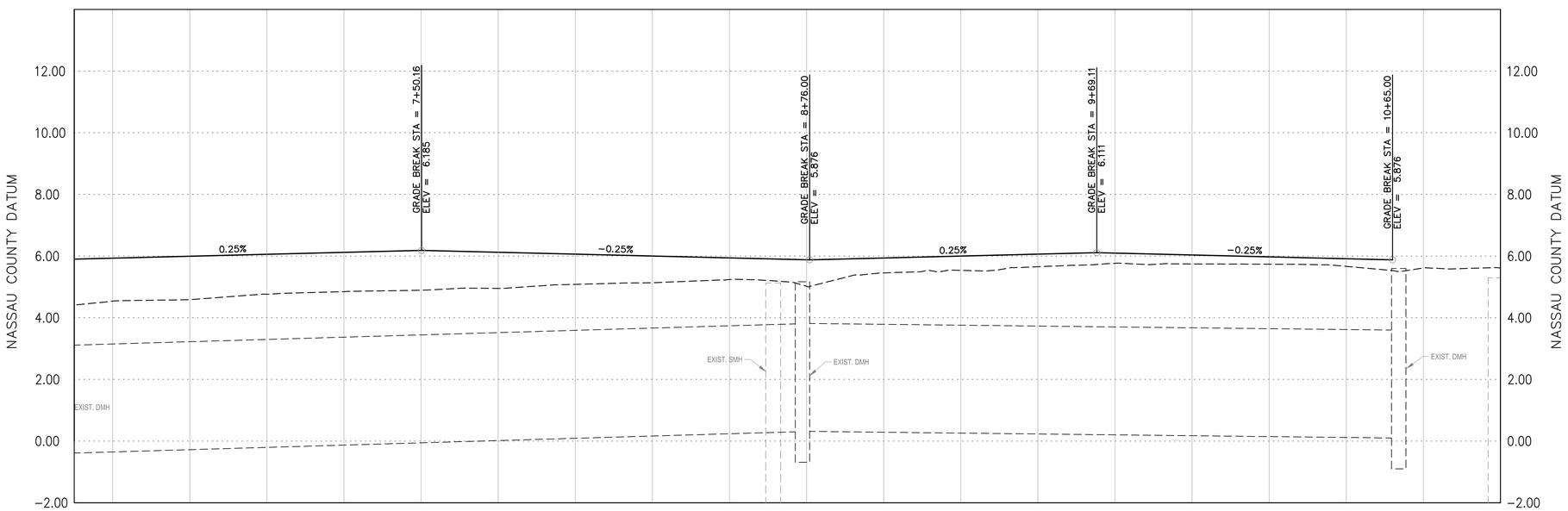
Sheet No.: 7 of 21







TG	6.08	6.21	6.14	6.09	6.03	5.96	5.90	5.83	5.54	5.62	5.69	5.75	5.81	5.85	5.79	5.73	5.66			TG
G	5.83	5.96	5.89	5.84	5.78	5.71	5.65	5.58	5.54	5.37	5.44	5.50	5.56	5.60	5.54	5.48	5.41			G
MID CL	6.10	6.24	6.17	6.11	6.05	5.99	5.92	5.86	5.76	5.66	5.71	5.78	5.84	5.87	5.81	5.75	5.69			MID CL
CL	6.32	6.46	6.40	6.34	6.27	6.21	6.15	6.08	5.98	5.88	5.94	6.00	6.06	6.10	6.04	5.97	5.91			CL
MID CL	6.10	6.24	6.17	6.11	6.05	5.99	5.92	5.86	5.76	5.66	5.71	5.78	5.84	5.87	5.81	5.75	5.69			MID CL
G	5.83	5.96	5.90	5.84	5.78	5.71	5.65	5.58	5.48	5.38	5.44	5.50	5.56	5.60	5.54	5.48	5.41			G
TG	6.08	6.21	5.94	6.09	6.03	5.96	5.90	5.83	5.73	5.63	5.69	5.75	5.81	5.85	5.79	5.73	5.66			TG
STA	06+50	06+75	07+00	07+25	07+50	07+75	08+00	08+25	08+50	08+75	09+00	09+25	09+50	09+75	10+00	10+25	10+50	10+75	11+00	STA



NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
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Reviewed:	X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644

Department of Engineering

PROFILE

GRADE

LEGEND

Proposed Centerline

Existing Centerline

BAYSWATER BLVD
PLAN AND PROFILE
STATION 6+50 TO STATION 11+00

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

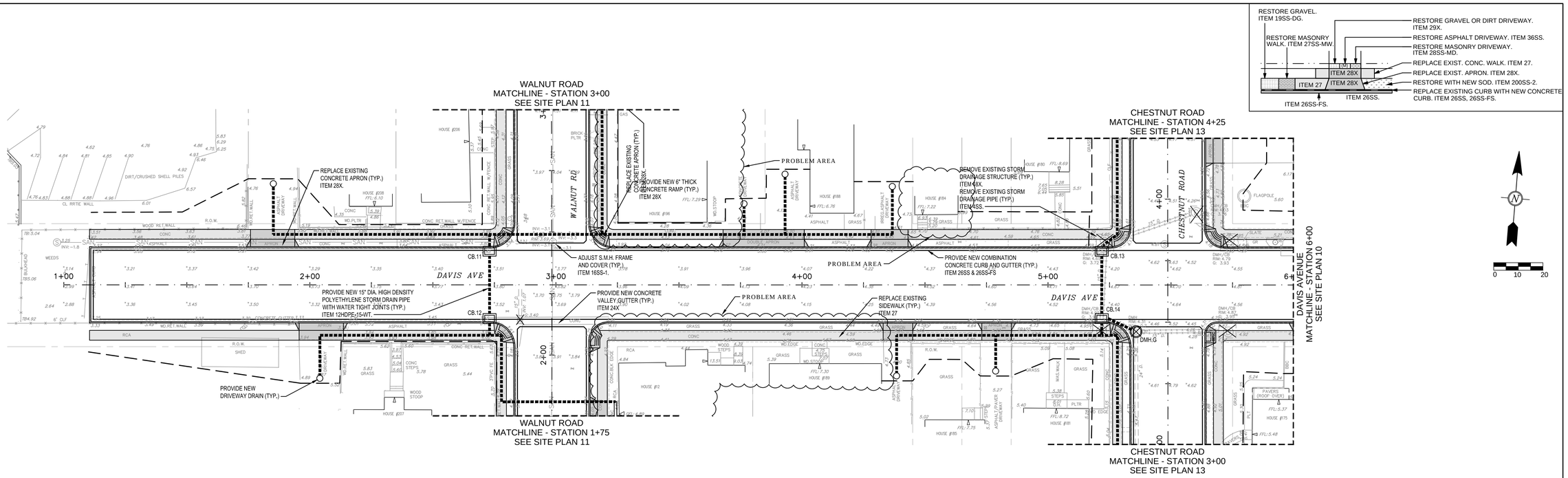
Scale: H : 1" = 20' V : 1" = 2'

Date: JAN. 2019

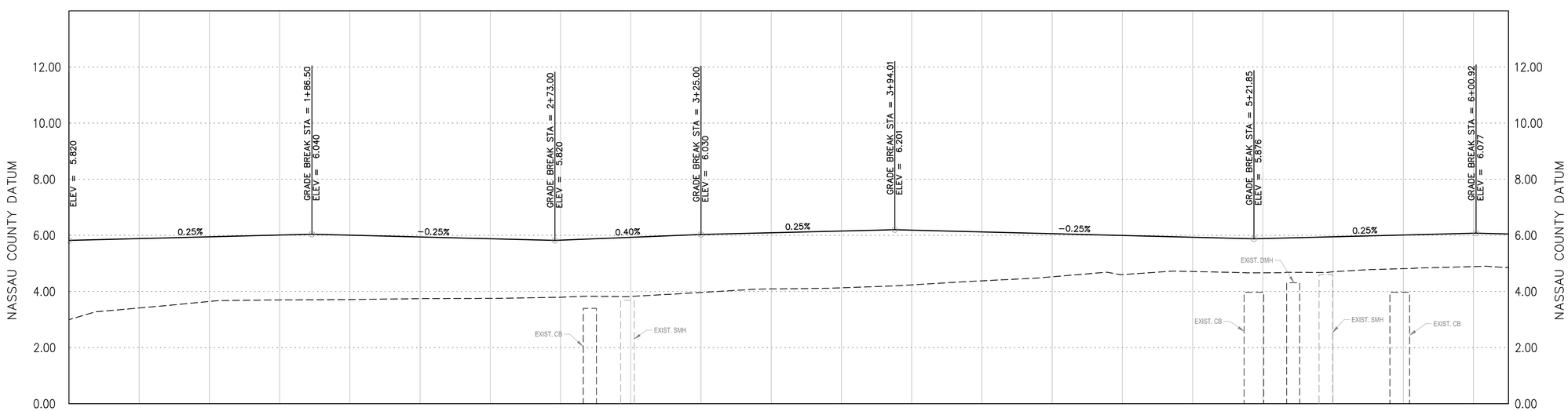
File No.:

Dwg No.:

Sheet No.: 8 of 21



TG	5.63	5.69	5.76	5.82	5.80	5.75	5.54	5.65	5.55	5.69	5.90	5.75	6.02	6.09	6.15	6.04	5.79	5.71	5.55	5.48	5.69	TG
G	5.38	5.44	5.51	5.57	5.55	5.50	5.44	5.40	5.55	5.59	5.65	5.71	5.77	5.84	5.90	5.79	5.69	5.59	5.54	5.38	5.44	G
MID CL	5.62	5.69	5.75	5.81	5.81	5.75	5.68	5.63	5.73	5.83	5.90	5.96	6.02	6.08	6.14	6.04	5.94	5.83	5.73	5.62	5.69	MID CL
CL	5.82	5.88	5.95	6.01	6.01	5.94	5.88	5.83	5.93	6.03	6.09	6.15	6.22	6.28	6.34	6.24	6.13	6.03	5.92	5.82	5.88	CL
MID CL	5.62	5.69	5.75	5.81	5.81	5.75	5.68	5.63	5.73	5.83	5.90	5.96	6.02	6.08	6.14	6.04	5.94	5.83	5.73	5.62	5.69	MID CL
G	5.38	5.44	5.51	5.57	5.56	5.50	5.44	5.41	5.55	5.59	5.65	5.70	5.77	5.84	5.90	5.79	5.69	5.61	5.54	5.38	5.44	G
TG	5.63	5.69	5.76	5.82	5.61	5.75	5.54	5.65	5.55	5.69	5.90	5.95	6.02	6.09	6.15	6.04	5.79	5.84	5.55	5.48	5.69	TG
STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	04+50	04+75	05+00	05+25	05+50	05+75	06+00	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD N.Y. FOUNDED 1644
Department of Engineering

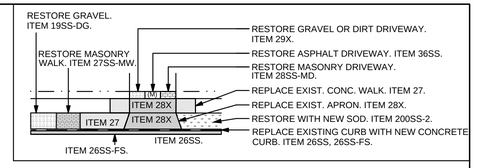
PROFILE
GRADE
LEGEND

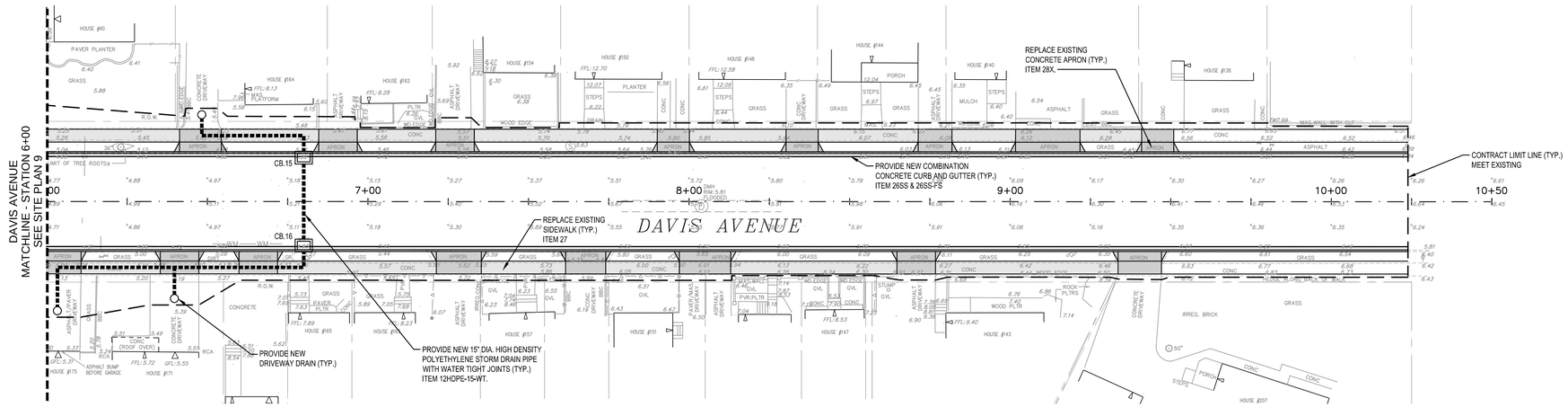
Proposed Centerline
Existing Centerline

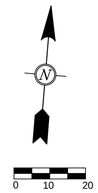
DAVIS AVENUE
PLAN AND PROFILE
STATION 1+00 TO STATION 6+00

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

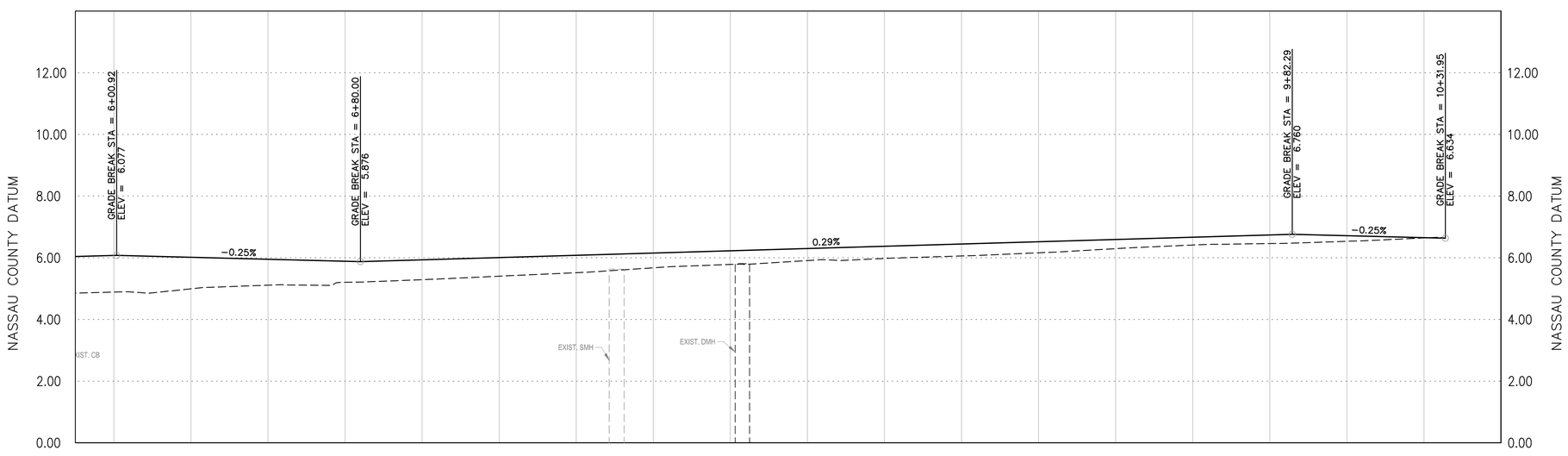
Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 9 of 21







TG	5.69	5.75	5.61	5.88	5.94	5.80	6.07	6.13	6.18	6.25	6.32	6.17	6.44	6.51	6.57	6.41	6.24	6.08		TG
G	5.44	5.50	5.57	5.63	5.69	5.75	5.82	5.88	5.93	6.00	6.07	6.13	6.19	6.26	6.32	6.16	5.99	5.83		G
MID CL	5.69	5.75	5.81	5.87	5.94	6.00	6.06	6.13	6.19	6.25	6.31	6.38	6.44	6.50	6.56	6.40	6.24	6.08		MID CL
CL	5.88	5.95	6.01	6.07	6.13	6.20	6.26	6.32	6.38	6.45	6.51	6.57	6.63	6.70	6.76	6.60	6.44	6.28		CL
MID CL	5.69	5.75	5.81	5.87	5.94	6.00	6.06	6.13	6.19	6.25	6.31	6.38	6.44	6.50	6.56	6.40	6.24	6.08		MID CL
G	5.44	5.50	5.56	5.63	5.69	5.75	5.82	5.88	5.94	6.00	6.07	6.12	6.19	6.26	6.32	6.16	5.99	5.83		G
TG	5.69	5.75	5.81	5.88	5.94	5.80	6.07	6.13	6.16	6.25	6.32	6.37	6.44	6.51	6.57	6.41	6.24	6.08		TG
STA	06+00	06+25	06+50	06+75	07+00	07+25	07+50	07+75	08+00	08+25	08+50	08+75	09+00	09+25	09+50	09+75	10+00	10+25	10+50	STA



NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644

Department of Engineering

PROFILE

GRADE

LEGEND

Proposed Centerline

Existing Centerline

DAVIS AVENUE
PLAN AND PROFILE
STATION 6+00 TO STATION 10+50

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

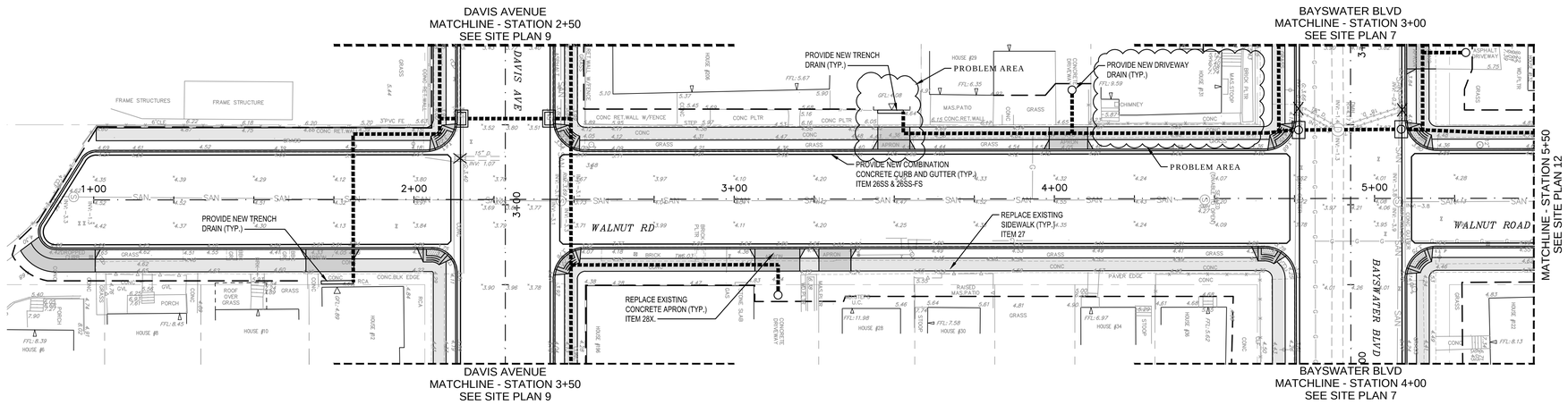
Scale: H : 1" = 20' V : 1" = 2'

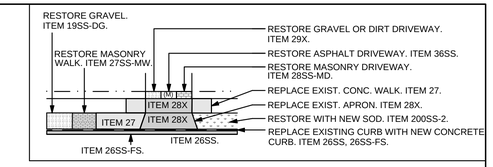
Date: JAN. 2019

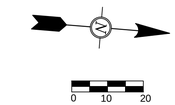
File No.:

Dwg No.:

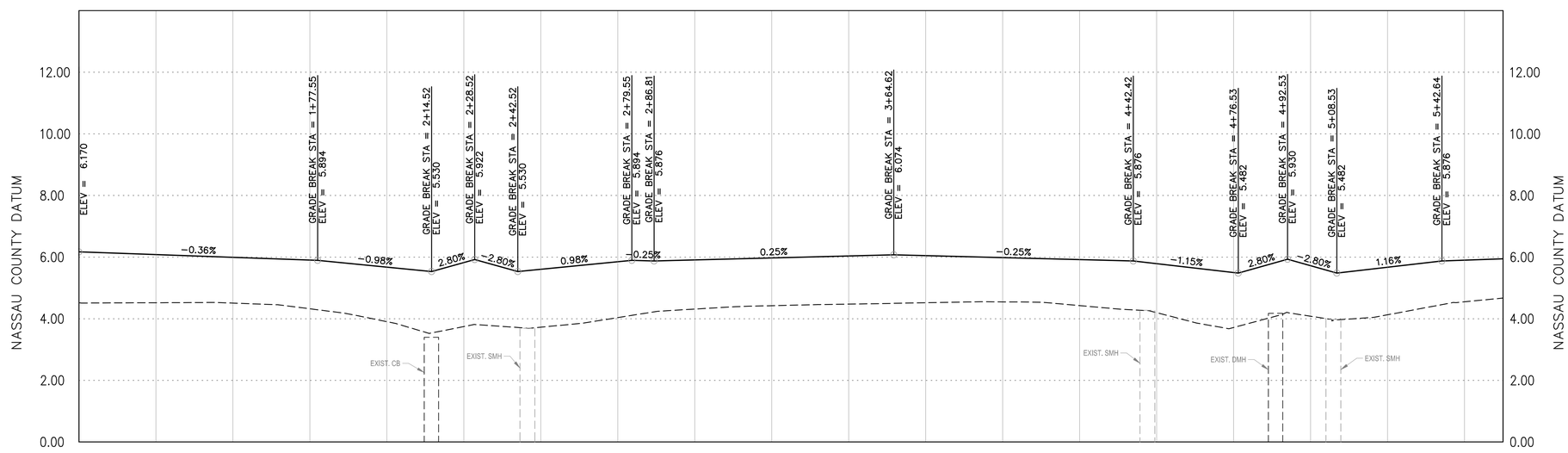
Sheet No.: 10 of 21







TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	5.92	6.05	5.98	5.92	5.86	5.80	5.73	5.68	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	5.67	5.80	5.73	5.67	5.61	5.55	5.48	5.43	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	6.17	6.30	6.23	6.17	6.11	6.05	5.99	5.92	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	5.67	5.80	5.74	5.67	5.61	5.55	5.49	5.43	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	5.92	6.05	5.78	5.92	5.86	5.80	5.53	5.68	TG
STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	04+50	04+75	05+00	05+25	05+50	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

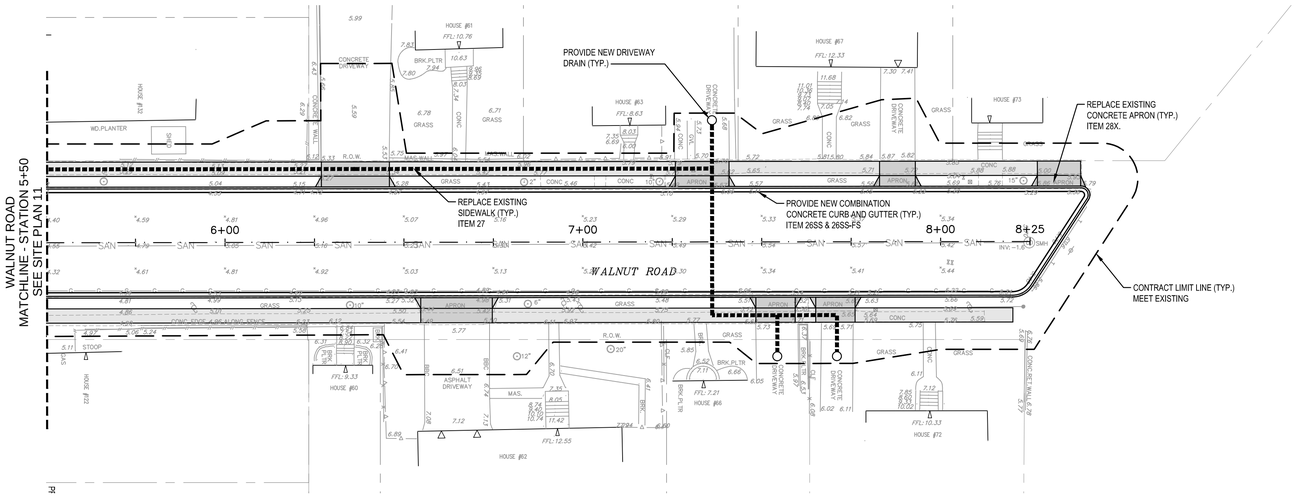
TOWN OF HEMPSTEAD N.Y. FOUNDED 1644
Department of Engineering

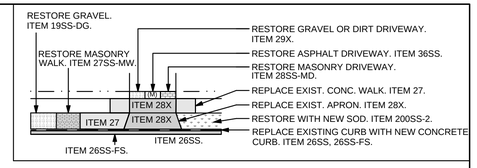
PROFILE
GRADE
LEGEND
Proposed Centerline
Existing Centerline

WALNUT ROAD
PLAN AND PROFILE
STATION 1+00 TO STATION 5+50

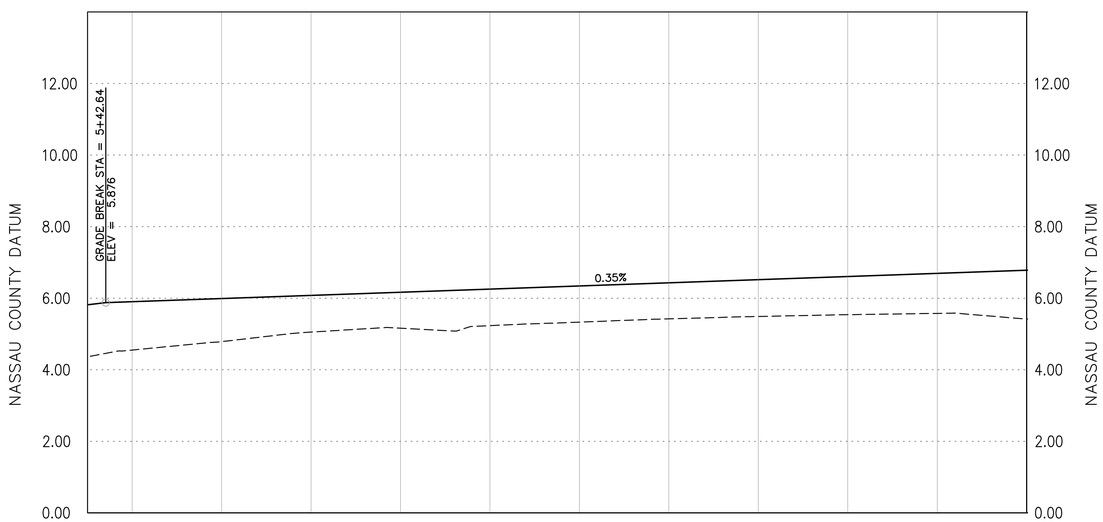
STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 11 of 21





TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	TG
STA	05+50	05+75	06+00	06+25	06+50	06+75	07+00	07+25	07+50	07+75	08+00	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

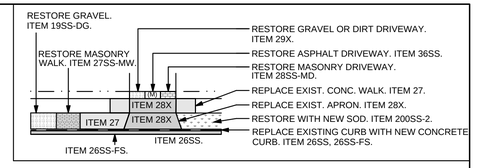
TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

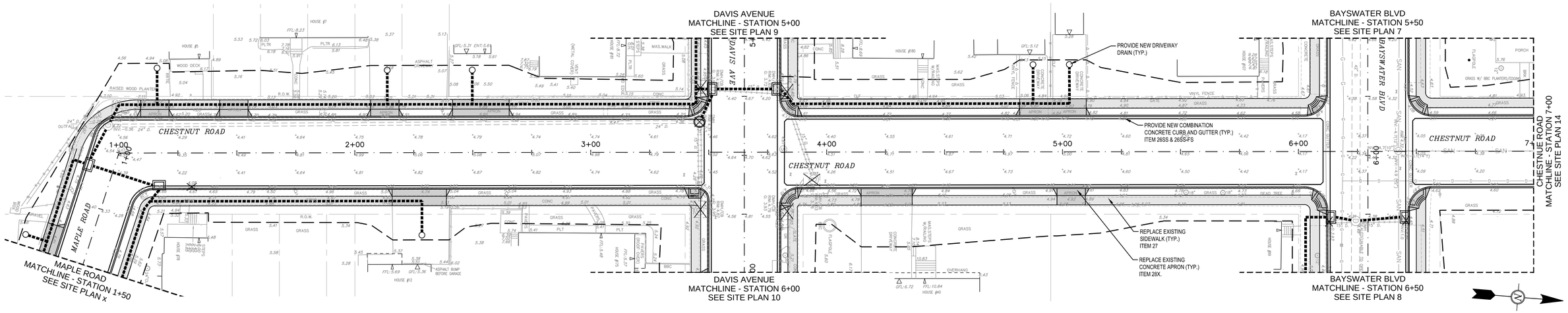
PROFILE
GRADE
LEGEND
Proposed Centerline
Existing Centerline

WALNUT ROAD
PLAN AND PROFILE
STATION 5+50 TO STATION 8+00

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

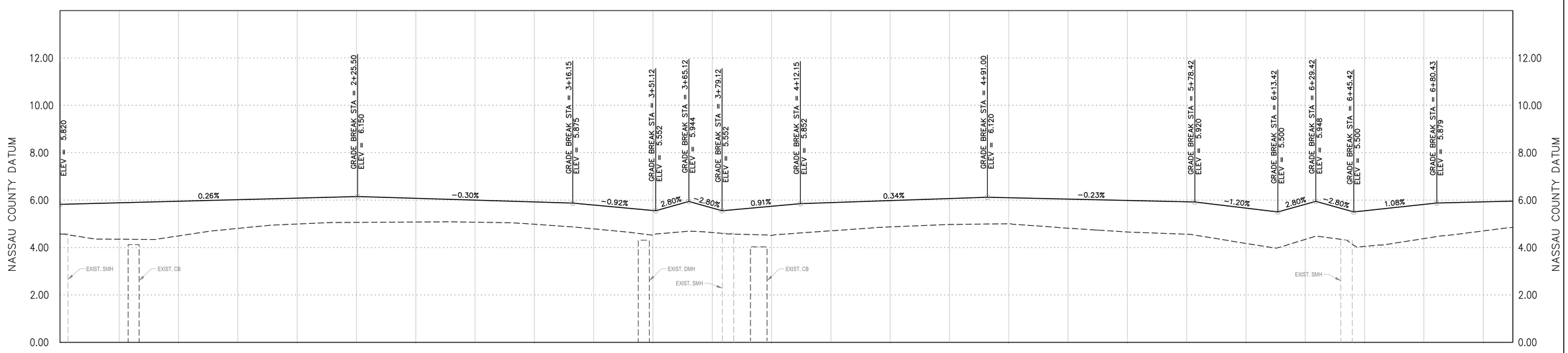
Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 12 of 21





0 10 20

TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	5.92	6.05	5.98	5.92	5.86	5.80	5.73	5.68	5.68	5.62	5.94	6.08	5.94	6.08	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	5.67	5.80	5.73	5.67	5.61	5.55	5.48	5.43	5.43	5.61	5.69	5.83	5.69	5.83	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	5.69	5.82	5.96	6.10	5.96	6.10	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	6.17	6.30	6.23	6.17	6.11	6.05	5.99	5.92	5.91	6.05	6.19	6.32	6.19	6.32	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	5.89	5.82	5.76	5.70	5.69	5.82	5.96	6.10	5.96	6.10	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	5.67	5.80	5.74	5.67	5.61	5.55	5.49	5.43	5.43	5.61	5.69	5.83	5.69	5.83	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	5.92	6.05	5.78	5.92	5.86	5.80	5.53	5.68	5.68	5.62	5.94	6.08	5.94	6.08	TG
STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	04+50	04+75	05+00	05+25	05+50	05+75	06+00	06+25	06+50	06+75	07+00	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

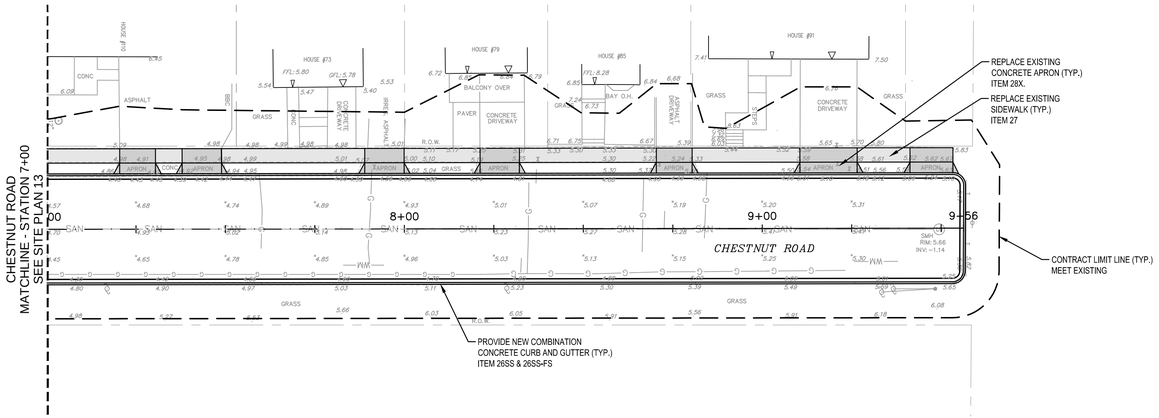
PROFILE
GRADE
LEGEND

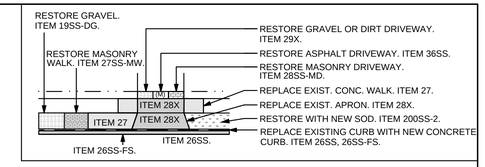
Proposed Centerline
Existing Centerline

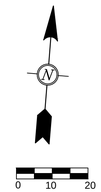
CHESTNUT ROAD
PLAN AND PROFILE
STATION 1+00 TO STATION 7+00

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

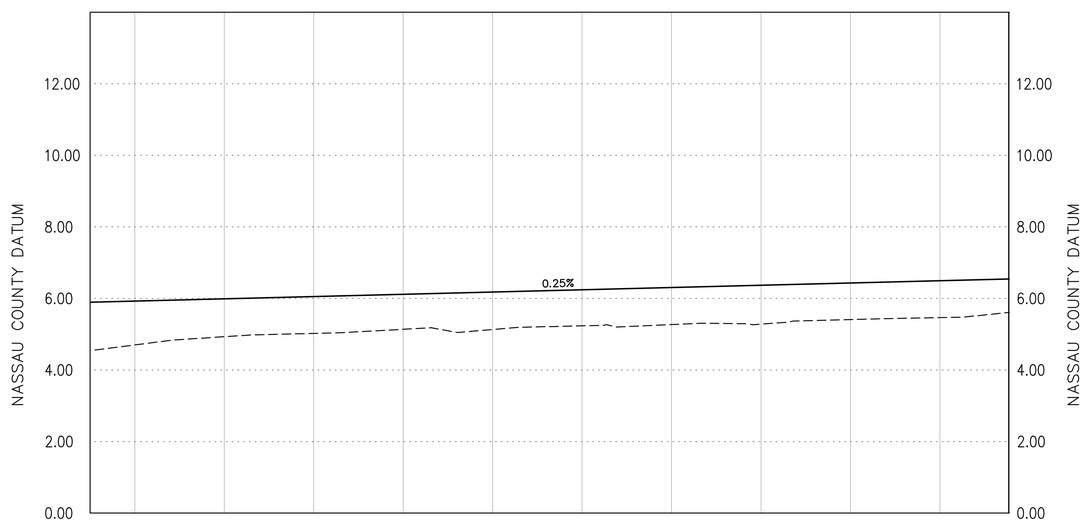
Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 13 of 21







TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	TG
STA	07+00	07+25	07+50	07+75	08+00	08+25	08+50	08+75	09+00	09+25	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

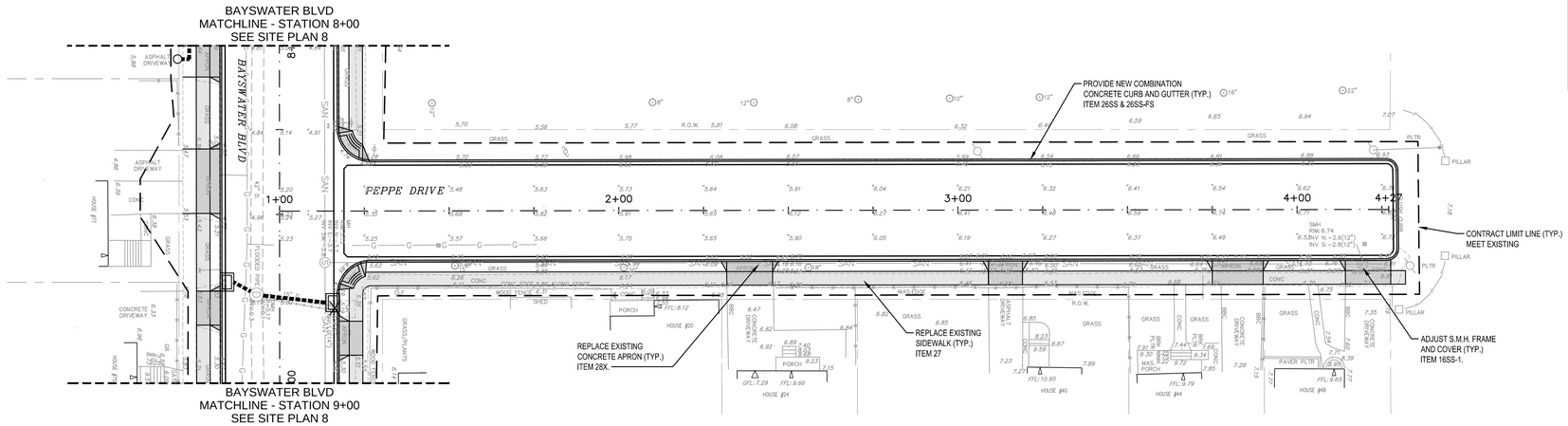
TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

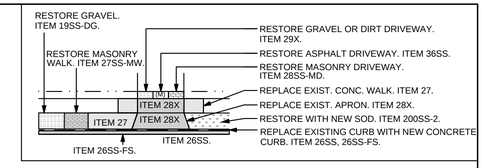
PROFILE
GRADE
LEGEND
Proposed Centerline
Existing Centerline

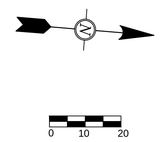
CHESTNUT ROAD
PLAN AND PROFILE
STATION 7+00 TO STATION 9+44

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

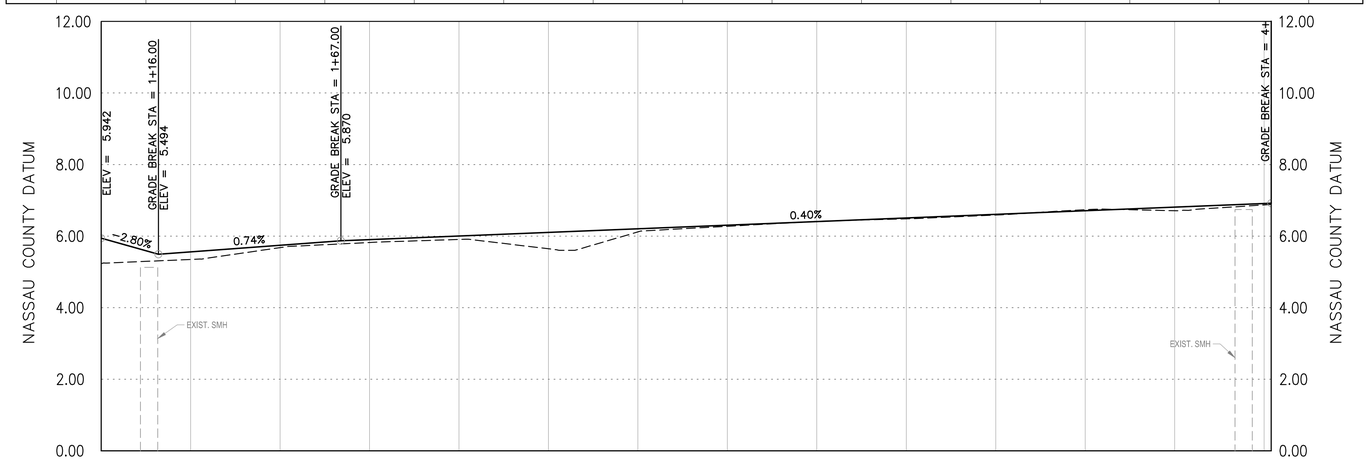
Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 14 of 21







TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	5.92	6.05	5.98	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	5.67	5.80	5.73	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	6.17	6.30	6.23	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	5.67	5.80	5.74	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	5.92	6.05	5.78	TG
STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	STA



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

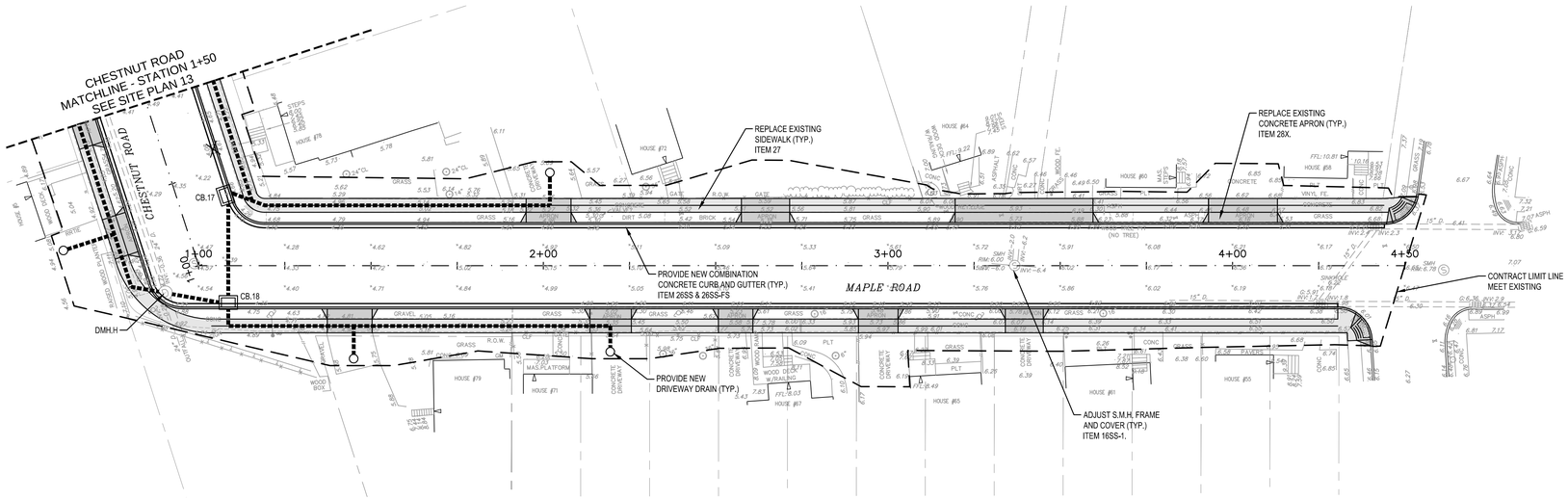
PROFILE
GRADE
LEGEND

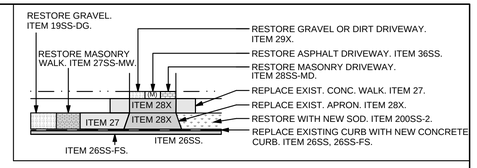
Proposed Centerline
Existing Centerline

PEPPE ROAD
PLAN AND PROFILE
STATION 1+00 TO STATION 4+27

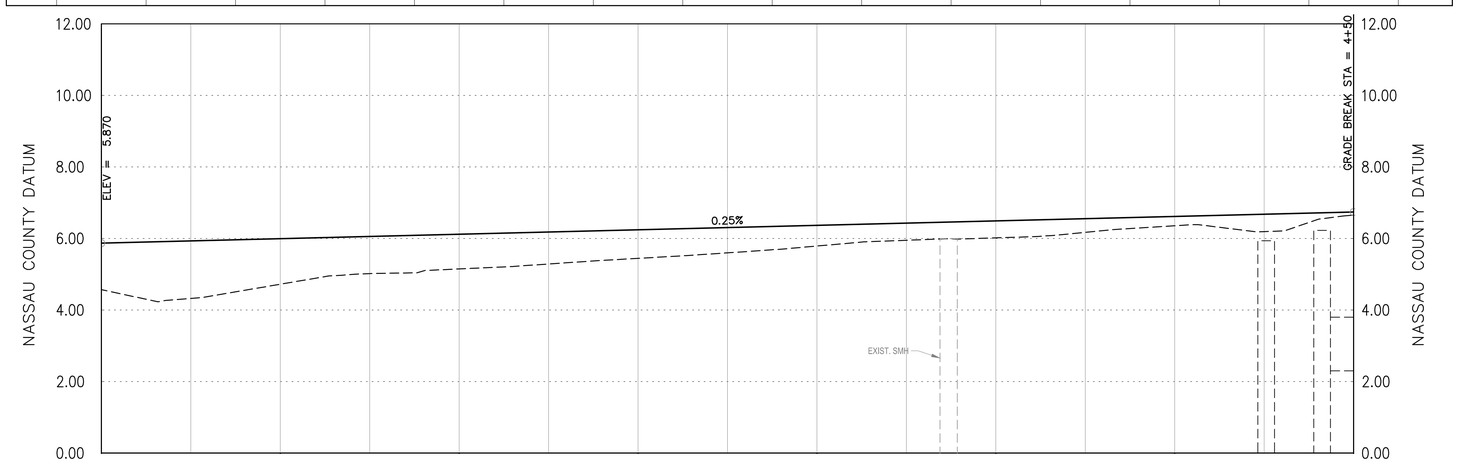
STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: H : 1" = 20' V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
Sheet No.: 15 of 21





STA	01+00	01+25	01+50	01+75	02+00	02+25	02+50	02+75	03+00	03+25	03+50	03+75	04+00	04+25	04+50	STA
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.79	5.73	5.47	5.67	5.61	5.92	6.05	5.98	5.92	TG
G	5.93	5.87	5.80	5.74	5.68	5.61	5.54	5.48	5.43	5.43	5.60	5.67	5.80	5.73	5.67	G
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	MID CL
CL	6.43	6.36	6.30	6.24	6.17	6.11	6.05	5.99	5.92	5.91	6.04	6.17	6.30	6.23	6.17	CL
MID CL	6.20	6.14	6.08	6.01	5.95	5.89	5.83	5.76	5.70	5.68	5.81	5.94	6.07	6.01	5.95	MID CL
G	5.93	5.87	5.80	5.74	5.68	5.61	5.55	5.49	5.42	5.42	5.60	5.67	5.80	5.74	5.67	G
TG	6.18	6.12	6.05	5.99	5.93	5.86	5.59	5.53	5.67	5.67	5.61	5.92	6.05	5.78	5.92	TG



NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

PROFILE
GRADE
LEGEND

Proposed Centerline
Existing Centerline

MAPLE ROAD
PLAN AND PROFILE
STATION 1+00 TO STATION 4+50

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: H : 1" = 20'
V : 1" = 2'
Date: JAN. 2019
File No.:
Dwg No.:
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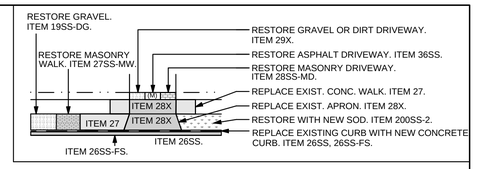

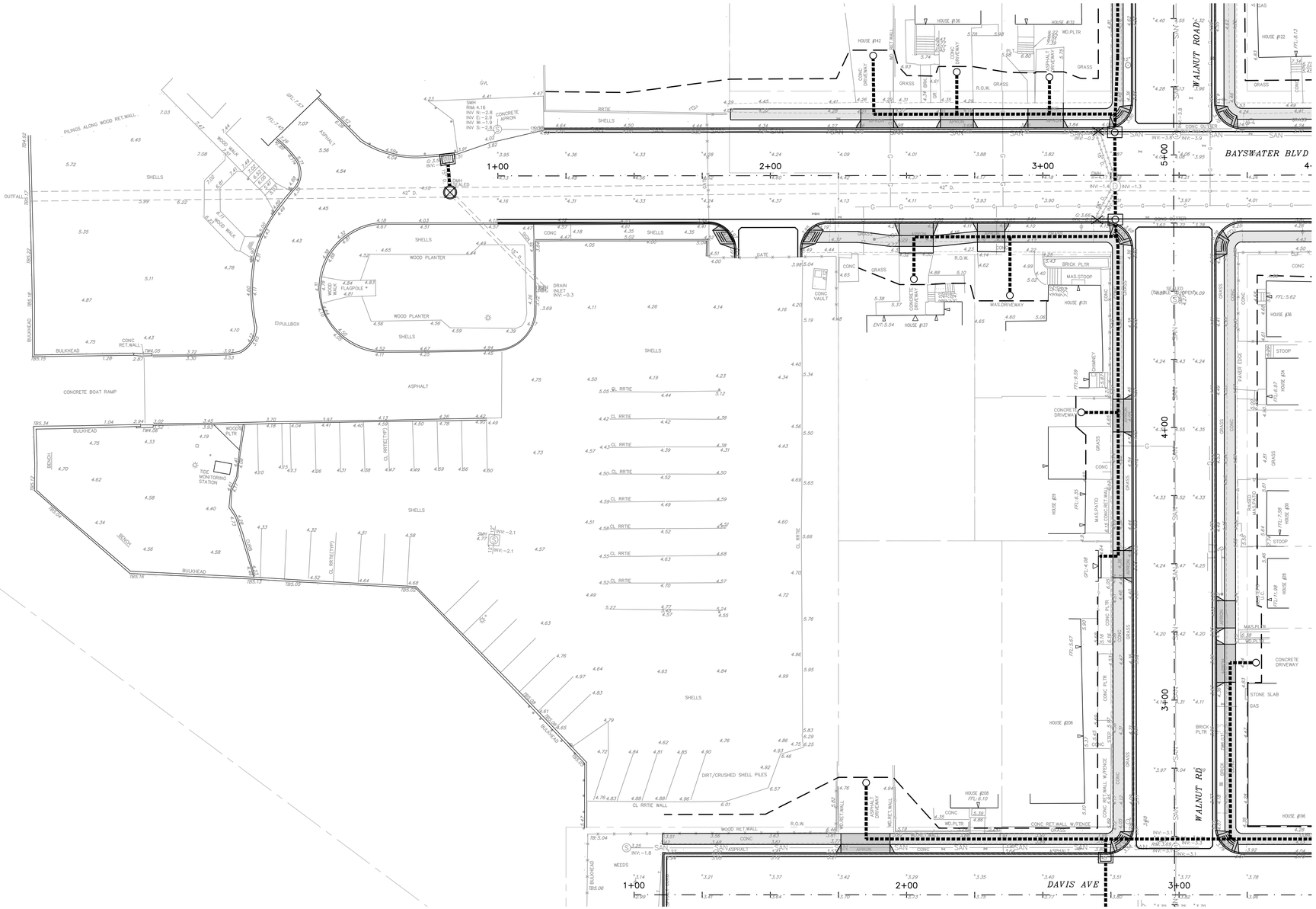

NO.	DATE	REVISIONS

In Charge: X
Compilation: X.
Design: X.
Drawn: X
Checked: X
Reviewed: X

TOWN OF HEMPSTEAD N.Y. FOUNDED 1644

Department of Engineering

PROFILE
GRADE
LEGEND

Proposed Centerline
Existing Centerline

MARINA PLAN

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: 1" = 20'
Date: JAN. 2019
File No.:
Dwg No.:
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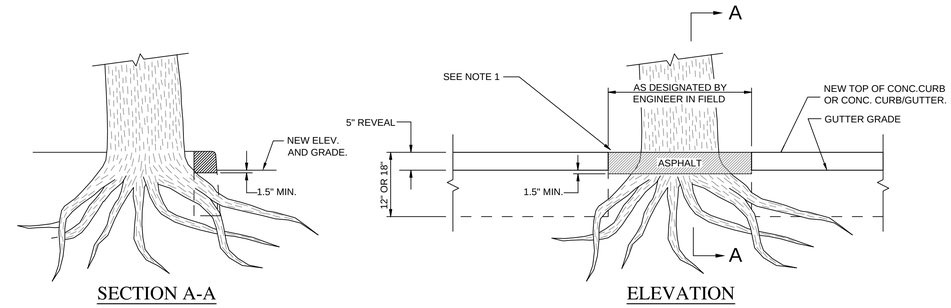
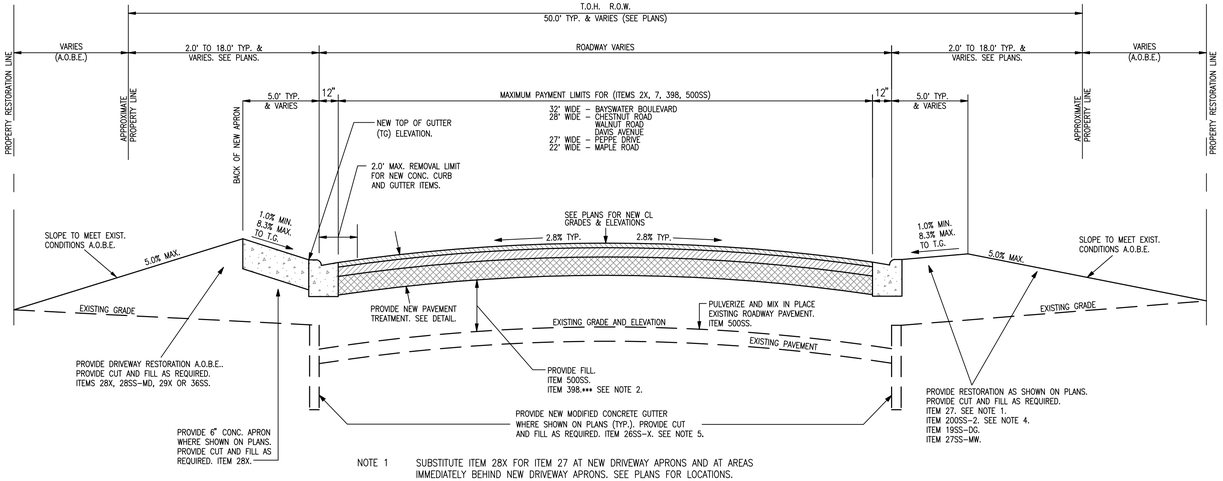


NOTES:

1. PROVIDE NEW ASPHALT CURB WHERE NEW CONCRETE CURB OR CURB AND GUTTER IS INTERRUPTED TO SAVE TREE.
2. PAYMENT FOR ROOT CUTTING SHALL BE INCLUDED IN THE PRICE BID FOR ALL NEW CONCRETE CURB PAYMENT ITEMS. ASPHALT USED AT INTERRUPTIONS IN NEW CURB OR CURB AND GUTTER SHALL BE PAID UNDER ITEM 36 E.

DETAIL OF CURB TREATMENT AT TREES

NOT TO SCALE



NOTE 1 SUBSTITUTE ITEM 28X FOR ITEM 27 AT NEW DRIVEWAY APRONS AND AT AREAS IMMEDIATELY BEHIND NEW DRIVEWAY APRONS. SEE PLANS FOR LOCATIONS.

NOTE 2 ITEM 398 SHALL ONLY BE PROVIDED AFTER ALL EXCESS EXISTING MATERIAL FROM ITEM 500SS OPERATIONS HAS BEEN USED AND WHEN APPROVED BY THE ENGINEER FOR GRADATION PURPOSES OR IN FILL AREAS BELOW THE NEW PAVEMENT BASE COURSE.

NOTE 3 ITEM 2X SHALL BE USED ONLY IF REMOVAL OF EXCESS EXISTING MATERIAL OF THE ROADWAY AREAS WITHIN THE PROJECT LIMITS IS REQUIRED AFTER THE COMPLETION OF ITEM 500SS AND ITEM 7 OPERATIONS.

NOTE 4 SUBSTITUTE ITEM 200SS-1 FOR ITEM 200SS-2 AT EXISTING TREE LOCATIONS WHERE A.O.B.E..

NOTE 5 SUBSTITUTE ITEM 26C AND ITEM 26SS FOR ITEM 26SS-X WHERE SHOWN ON PLANS TO REPLACE EXISTING CURB.

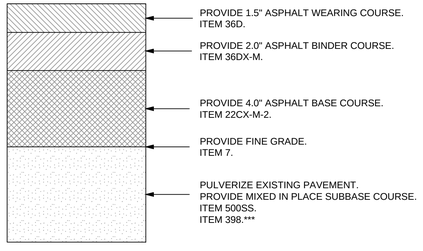
TYPICAL ROADWAY CROSS SECTION DETAIL OF PAYMENT LIMITS

NOT TO SCALE

ITEM	YIELD (S.Y. / TON / INCH)	YIELD (TONS / C.Y.)
22CX-M-2	17.85	2.02
36DX-M	17.60	2.05
36D	17.35	2.08
36E	17.10	2.11

NOTES
1. YIELDS INDICATED INCLUDE 5% MAXIMUM ALLOWABLE DEVIATION FOR RATE OF PLACEMENT OF EACH ITEM.

ASPHALT PAVEMENT YIELDS



NOTES
1. *** INDICATES A CONTINGENCY ITEM TO BE USED WHEN ORDERED BY ENGINEER.

T.O.H.PAVEMENT TREATMENT DETAIL

NOT TO SCALE

CROWN LAYOUT

$$Y = 4C(D/W)^2$$

WHERE : Y IS VERTICAL OFFSET FROM CROWN IN FEET.
C IS CROWN OF ROAD IN FEET.
D IS HORIZONTAL OFFSET FROM CROWN IN FEET.
W IS WIDTH OF ROAD IN FEET.

ROADWAY WIDTH = 30'
CROWN = .42'

D	Y
1'	.002'
2'	.007'
3'	.017'
4'	.030'
5'	.047'
6'	.067'
7'	.091'
7.5'	.105'
8'	.119'
9'	.151'
10'	.187'
11'	.226'
12'	.269'
13'	.315'
14'	.366'
15'	.420'

SYMMETRICAL CROWN LAYOUT DATA

NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

TOWN OF HEMPSTEAD N.Y. FOUNDED 1644
Department of Engineering

ROADWAY DETAILS

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

Scale: AS NOTED
Date: JAN. 2019
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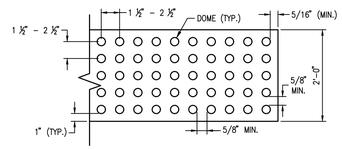
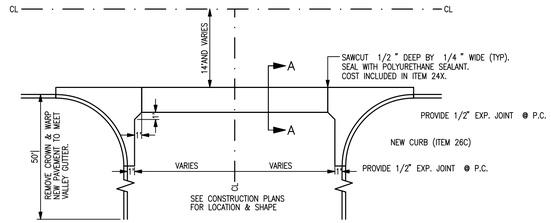
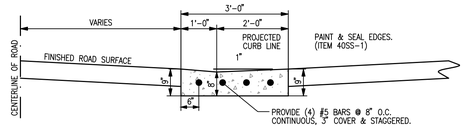


DETECTABLE WARNING FIELD DETAIL

N.T.S.



PLAN

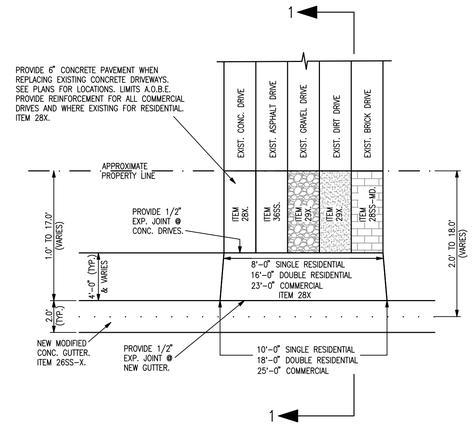


SECTION A-A

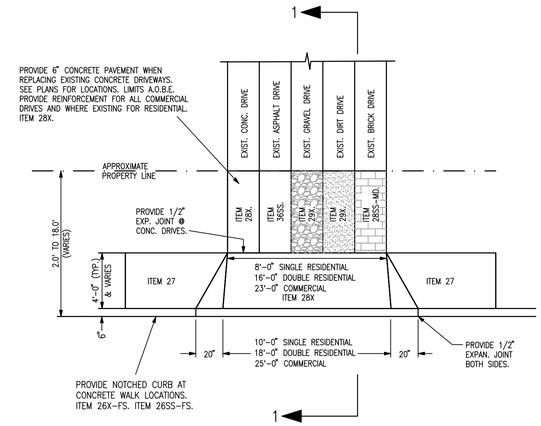
NOTE:
VALLEY GUTTER CONSTRUCTION SHALL BE RESTRICTED TO ONE SIDE OF THE INTERSECTION UNTIL THAT SIDE IS COMPLETED AND OPEN TO ALL TRAFFIC. REINFORCING RODS SHALL EXTEND 18" INTO SECOND HALF OF NEW VALLEY GUTTER.

CONCRETE VALLEY GUTTER DETAIL
ITEM 24X

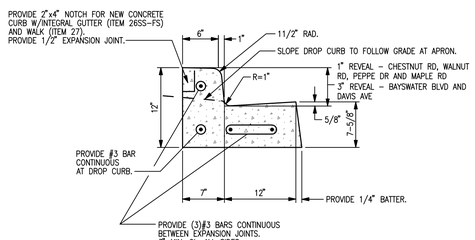
N.T.S.



PLAN



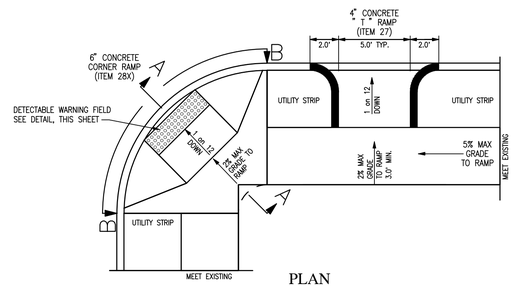
PLAN



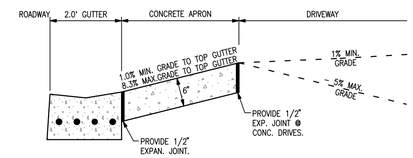
NOTE:
WWF 6x6/W4.7xW4.7 REINFORCING MESH MAY BE SUBSTITUTED FOR THE REINFORCING SHOWN (3–#3 BARS) WITH EXPANSION JOINT SPACING OF 20 FEET ON CENTER.

COMBINATION CONCRETE CURB AND GUTTER
ITEM 26 SS & 26SS-FS

N.T.S.



PLAN

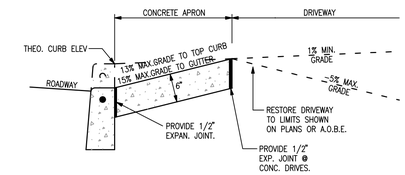


SECTION 1-1

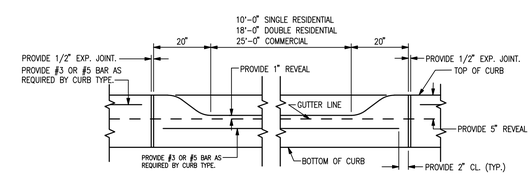
NOTES:
1. PROVIDE 1/2" EXP. JOINT WHERE NEW APRONS MEET EXISTING CONCRETE PAVEMENT.
2. PROVIDE 1/2" EXP. JOINT BETWEEN NEW APRONS AND NEW CONCRETE DRIVES.
3. NEW APRONS AND DRIVES SHALL BE 6" CONCRETE PAVEMENT.
4. REINFORCEMENT WHERE REQUIRED SHALL BE WWF 6 x12 / W4.7 X W4.7.
NO SEPARATE PAYMENT SHALL BE MADE FOR REINFORCEMENT. COST OF REINFORCEMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM 28X.

CONCRETE APRON DETAILS
ITEM 28X

N.T.S.

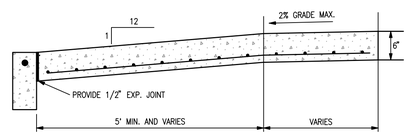


SECTION 1-1

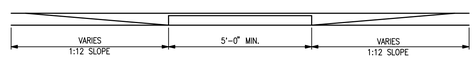


ELEVATION AT DROP CURB

N.T.S.



SECTION A-A

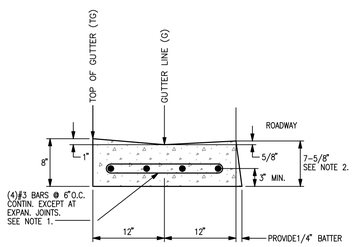


ELEVATION B-B

NOTES:
1. PROVIDE COARSE BROOM FINISH TO RAMPS, PERPENDICULAR TO DIRECTION OF SLOPE.
2. NEW CORNER RAMPS SHALL BE 6" CONCRETE PAVEMENT REINFORCED WITH WWF 6x12/W4.7 X W4.7 AND CONSTRUCTED UNDER ITEM 28X. NO SEPARATE PAYMENT SHALL BE MADE FOR REINFORCEMENT. COST OF REINFORCEMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM 28X.
3. NEW " T " RAMPS (NOT LOCATED ON CORNER QUADRANTS) SHALL BE 4" CONCRETE PAVEMENT AND CONSTRUCTED UNDER ITEM 27.
4. PROVIDE 1/2" EXPANSION JOINTS AT LOCATIONS WHERE NEW RAMPS MEET EXISTING CONCRETE PAVEMENT AND WHERE NEW 4" CONCRETE PAVEMENT (ITEM 27) MEETS NEW 6" CONCRETE PAVEMENT (ITEM 28X).

TYPE "A" SIDEWALK RAMP DETAILS
ITEM 27 AND ITEM 28X

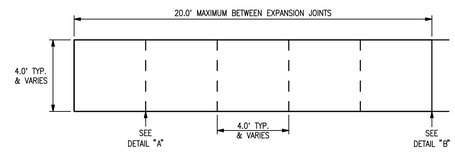
N.T.S.

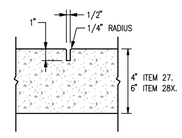


NOTES:
1. WWF 6x6/W4.7xW4.7 REINFORCING MESH MAY BE SUBSTITUTED FOR THE REINFORCING SHOWN (4–#3 BARS) WITH EXPANSION JOINT SPACING OF 20 FEET ON CENTER.
2. PROVIDE 5/8" / FT SLOPE FOR NEW GUTTER EXCEPT WHERE NOTED ON PLANS. SEE PLANS FOR LOCATIONS.

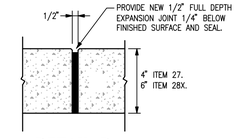
MODIFIED CONCRETE GUTTER DETAIL
ITEM 26SS-X

N.T.S.





DETAIL A
CONTRACTION JOINT



DETAIL B
EXPANSION JOINT

NOTES:
1. SEE SPECIFICATIONS FOR FURTHER LOCATION REQUIREMENTS.

CONTRACTION AND EXPANSION JOINT DETAIL

N.T.S.

NO.	DATE	REVISIONS	
			In Charge: X
			Compilation: X.
			Design: X.
			Drawn: X
			Checked: X
			Reviewed: X

TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

CONCRETE DETAILS

STORM WATER DRAINAGE
AND ROADWAY IMPROVEMENTS
INWOOD, N.Y.

Scale: AS NOTED
Date: JAN. 2019
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Dwg No.:
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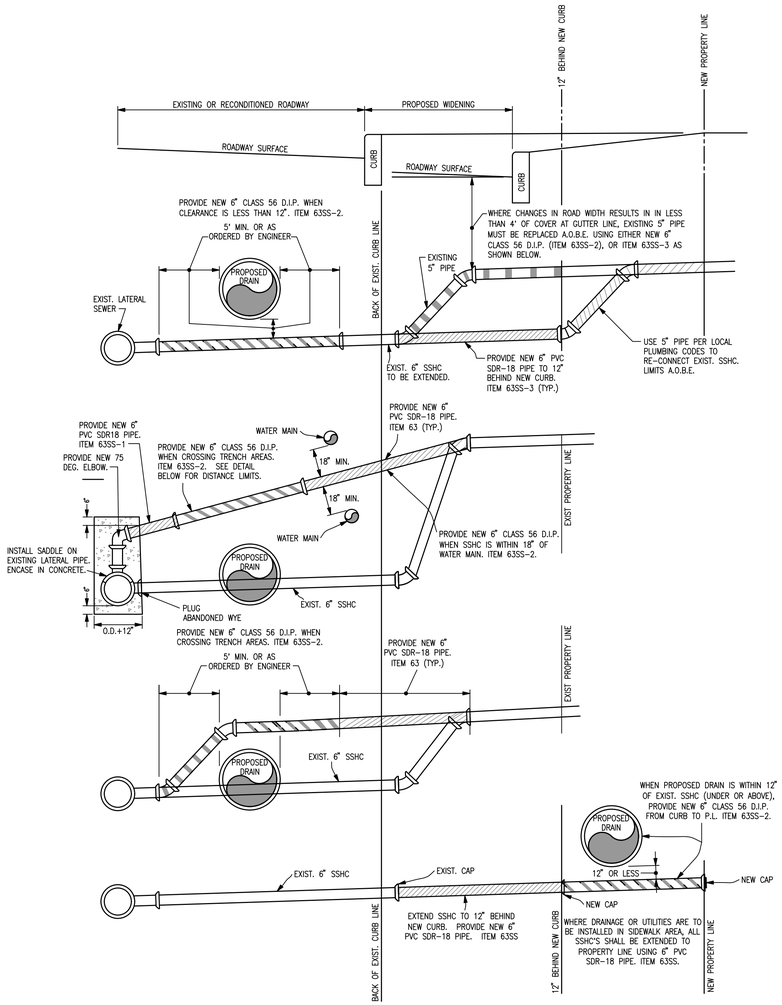
UTILITY CONTACTS		
UTILITY	TEL. #	CONTACT
NATIONAL GRID USA	516-545-5187	LAUREN ANDRIANO
PSEG-LI	516-545-5216	YAT MAR
TOWN OF HEMPSTEAD STREET LIGHTING	516-378-2260	JOHN BONNER
COUNTY OF NASSAU DIVISION OF PUBLIC WORKS	516-571-6844	PETER PYNE
CABLEVISION	516-390-5423	PAUL CORRADO
VERIZON	631-206-7471	KURT WOLF
WATER AUTHORITY OF WESTERN NASSAU COUNTY	516-327-4055	ROBERT SWARTZ

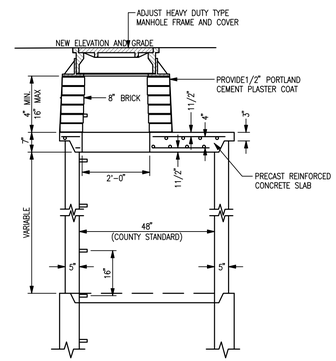


NOTES:

1. THE CONTRACTOR SHALL PROVIDE NEW PVC SDR-18 PIPE FOR ALL EXISTING SSHC PIPE TO BE ALTERED OR EXTENDED UNDER ITEM 63, ITEM 63SS-1 AND ITEM 63SS-3. NO ADDITIONAL OR SEPARATE PAYMENT SHALL BE MADE.
2. THE CONTRACTOR SHALL PROVIDE NEW 6" CLASS 56 DUCTILE IRON PIPE FOR ALL EXISTING SSHC PIPE TO BE ALTERED OR EXTENDED UNDER ITEM 63SS-2. NO ADDITIONAL OR SEPARATE PAYMENT SHALL BE MADE.
3. MECHANICAL COMPACTION IS REQUIRED IN ALL TRENCHS OR AS ORDERED BY THE ENGINEER.

SANITARY SEWER HOUSE CONNECTION ALTERATIONS
ITEM 63, ITEM 63SS, ITEM 63SS-1, ITEM 63 SS-2 AND ITEM 63SS-3

NOT TO SCALE



SANITARY SEWER NOTES

1. THE CONTRACTOR SHALL NOTIFY THE DIVISION OF SANITATION & WATER SUPPLY A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO WORK INVOLVING ANY SANITARY SEWER FACILITIES. NOTIFICATION IS TO BE MADE BY CALLING (516) 571-6841 OR 571-6844.
2. ALL WORK SHALL BE IN ACCORDANCE WITH N.C.D.P.W. STANDARD SPECIFICATIONS AND DETAILS FOR THE CONSTRUCTION OF SANITARY SEWERS, LATEST EDITION (2003). ALL WORK MUST BE PERFORMED IN THE PRESENCE OF A NASSAU COUNTY INSPECTOR. SEWER FLOW MUST BE MAINTAINED DURING CONSTRUCTION. COST TO BE INCLUDED IN ALL ITEMS OF CONTRACT.
3. ALL SANITARY SEWER HOUSE CONNECTIONS AND LATERALS SHALL BE LOCATED PRIOR TO ANY EXCAVATION BY THE CONTRACTOR.
4. THE HORIZONTAL/VERTICAL SEPARATION BETWEEN SEWER AND DRAINAGE PIPES AND SEWER AND WATER MAINS/SERVICE SHALL MEET OR EXCEED THE REQUIREMENTS OUTLINED IN THE RECOMMENDED STANDARDS FOR SEWER WORKS (TEN STATE STANDARDS), LATEST EDITION.
5. WHERE SANITARY OR HOUSE CONNECTION SEWERS CROSS OVER A DRAINAGE TRENCH AREA, THE SEWER SHALL BE REPLACED WITH DUCTILE IRON EXTENDING A MINIMUM OF FIVE (5) FEET EACH SIDE OF CROSSING TO UNDISTURBED SOIL. THE SAME REPLACEMENT SHALL APPLY FOR SEWERS UNDER A DRAINAGE TRENCH AREA WITHIN TWELVE (12) INCHES CLEARANCE, BOTTOM OF DRAIN TO TOP OF SEWER.
6. ALL PIPES, MANHOLES AND APPURTENANCES SHALL HAVE THE COUNTY APPROVAL STAMP THEREON OR WRITTEN CERTIFICATION ACCEPTABLE TO THE COUNTY BEFORE THE MATERIAL CAN BE INSTALLED.
7. WHERE IT IS NECESSARY TO RAISE SANITARY SEWER MANHOLE CASTINGS TO GRADE FOR REPAVING, FIXED FRAME CASTINGS MUST BE RAISED BY ADJUSTING THE HEIGHT OF THE BRICK MASONRY (INSERTS ARE NOT PERMITTED). ADJUSTABLE FRAME TYPE MANHOLES MAY BE RAISED BY ADDING UP TO A MAXIMUM OF TWO (2), ONE (1) INCH ADJUSTMENT RINGS TO ACHIEVE FINAL GRADE.
8. THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR ENTRY INTO A CONFINED SPACE WHENEVER IT IS NECESSARY FOR A CONTRACTOR'S EMPLOYEE TO ENTER A NASSAU COUNTY SANITARY SEWER MANHOLE. THE MINIMUM REQUIREMENTS THE CONTRACTOR MUST COMPLY WITH ARE :

   A. CONTRACTOR ISSUED "ENTRY PERMIT"
   B. CONFINED SPACE ENTRY MONITOR TO TEST FOR TOXIC, EXPLOSIVE AND OXYGEN DEFICIENT ATMOSPHERE
   C. CONFINED SPACE RESCUE AND RETRIEVAL

   THE CONTRACTOR WILL NOT BE PERMITTED TO WORK IN A NASSAU COUNTY SANITARY SEWER MANHOLE UNLESS HE COMPLIES WITH ALL APPLICABLE OSHA REQUIREMENTS.

ADJUSTMENT DETAIL FOR SANITARY SEWER MANHOLES
ITEM 16SS-1 OR 16SS-2

NOT TO SCALE

NO.	DATE	REVISIONS

In Charge:	X
Compilation:	X.
Design:	X.
Drawn:	X
Checked:	X
Reviewed:	X

TOWN OF HEMPSTEAD N.Y. FOUNDED 1644

Department of Engineering

UTILITY DETAILS

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

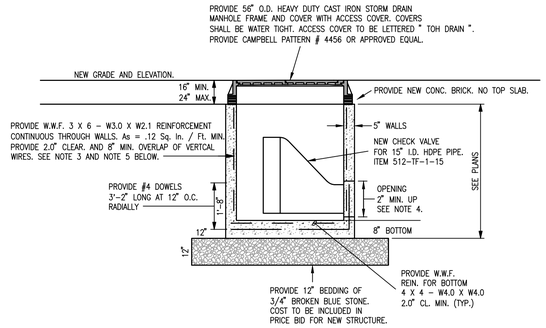
Scale: AS NOTED

Date: JAN. 2019

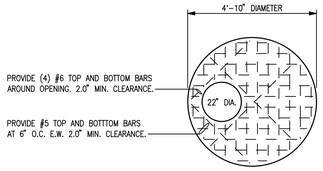
File No.:

Dwg No.:

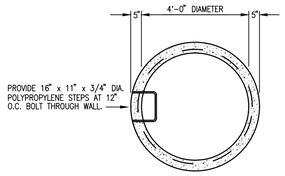
Sheet No.: 20 of 21



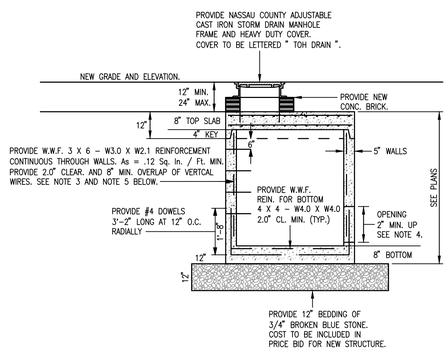
ELEVATION SECTION WITH CHECK VALVE (NO TOP SLAB)



TOP SLAB PLAN



PLAN SECTION



ELEVATION SECTION

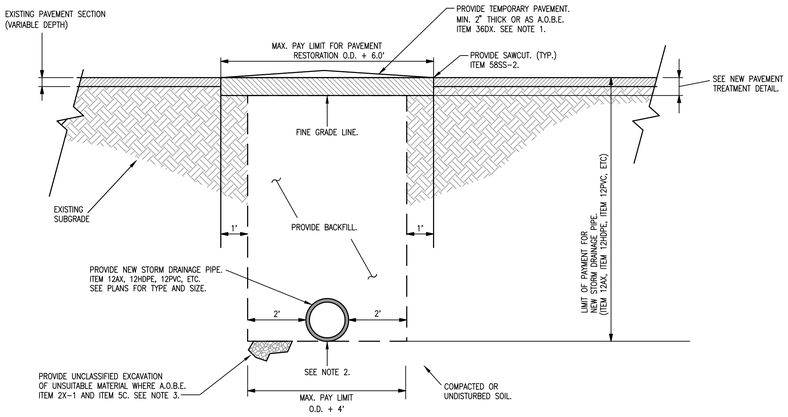
ITEM 13BX-3-4 NOTES:

1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A-615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED.
5. PRECAST OPENINGS SHALL BE ROUND IN SHAPE AND BE OUTSIDE DIAMETER OF NEW PIPE PLUS 6" MINIMUM. 5. ALL PRECAST MANHOLE RISER REINFORCING SHALL COMPLY WITH AREA REQUIREMENTS OF ASTM DESIGNATION C-478.
6. LOADING FOR TOP SLAB SHALL MEET AASHTO HS-20.

DETAIL OF NEW "TYPE 3" 48" DIAMETER PRECAST CONCRETE DRAIN MANHOLE

ITEM 13BX-3-4

NOT TO SCALE

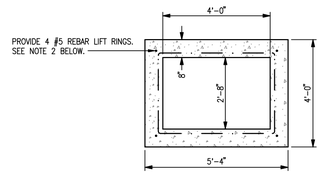


NOTES:

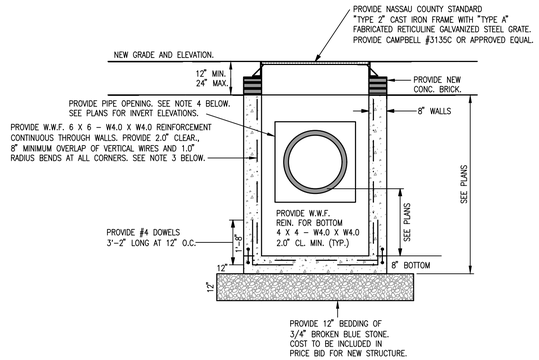
1. THE COST OF EXCAVATING AND REMOVAL OF EXCESS FILL AND OR TEMPORARY PAVEMENT ABOVE THE FINE GRADE LINE WITHIN PAVEMENT RESTORATION LIMITS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 360X.
2. A DRY TRENCH SHALL BE MAINTAINED FOR ALL NEW PIPE INSTALLATIONS. THE COSTSHALL BE INCLUDED IN THE PRICE BID FOR NEW PIPE (ITEM 12AX, 12HDPE, 12PVC, ETC.)
3. UNSUITABLE MATERIAL ENCOUNTERED WITHIN THE TRENCH SHALL BE EXCAVATEDTO THELIMITS A.O.B.E. (2.0' MAX.) AND BACKFILLED WITH SELECTED FILL. ITEM 2X-1 AND ITEM 5C.

DETAIL OF TYPICAL STORM DRAINAGE PIPE TRENCH

NOT TO SCALE



PLAN SECTION



ELEVATION SECTION

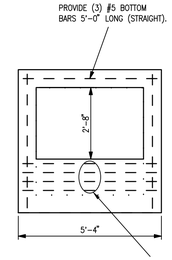
ITEM 13AX-B-MOD NOTES:

1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A-615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED.
5. PRECAST OPENINGS SHALL BE SQUARE IN SHAPE AND BE INSIDE DIAMETER OF NEW PIPE PLUS 12". 5. PROVIDE CONTINUOUS 6" P.V.C. WATER STOP IF BOTTOM IS NOT CONSTRUCTED MONOLITHICALLY WITH WALLS.

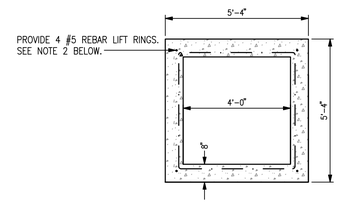
DETAIL OF NEW TYPE "B-MODIFIED" PRECAST CONCRETE CATCH BASIN

ITEM 13AX-B-MOD.

NOT TO SCALE

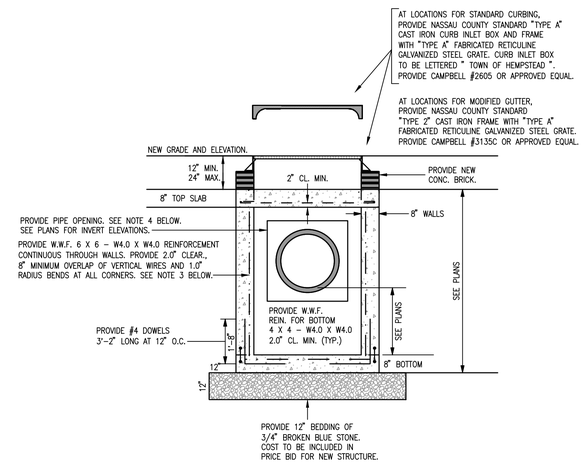


TOP SLAB PLAN



WALLS

PLAN SECTION



ELEVATION SECTION

ITEM 13AX-B NOTES:

1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A-615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED.
5. PRECAST OPENINGS SHALL BE SQUARE IN SHAPE AND BE INSIDE DIAMETER OF NEW PIPE PLUS 12". 5. PROVIDE CONTINUOUS 6" P.V.C. WATER STOP IF BOTTOM IS NOT CONSTRUCTED MONOLITHICALLY WITH WALLS.
6. LOADING FOR TOP SLAB SHALL MEET AASHTO HS-20.

DETAIL OF NEW TYPE "B" PRECAST CONCRETE CATCH BASIN

ITEM 13AX-B.

NOT TO SCALE

NO.	DATE	REVISIONS

In Charge:	X
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Department of Engineering

DRAINAGE DETAILS

STORM WATER DRAINAGE AND ROADWAY IMPROVEMENTS INWOOD, N.Y.

Scale: AS NOTED

Date: JAN. 2019

File No.:

Dwg No.:

Sheet No.: 21 of 21

TOWN OF HEMPSTEAD
DEPARTMENT OF ENGINEERING
NASSAU COUNTY, NEW YORK

CONTRACT DRAWING FOR
WOODMERE DRAINAGE IMPROVEMENTS
TOWN OF HEMPSTEAD
NASSAU COUNTY

FEBRUARY 2019

APPROVED BY

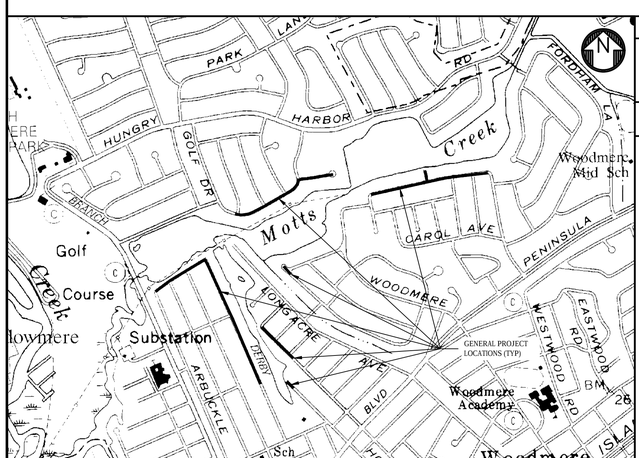
DOUGLAS L. TUMAN, P.E., ESQ. — DATE
COMMISSIONER OF ENGINEERING

THOMAS TOSCANO — DATE
COMMISSIONER OF HIGHWAYS

KEVIN ALMIRALL, P.E. — DATE
CIVIL ENGINEER

SUBMITTED FOR APPROVAL BY

JOSEPH R. AMATO, P.E. — DATE
CAMERON ENGINEERING & ASSOCIATES, LLP



SCALE: 1" = 600'

LOCATION PLAN

SHADED AREA INDICATES CONTRACT LIMITS

NASSAU COUNTY FILE NO.

NASSAU COUNTY APPROVALS

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BASE MAP LEGEND

MANHOLES
- STORM DRAIN
- ELECTRIC
- GAS
- SANITARY SEWER
- SANITARY SEWER CLEANOUT
- TRAFFIC
- TELEPHONE
- UNKNOWN
- WATER

CATCH BASIN INLETS
- COMB.CURB INLET & GRATE
- CURB INLET
- DOUBLE CURB INLET
- FLUSH GRATE
- ROUND GRATE

UTILITIES
- STORM DRAINAGE PIPE — 18" DRAIN
- ELECTRIC — E
- GAS MAIN — 4"G
- SANITARY SEWER PIPE — 12"S
- TELEPHONE — T
- TRAFFIC — TR
- WATER — 8"W

UTILITY PAINT
- ELECTRIC — EL
- ELECTRIC OFFSET — EL 2'
- GAS — GM
- GAS OFFSET — GM 2'
- GAS SERVICE — G S
- SEWER HOUSE CONNECTION — SHC
- TELEPHONE — TEL
- TELEPHONE OFFSET — T 2'
- WATER — WM
- WATER SERVICE — S
- WATER OFFSET — WM 2'

UTILITY HARDWARE
- ELECTRIC VAULT — E
- GAS MAIN VALVE
- GAS SERVICE VALVE
- GAS VENT — G
- HYDRANT
- HYDRANT VALVE
- OIL FILLER VALVE — FV
- SANITARY SEWER VENT — S
- TRAFFIC DETECTOR
- TRAFFIC LOOP
- UNIDENTIFIED VAULT — V
- UNKNOWN VALVE
- WATER MAIN VALVE
- WATER METER — M
- WATER SERVICE VALVE

UTILITY POLES
- METAL POLE WITH LIGHT
- METAL POLE WITH TRAFFIC
- PEDESTRIAN STANCHION
- WOODEN UTILITY POLE
- WOODEN UTILITY POLE WITH LIGHT

VEGETATION
- BUSH
- 4' HIGH HEDGE — 4' HEDGE
- 15" DIA. DECIDUOUS TREE — 15"
- EVERGREEN

- GUARD RAIL
- METAL FENCE
- RETAINING WALL
- WOODEN FENC
- VINYL FENCE

BASE MAP LEGEND

MISCELLANEOUS
- BASELINE & STATION — 0+00, 1+00
- BASKETBALL BACKBOARD POST — BB
- CELLAR DOOR
- COLUMN
- CURB
- CURB & GUTTER
- EDGE OF PAVEMENT
- FIRST FLOOR ENTRANCE
- FLAGPOLE — FP
- GARAGE ENTRANCE
- GUARDPOST — GP
- GUYWIRE & ANCHOR
- HANDICAP RAMP
- LOT LINE
- MAILBOX
- MONUMENT
- PARKING METER
- POLICE BOX — P
- PROPERTY LINE
- ROOF DRAIN — RD
- ROADWAY CENTERLINE
- SIGN – SINGLE POST
- SIGN – DOUBLE POST
- TELEPHONE BOOTH — TEL
- TEST HOLE

ABBREVIATIONS

ABAND.	ABANDONED
ALUM	ALUMINUM
A.O.B.E.	AS ORDERED BY ENGINEER
APT.	APARTMENT
ASPH.	ASPHALT
BOP	BEGINNING OF PROFILE
B. BLK	BELGIAN BLOCK
B.C.	BOTTOM OF CURB
B.T.	BLACKTOP
BIT	BITUMINOUS
BLK	BLOCK
B.M.	BENCH MARK
BRK	BRICK
B.W.	BACK OF SIDEWALK
CB	CATCH BASIN
CL	CENTERLINE OF ROADWAY
CONC.	CONCRETE
CH. LK. FE.	CHAIN LINK FENCE
D.I.C.B.	DOUBLE INLET CATCH BASIN
DILAP.	DILAPIDATED
(E)	EAST
EL	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST.	EXISTING
FF7.25	FIRST FLOOR ELEVATION
FR	FRAME
F.W.	FRONT OF SIDEWALK
G	GUTTER
GF18.30	GARAGE FLOOR ELEVATION
H.C.R.	HANDICAP RAMP
HP 5.90C	HIGH POINT ELEVATION AT CURB
H.D.P.E.	HIGH DENSITY POLYETHELENE PIPE
INV. = 7.00	INVERT ELEVATION
L.	LEFT
L/C	LEFT CURB
MH	MANHOLE
MID C.L.	MIDCENTERLINE OF ROADWAY
(N)	NORTH
N.I.C.	NOT IN CONTRACT
PC	POINT OF CURVATURE
RAIL FE.	POST AND RAIL FENCE
#107	RESIDENCE NO. 107
RCP	REINFORCED CONCRETE PIPE
R.	RIGHT
R/C	RIGHT CURB
R=32.65	RIM ELEVATION OF MANHOLE
S.I.C.B.	SINGLE INLET CATCH BASIN
SSHC	SANITARY SEWER HOUSE CONNECTION
SLT.	SLATE
(S)	SOUTH
STA	STATION
STOCK FE.	STOCKADE FENCE
STY	STORY
T.B.M.	TEMPORARY BENCH MARK
T.C.	TOP OF CURB
TH #3	TEST HOLE
THEO.	THEORETICAL
TTC	THEORETICAL TOP OF CURB
TYP.	TYPICAL
U.G.	UNDERGROUND
VAC.	VACANT
VPI	VERTICAL POINT OF INTERSECTION
(W)	WEST
WD	WOOD

Sheet List Table

Drawing Number	Sheet Title	Sheet Number
	COVER	--
2	LEGEND, ABREVIATIONS, SHEET LIST	G-100
3	COMPREHENSIVE DRAINAGE PLAN	C-100
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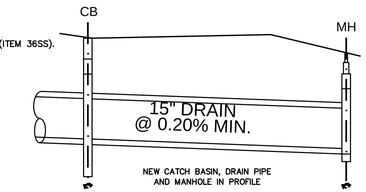
5	REGION N3 (5 thru 8)	C-102
6	REGION N4	C-103
7	REGION N5	C-104
8	DETAILS	D-100
9	DETAILS (2)	D-101

NEW CONSTRUCTION LEGEND FOR PLAN & PROFILE SHEETS

- 27 / NOTCH — REPLACE EXISTING CONCRETE CURB OR EXISTING CONRETE CURB AND GUTTER WITH NEW INTEGRAL CONCRETE CURB AND GUTTER (ITEM 26SS) OR NEW NOTCHED INTEGRAL CONCRETE CURB AND GUTTER (ITEM 26SS–FS). REPLACE EXISTING CONCRETE WALK (ITEM 27).
- 27 / NOTCH — REPLACE EXISTING CONCRETE CURB WITH NEW STANDARD CONCRETE CURB (ITEM 26C), OR NEW NOTCHED STANDARD CONRETE CURB (ITEM 26X–FS). REPLACE EXISTING CONCRETE WALK. (ITEM 27).
- 27 / 28SS — PROVIDE NEW CONCRETE RAMP AT CORNER.(ITEM 28SS). PROVIDE NEW CONCRETE RAMP AT MID BLOCK.(ITEM 27). REPLACE EXISTING CONCRETE WALK.(ITEM 27). REPLACE EXISTING CONCRETE CURB.(ITEM 26C).
- 27 / 28SS / 27 — REPLACE EXISTING CONCRETE WALK TO LIMITS SHOWN.(ITEM 27). REPLACE EXISTING CONCRETE DRIVE TO LIMITS SHOWN.(ITEM 28SS). PROVIDE CONCRETE SAWCUT WHERE REQUIRED A.O.B.E.(ITEM 58SS–1).
- RESTORE EXISTING GRAVEL OR DIRT DRIVE.(ITEM 29X).
- RESTORE EXISTING ASPHALT DRIVE.(ITEM 36SS).
- RESTORE EXISTING MASONRY DRIVE.(ITEM 28SS–MD).
- REPLACE EXISTING CONCRETE WALK.(ITEM 27).
- REPLACE EXISTING CONCRETE DRIVE.(ITEM 28SS).
- REPLACE EXISTING GRASS.(ITEM 200SS–2).
- REPLACE EXISTING CONCRETE CURB WITH NEW INTEGRAL CONCRETE CURB AND GUTTER.(ITEM 26SS).
- REPLACE EXISTING CONCRETE CURB.(ITEM 26C). RESTORE EXISTING ASPHALT DRIVE.(ITEM 36SS). RESTORE EXISTING DRIVEWAY CURB.(ITEM 26SS–MSC, OR 26SS–SC).
- 29X — REPLACE EXISTING CONCRETE CURB.(ITEM 26C). RESTORE EXISTING GRAVEL OR DIRT DRIVE.(ITEM 29X).
- REPLACE EXISTING CONCRETE CURB.(ITEM 26C). RESTORE EXISTING MASONRY WALK.(ITEM 27SS–MW).
- 26C / 24X — PROVIDE CONCRETE VALLEY GUTTER.(ITEM 24X). REPLACE EXISTING CONCRETE CURB.(ITEM 26C).
- A.V.G. — ASPHALT VALLEY GUTTER
- LIMIT OF RESTORATION

- MH CB — DEMOLISH EXISTING DRAINAGE STRUCTURES.(ITEM 4BX).
- MH CB 18" DRAIN — PROVIDE NEW CATCH BASIN (ITEM 13AX), MANHOLE (ITEM 13BX) AND STORM DRAIN PIPE (ITEM 12AX, 12HDPE, ETC.). SEE PLAN AND PROFILE DRAWINGS FOR TYPES AND SIZES.
- ALTER EXISTING CATCH BASIN TOP SLAB.(ITEM 15X). CONTINUE CONCRETE GUTTER IN FRONT OF CATCH BASIN.(ITEM 26SS).
- S — ADJUST EXISTING SANITARY MANHOLE TO GRADE.(ITEMS 16SS–1 OR 16SS–2).
- D — ADJUST EXISTING DRAINAGE MANHOLE TO GRADE.(ITEMS 16SS–3 OR 16SS–4).
- BULKHEAD EXISTING DRAIN PIPE.(ITEM 18SS–2). DEMOLISH EXISTING CATCH BASIN.(ITEM 4BX).
- CONNECT NEW DRAIN PIPE TO EXISTING STRUCTURE.(ITEM 14X).
- CONNECT NEW MANHOLE TO EXISTING DRAIN PIPE.(ITEM 14X).
- CONNECT NEW DRAIN PIPE TO EXISTING DRAIN PIPE.(ITEM 312–FPC).
- PROVIDE NEW CONCRETE BOTTOM SLAB IN EXISTING CATCH BASIN.(ITEM 18X).



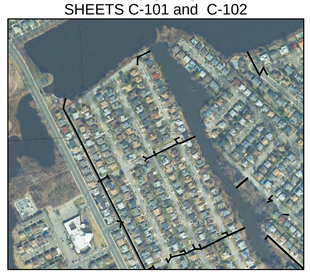
NEW CATCH BASIN, DRAIN PIPE AND MANHOLE IN PROFILE

- 15.00 — EXISTING ELEVATION
- 15.00 — NEW ELEVATION

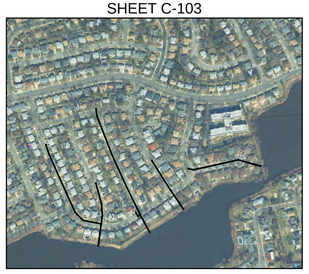
DRAWING INDEX DIAGRAM

N

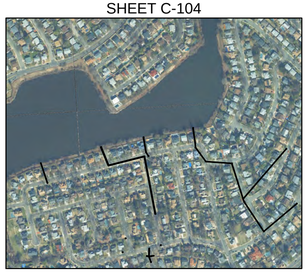
REGION N3
SHEETS C-101 and C-102



REGION N4
SHEET C-103



REGION N5
SHEET C-104



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LEGEND, ABREVIATIONS, SHEET LIST

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

Scale: NOT TO SCALE
Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: G–100
Sheet No.: 2 of 9

PROPOSED DRAINAGE IMPROVEMENTS BY LOCATION

LOCATION	DESCRIPTION	PROPOSED IMPROVEMENTS		
		CHECK VALVE INSTALLATION	INSTALL CDS STORMWATER TREATMENT	INCREASE OUTFALL PIPE SIZE
N3-1	NORTH OF INTERSECTION OF ARBUCKLE AVE AND STEVENSON ST	X	X	X
N3-2	NORTH OF INTERSECTION OF STEVENSON ST AND DERBY DR	X		
N3-3	EAST OF INTERSECTION OF RALEIGH ST AND DERBY DR	X	X	X
N3-4	NORTH END OF GREENE PLACE CUL-DE-SAC	X	X	X
N3-5	648 LONGACRE AVE	X		
N3-6	WEST SIDE OF ISLAND AVE AT NAPOLEAN ST			
N3-7	EAST SIDE OF DERBY DR ALIGNED WITH POE ST (TO THE WEST)	X	X	X
N3-8	WEST SIDE OF THE END OF HOWARD AVE	X	X	
N4-1	SOUTH SIDE OF GOLF DRIVE, OPPOSITE TURF ROAD	X	X	
N4-2	SOUTH SIDE OF GOLF DRIVE, OPPOSITE EAGLE DRIVE	X	X	
N4-3	SOUTH SIDE OF GOLF DRIVE, OPPOSITE BUNKER ROAD	X	X	
N4-4	EAST SIDE OF GOLF COURT	X	X	
N5-1	NORTH SIDE OF MIDWAY BETWEEN ****	X	X	X
N5-2	NORTH END OF BRIDGE ST	X	X	
N5-3	NORTH SIDE OF MIDWAY OPPOSITE NORMAN WAY	X	X	
N5-4	NORTH SIDE OF MIDWAY OPPOSITE SADDLE RIDGE RD	X	X	X

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORIZ. 1 inch = 20 ft.

NO.	DATE	REVISIONS

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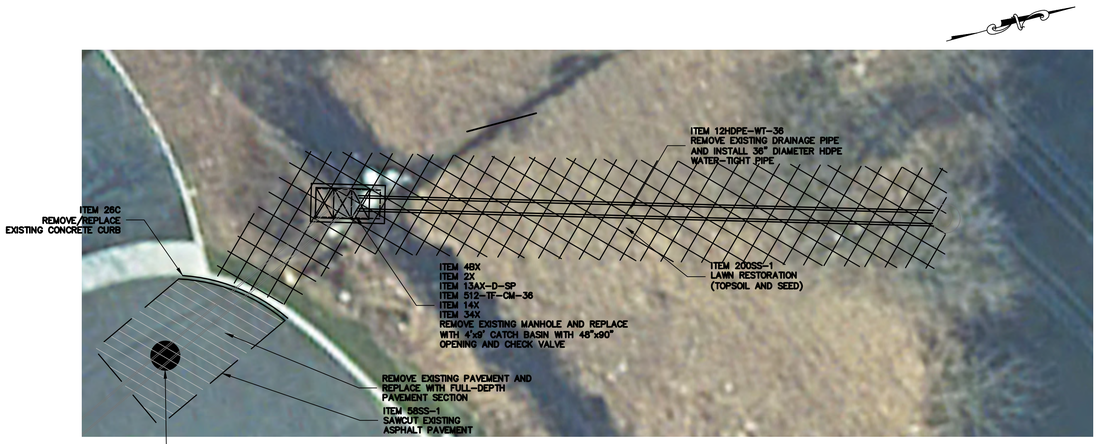
Department of Engineering

COMPREHENSIVE DRAINAGE PLAN

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

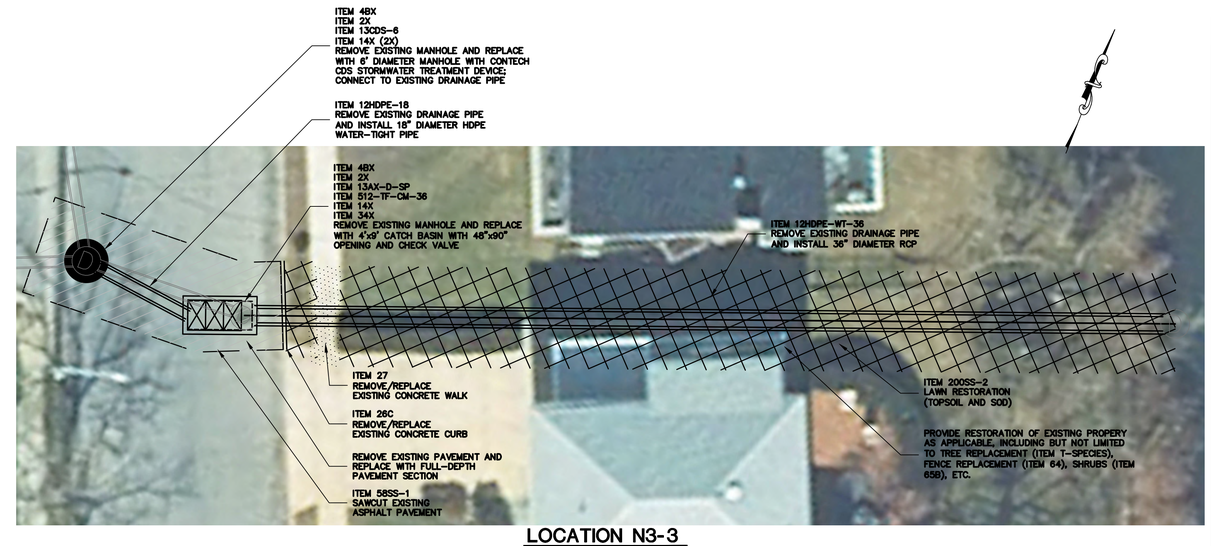
Scale:
Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: C–100
Sheet No.: 3 of 9



LOCATION N3-1

SCOPE OF WORK:

1. INSTALL CHECK VALVE IN NEW MANHOLE
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
3. INCREASE DIAMETER OF OUTFALL PIPE TO 36" DIAMETER



LOCATION N3-3

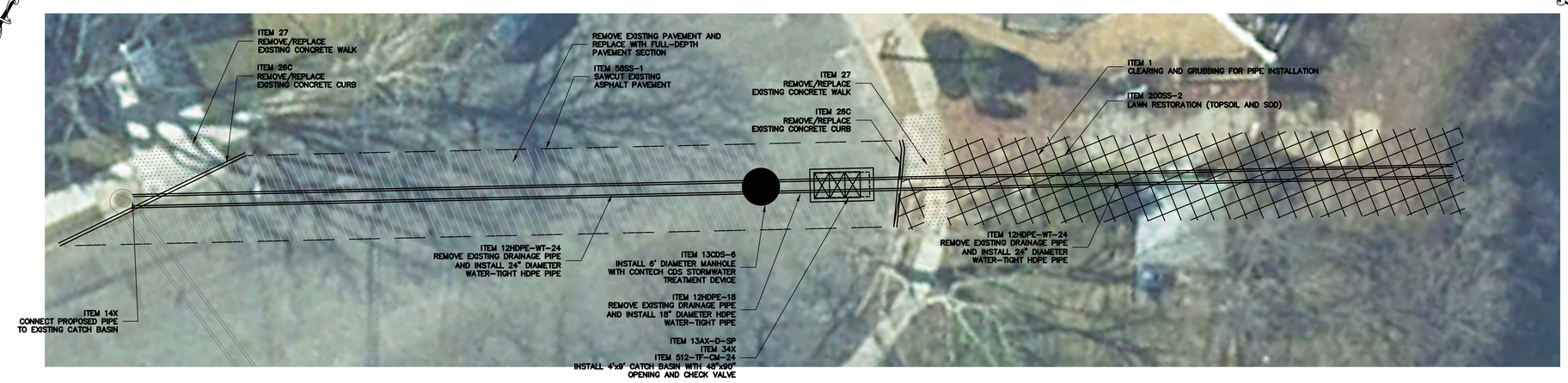
SCOPE OF WORK:

1. INSTALL CHECK VALVE AT OUTFALL
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
3. INCREASE DIAMETER OF OUTFALL PIPE TO 36" DIAMETER

LOCATION N3-2

SCOPE OF WORK:

1. INSTALL CHECK VALVE WITHIN EXISTING CATCH BASIN
2. INSTALL CATCH BASIN FILTERS WITHIN EXISTING CATCH BASINS



LOCATION N3-4

SCOPE OF WORK:

1. INSTALL CHECK VALVE IN NEW MANHOLE
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
3. INCREASE DIAMETER OF OUTFALL PIPE TO 24" DIAMETER

SURVEY NOTE

1. DESIGN BASED ON AERIAL INFORMATION OBTAINED FROM THE NEW YORK STATE AERIAL IMAGERY.
2. EXISTING PIPE INFORMATION WAS COMPILED FROM RECORD INFORMATION PROVIDED BY THE TOWN OF HEMPSTEAD AND FROM THE 5 TOWNS DRAINAGE REPORT PREPARED FOR THE NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS (DECEMBER 2017)
3. THE EXISTING CONDITIONS SURVEY FOR THE PROJECT AREA IS ANTICIPATED TO BE COMPLETED IN OCTOBER 2018.

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
HORIZ. 1 inch = 10 ft.

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REGION N3 (1 THRU 4)

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

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Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: C-101
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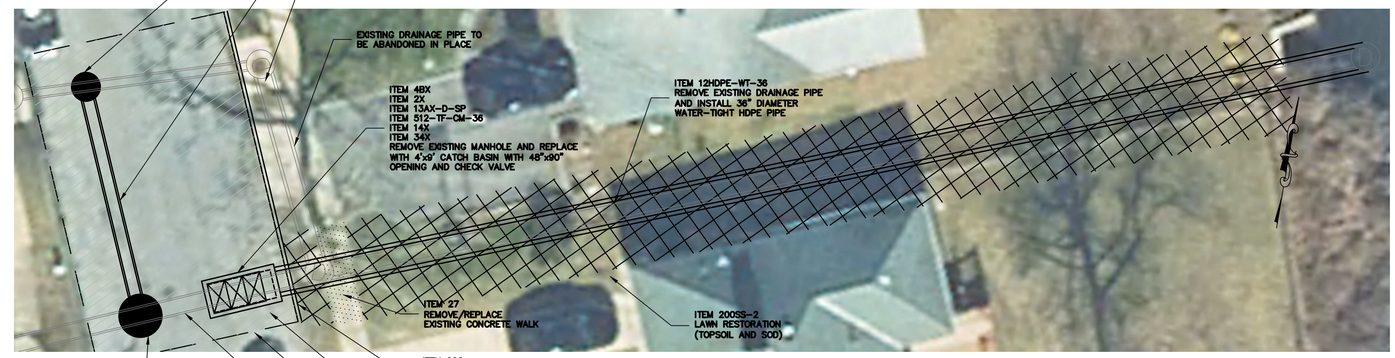
LOCATION N3-5

SCOPE OF WORK:

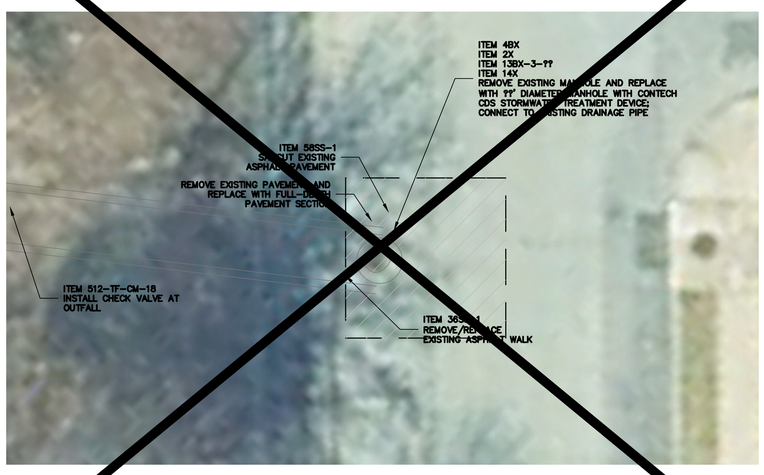
1. INSTALL CHECK VALVE WITHIN EXISTING CATCH BASIN



LOCATION N3-7

SCOPE OF WORK:

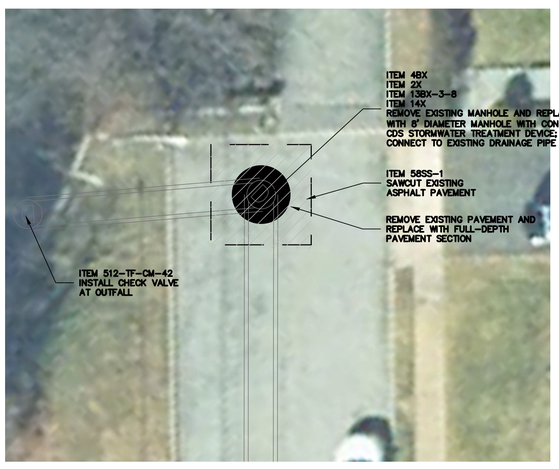
1. INSTALL CHECK VALVE AT OUTFALL
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
3. INCREASE DIAMETER OF OUTFALL PIPE TO 36" DIAMETER



LOCATION N3-6

SCOPE OF WORK:

1. NO WORK PROPOSED AT THIS LOCATION.



LOCATION N3-8

SCOPE OF WORK:

1. INSTALL CHECK VALVE AT OUTFALL
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)

SURVEY NOTE

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GRAPHIC SCALE

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REGION N3 (5 THRU 8)

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

Scale:
Date: FEBRUARY 2019
File No.: CE2876
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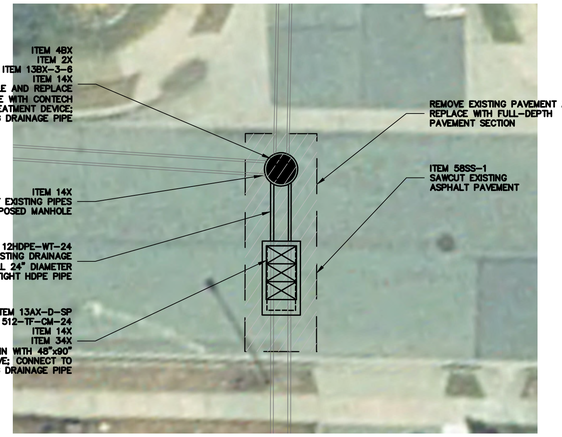
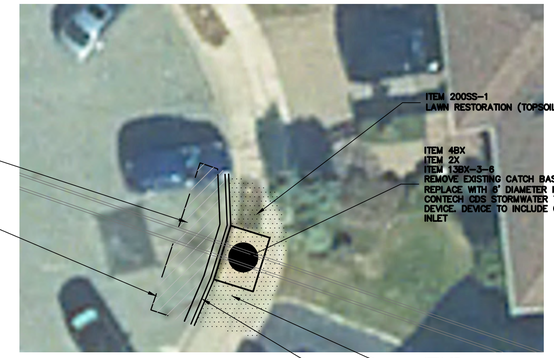


LOCATION N4-1

SCOPE OF WORK:

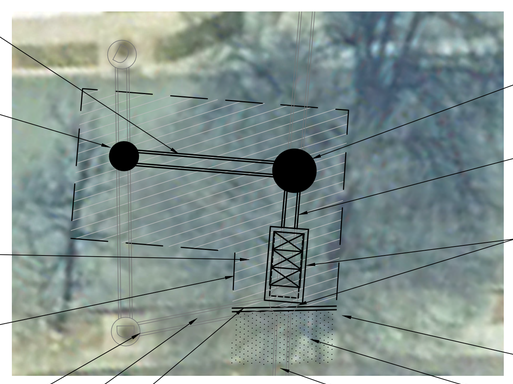
1. INSTALL CHECK VALVE IN NEW CATCH BASIN
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)



LOCATION N4-4

SCOPE OF WORK:

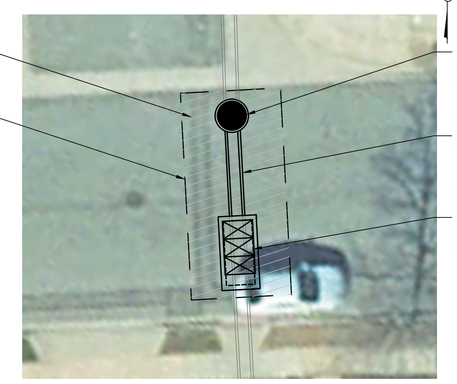
1. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
2. INSTALL CHECK VALVE AT OUTLET (ITEM 512-TF-CM-18)



LOCATION N4-2

SCOPE OF WORK:

1. INSTALL CHECK VALVE IN CATCH BASIN
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)



LOCATION N4-3

SCOPE OF WORK:

1. INSTALL CHECK VALVE
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)

SURVEY NOTE

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GRAPHIC SCALE

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REGION N4

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

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Date: FEBRUARY 2019
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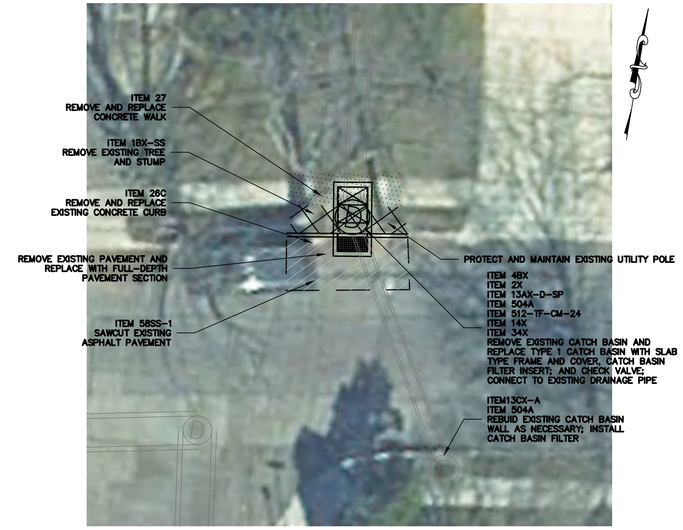
Dwg No.: C-103
Sheet No.: 6 of 9

LOCATION N5-1

SCOPE OF WORK:

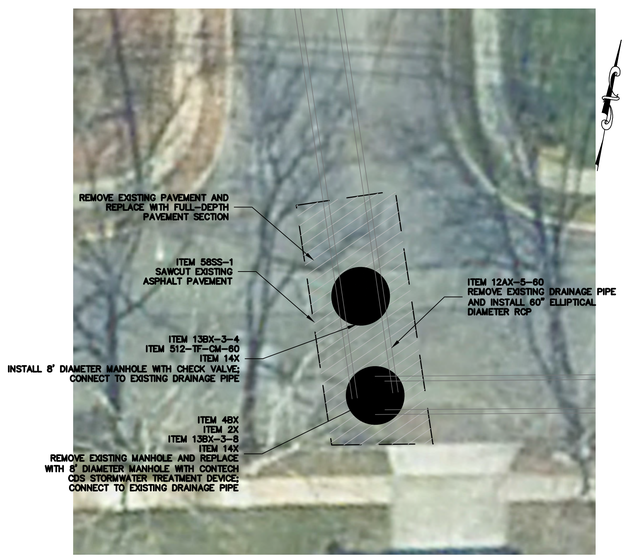
1. INSTALL CHECK VALVE AT OUTFALL
2. INSTALL CATCH BASIN FILTERS
3. INCREASE DIAMETER OF OUTFALL PIPE TO 24" DIAMETER



LOCATION N5-3

SCOPE OF WORK:

1. INSTALL CHECK VALVE
2. INSTALL CATCH BASIN FILTERS



LOCATION N5-2

SCOPE OF WORK:

1. INSTALL CHECK VALVE IN NEW MANHOLE
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)

LOCATION N5-4

SCOPE OF WORK:

1. INSTALL CHECK VALVE AT OUTFALL
2. INSTALL CONTECH CDS STORMWATER TREATMENT DEVICE (OR APPROVED EQUAL)
3. INCREASE DIAMETER OF OUTFALL PIPE TO 36" DIAMETER

SURVEY NOTE

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GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
HORIZ. 1 inch = 10 ft.

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REGION N5

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

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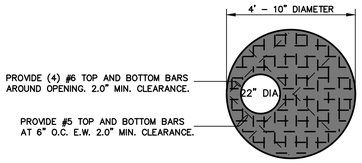
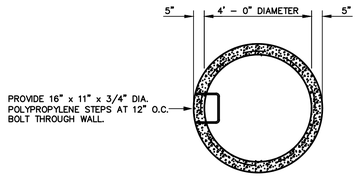
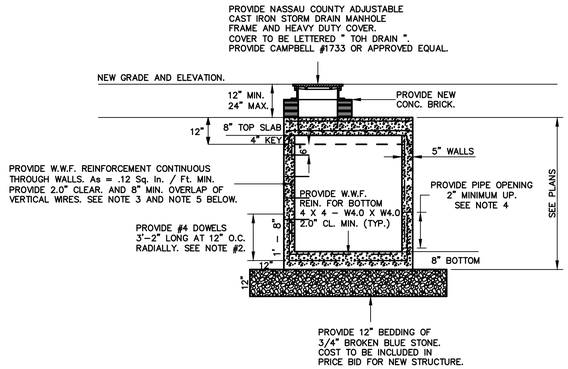
Dwg No.: C–104
Sheet No.: 7 of 9



TOP SLAB PLAN



PLAN SECTION



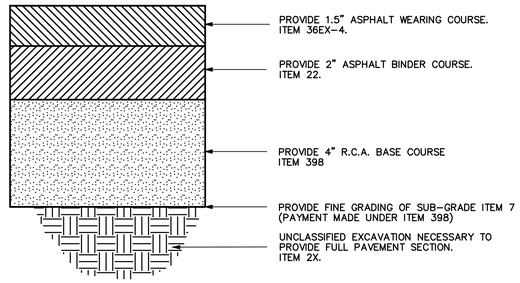
ELEVATION SECTION

ITEM 13BX–3–4 NOTES:
1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A–615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A–185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED.
   PRECAST OPENINGS SHALL BE ROUND IN SHAPE AND BE OUTSIDE DIAMETER OF NEW PIPE PLUS 6" MINIMUM.
5. ALL PRECAST MANHOLE RISER REINFORCING SHALL COMPLY WITH AREA REQUIREMENTS OF ASTM DESIGNATION C–478.
6. LOADING FOR TOP SLAB SHALL MEET AASHTO HS–20.

DETAIL OF NEW "TYPE 3" 48" DIAMETER PRECAST CONCRETE DRAIN MANHOLE

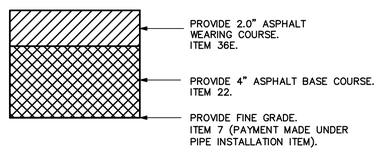
ITEM 13BX–3–4

NOT TO SCALE



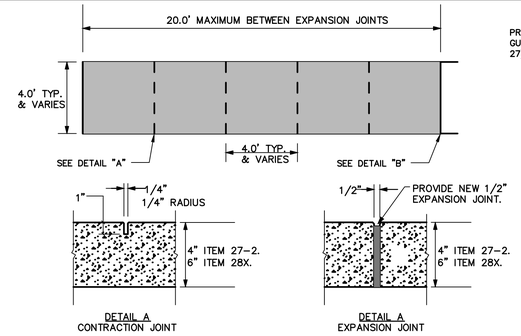
T.O.H. FULL DEPTH PAVEMENT TREATMENT DETAIL

NOT TO SCALE



T.O.H. PAVEMENT TREATMENT DETAIL AT PIPE TRENCH

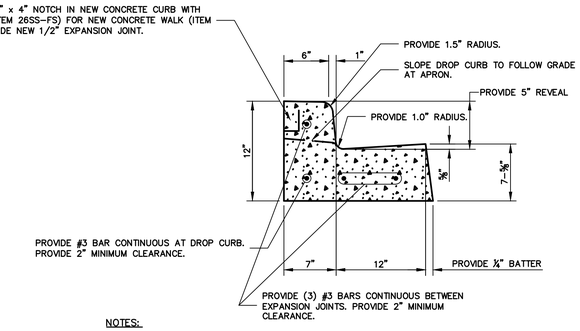
NOT TO SCALE



NOTES:
1. PROPOSED SIDEWALK LOCATED AT THE TOP OF THE PROPOSED RETAINING WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STRUCTURAL DETAILS ON SHEET S–200. PAYMENT FOR THIS WORK SHALL BE UNDER THE FOLLOWING ITEMS:
   A. ITEM 2X – REMOVAL OF EXISTING SIDEWALK
   B. ITEM 18SS–RW – INSTALLATION OF PROPOSED WALK (INTEGRAL TO THE RETAINING WALL)
2. SEE SPECIFICATIONS FOR FURTHER LOCATION REQUIREMENTS.

CONCRETE JOINT DETAILS

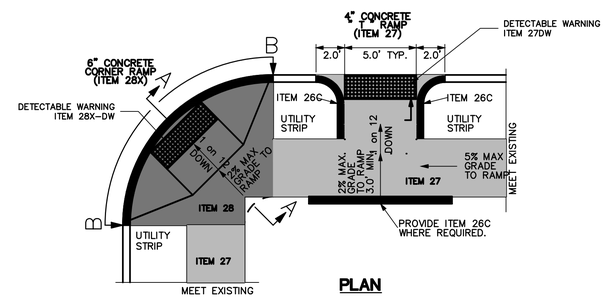
NOT TO SCALE



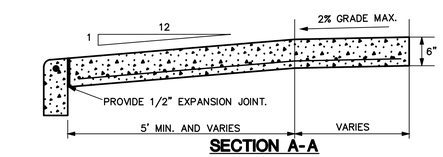
NOTES:
1. WWF 6x6/W4.7xW4.7 REINFORCEMENT MAY BE SUBSTITUTED FOR REINFORCEMENT SHOWN (3 – #3 BARS). PROVIDE EXPANSION JOINT SPACING OF 20 FEET ON CENTER.

CONCRETE CURB AND GUTTER DETAIL ITEM 26 SS & 26SS-FS

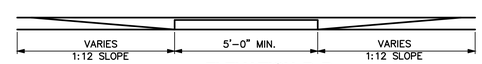
NOT TO SCALE



PLAN



SECTION A-A

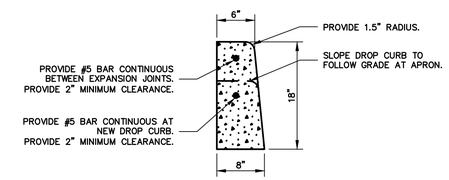


ELEVATION B-B

NOTES:
1. PROVIDE COARSE BROOM FINISH TO RAMPS, PERPENDICULAR TO DIRECTION OF SLOPE.
2. NEW CORNER RAMPS SHALL BE 6" CONCRETE PAVEMENT REINFORCED WITH WWF 6x12/W4.7 X W4.7 AND CONSTRUCTED UNDER ITEM 28X. NO SEPARATE PAYMENT SHALL BE MADE FOR REINFORCEMENT. COST OF REINFORCEMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM 28X.
3. NEW " T " RAMPS (NOT LOCATED ON CORNER QUADRANTS) SHALL BE 4" CONCRETE PAVEMENT AND CONSTRUCTED UNDER ITEM 27.
4. PROVIDE 1/2" EXPANSION JOINTS AT LOCATIONS WHERE NEW RAMPS MEET EXISTING CONCRETE PAVEMENT AND WHERE NEW 4" CONCRETE PAVEMENT (ITEM 27) MEETS NEW 6" CONCRETE PAVEMENT (ITEM 28X).
5. PROVIDE DETECTABLE WARNING SURFACE FOR ALL NEW RAMPS. ITEM 28X–DWS.

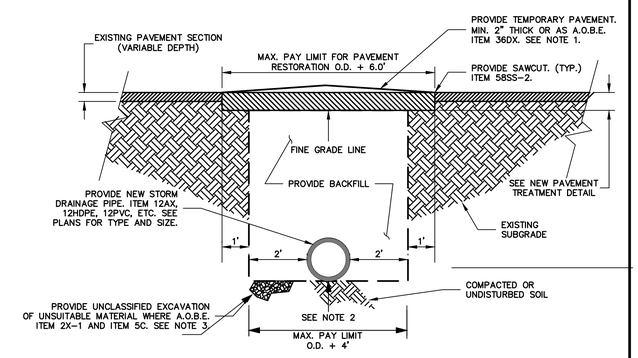
TYPE "A" SIDEWALK RAMP DETAILS ITEM 27 AND ITEM 28X

NOT TO SCALE



CONCRETE CURB DETAIL ITEM 26C

NOT TO SCALE



NOTES:
1. THE COST OF EXCAVATING AND REMOVAL OF EXCESS FILL AND OR TEMPORARY PAVEMENT ABOVE THE FINE GRADE LINE WITHIN PAVEMENT RESTORATION LIMITS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 36DX.
2. A DRY TRENCH SHALL BE MAINTAINED FOR ALL NEW PIPE INSTALLATIONS. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR NEW PIPE (ITEM 12AX, 12HDPE, 12PVC, ETC.)
3. UNSUITABLE MATERIAL ENCOUNTERED WITHIN THE TRENCH SHALL BE EXCAVATEDTO THE LIMITS A.O.B.E. (2.0' MAX.) AND BACKFILLED WITH SELECTED FILL. ITEM 2X–1 AND ITEM 5C.

DETAIL OF TYPICAL STORM DRAINAGE PIPE TRENCH

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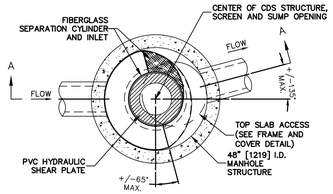
DETAILS

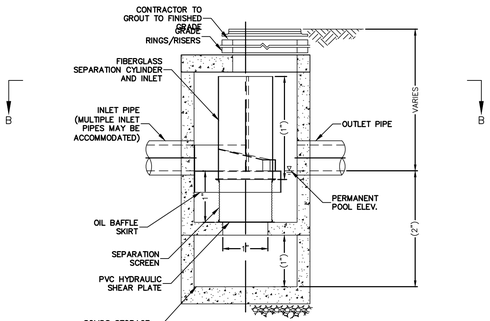
WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

Scale:
Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: D–100
Sheet No.: 8 of 9



PLAN VIEW B-B



ELEVATION A-A

GENERAL NOTES

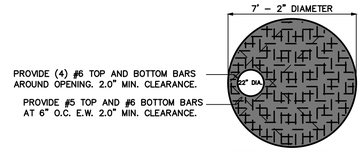
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

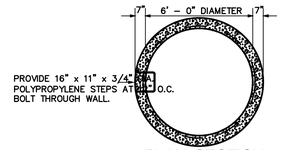
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH CDS STORMWATER TREATMENT DEVICE VARIOUS SIZES

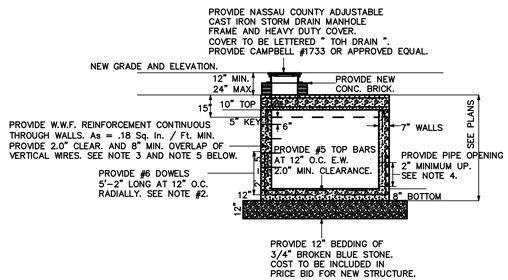
ITEM 13CDS-(DEVICE SIZE)



TOP SLAB PLAN



PLAN SECTION



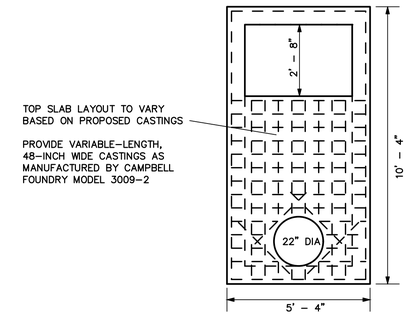
ELEVATION SECTION

ITEM 13BX-3-6 NOTES:

1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A-615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED. PRECAST OPENINGS SHALL BE ROUND IN SHAPE AND BE OUTSIDE DIAMETER OF NEW PIPE PLUS 6" MINIMUM.
5. ALL PRECAST MANHOLE RISER REINFORCING SHALL COMPLY WITH AREA REQUIREMENTS OF ASTM DESIGNATION C-478.
6. LOADING FOR TOP SLAB SHALL MEET AASHTO HS-20.

DETAIL OF NEW "TYPE 3" 72" DIAMETER PRECAST CONCRETE DRAIN MANHOLE

ITEM 13BX-3-6
NOT TO SCALE



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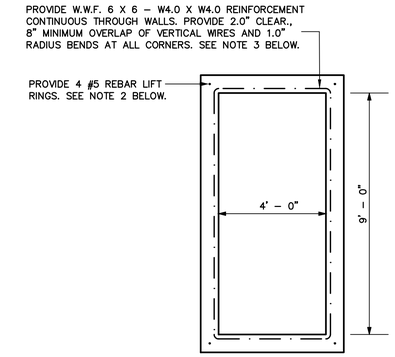
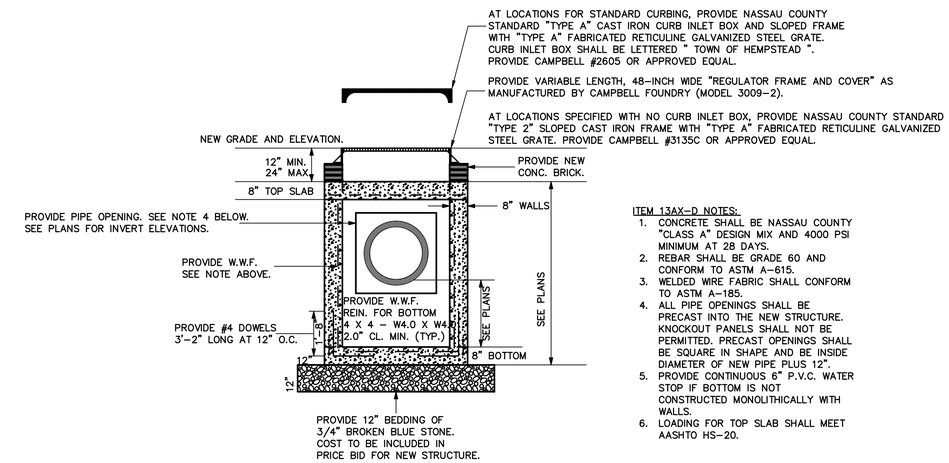


WALL PLAN SECTION



ITEM 13AX-D NOTES:

1. CONCRETE SHALL BE NASSAU COUNTY "CLASS A" DESIGN MIX AND 4000 PSI MINIMUM AT 28 DAYS.
2. REBAR SHALL BE GRADE 60 AND CONFORM TO ASTM A-615.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.
4. ALL PIPE OPENINGS SHALL BE PRECAST INTO THE NEW STRUCTURE. KNOCKOUT PANELS SHALL NOT BE PERMITTED. PRECAST OPENINGS SHALL BE SQUARE IN SHAPE AND BE INSIDE DIAMETER OF NEW PIPE PLUS 12".
5. PROVIDE CONTINUOUS 6" P.V.C. WATER STOP IF BOTTOM IS NOT CONSTRUCTED MONOLITHICALLY WITH WALLS.
6. LOADING FOR TOP SLAB SHALL MEET AASHTO HS-20.

ELEVATION SECTION

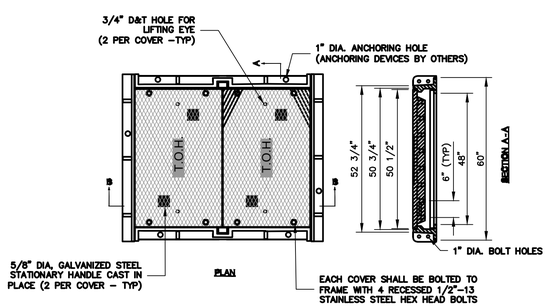
DETAIL OF NEW TYPE "D-SPECIAL" PRECAST CONCRETE CATCH BASIN ITEM 13AX-D-SP

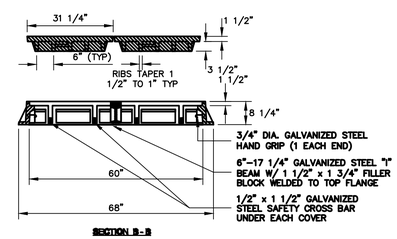
NOT TO SCALE

PROVIDE NEW 12" DEEP CONCRETE BRICK BULKHEAD WITH 1/2" WIDE MORTARED JOINTS IN PIPE OPENING. PROVIDE WEEP HOLE WHERE NOTED ON PLANS AS DIRECTED BY ENGINEER.

DETAIL OF NEW BULKHEAD FOR STORM DRAINAGE PIPE

ITEM 18SS-2
NOT TO SCALE





NOTES:

1. Material -Frame sections of Gray Cast Iron ASTM A48-83, Class 30B, Covers of Ductile Iron ASTM A536, Grade 65-45-12;
2. Surface of Cover(s) shall be diamond grid, skid resistant type;
3. Each Cover shall be bolted to frame with 4 recessed 1/2"-13 s.s. hex head bolts;
4. Each Cover shall have two recessed, 5/8"' dia. stationary handles cast in place and two 3/4" D&T holes for lifting eyes (lifting eyes by 'Others');
5. Steel parts (beams, blocks, safety bars) shall be hot-dip galvanized, ASTM 123;
6. Flange of frame shall have a 1' diameter anchoring hole per 30' section, (Anchoring devices by 'Others');
7. Castings shall be supplied without surface coating.

CAMPBELL FOUNDRY REGULATOR FRAME AND COVER (PATTERN 3009-2)

NOT TO SCALE

NO.	DATE	REVISIONS

In Charge: -
Compilation:-
Design: JDB
Drawn: LMB
Checked: RJZ
Reviewed: -

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TOWN OF HEMPSTEAD N.Y. FOUNDED 1644
Department of Engineering

DETAILS (2)

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

Scale:
Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: D-101
Sheet No.: 9 of 9

Appendix A: Figures

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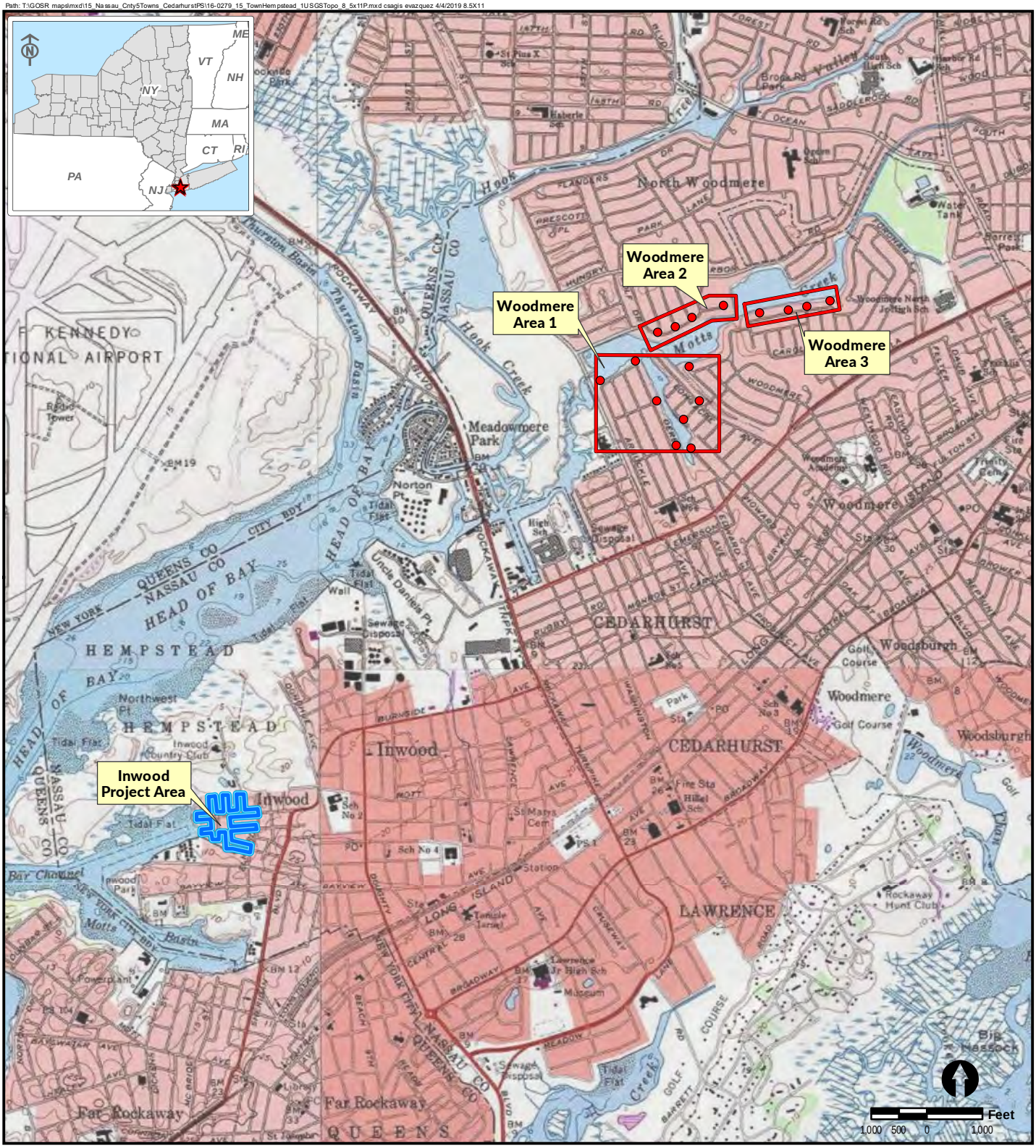

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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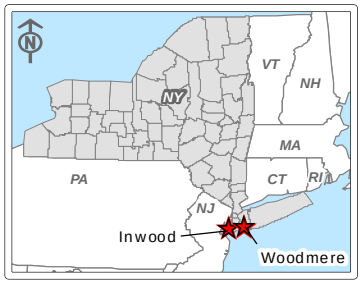

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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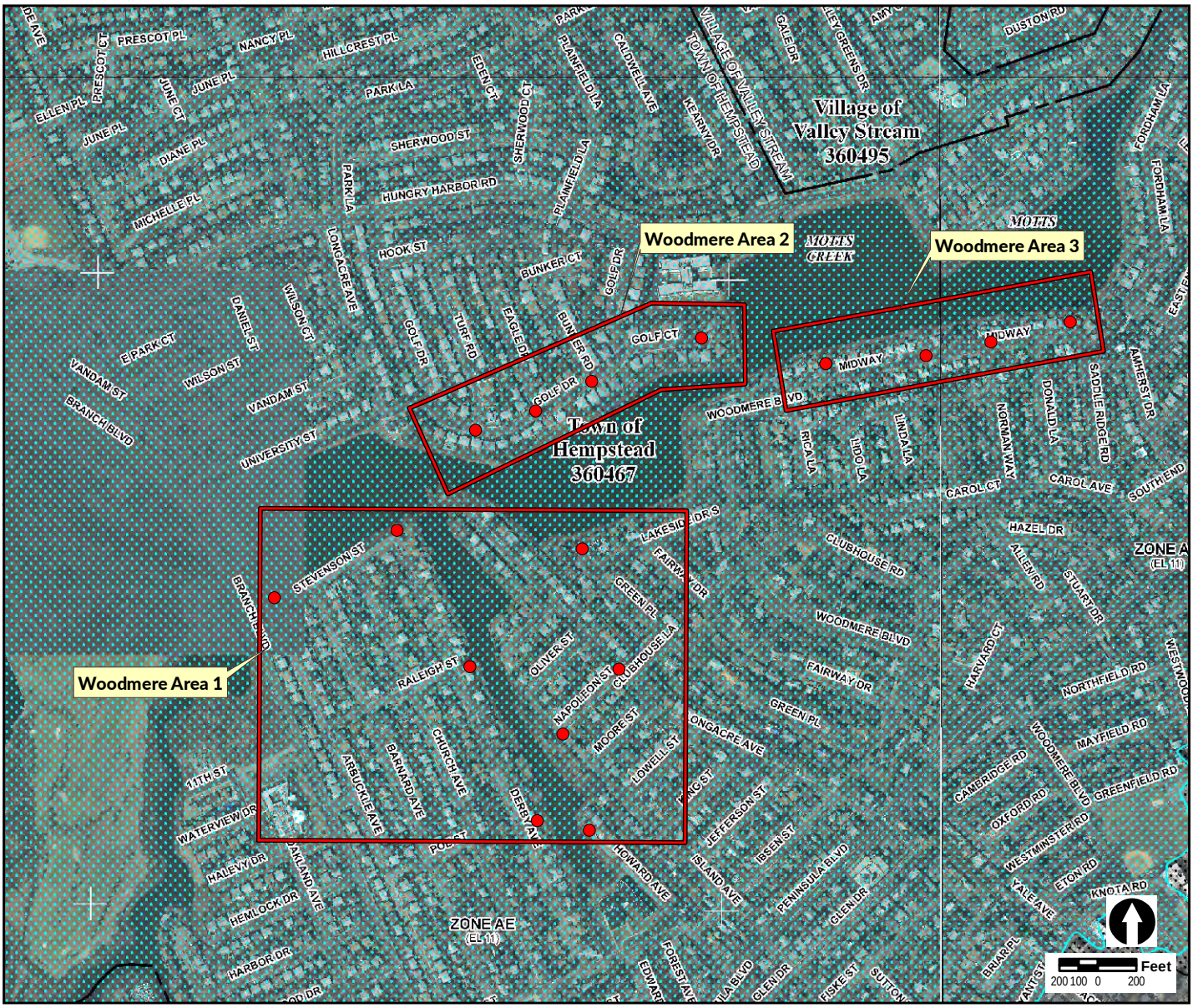


Woodmere Project Sites

Woodmere Project Areas (Zone AE)

FEMA

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Food Elevations determined.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

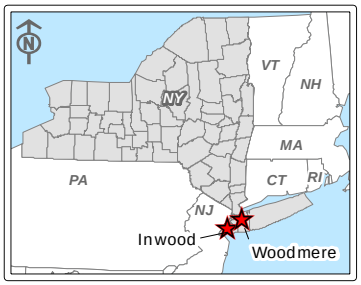
Source: FEMA Flood Insurance Rate Map, Map Numbers: 36059C0213G and 36059C0214H (September 11, 2009)

Figure 3a

Flood Hazard

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York



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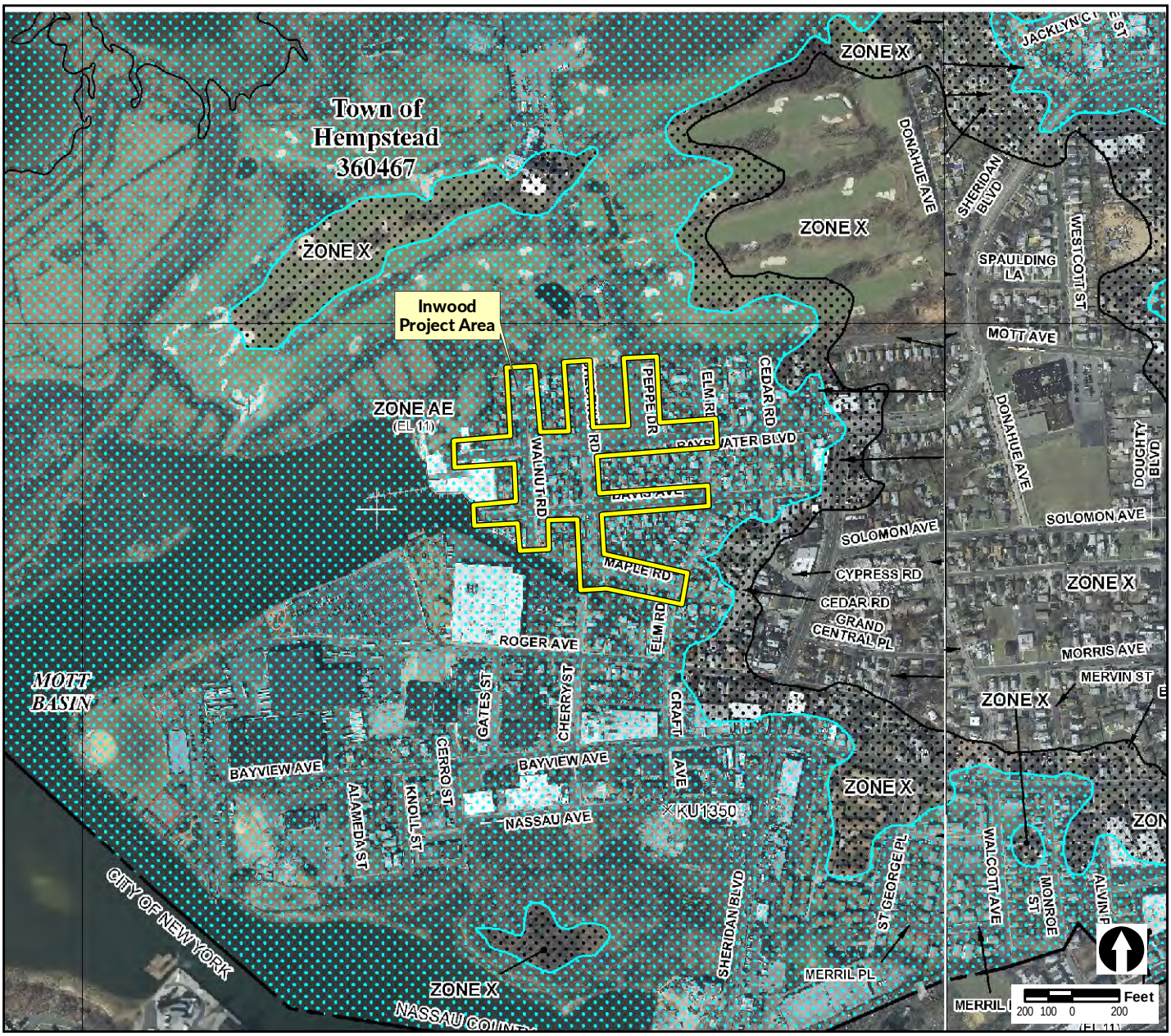


Inwood Project Area (Zone AE)

FEMA

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Food Elevations determined.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

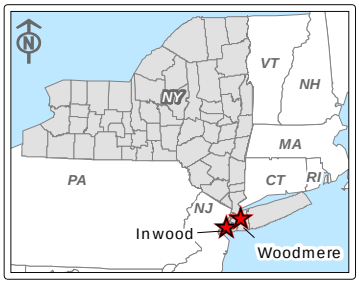
Source: FEMA Flood Insurance Rate Map, Map Numbers: 36059C0282G and 36059C0301G (September 11, 2009)

Figure 3b

Flood Hazard

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York



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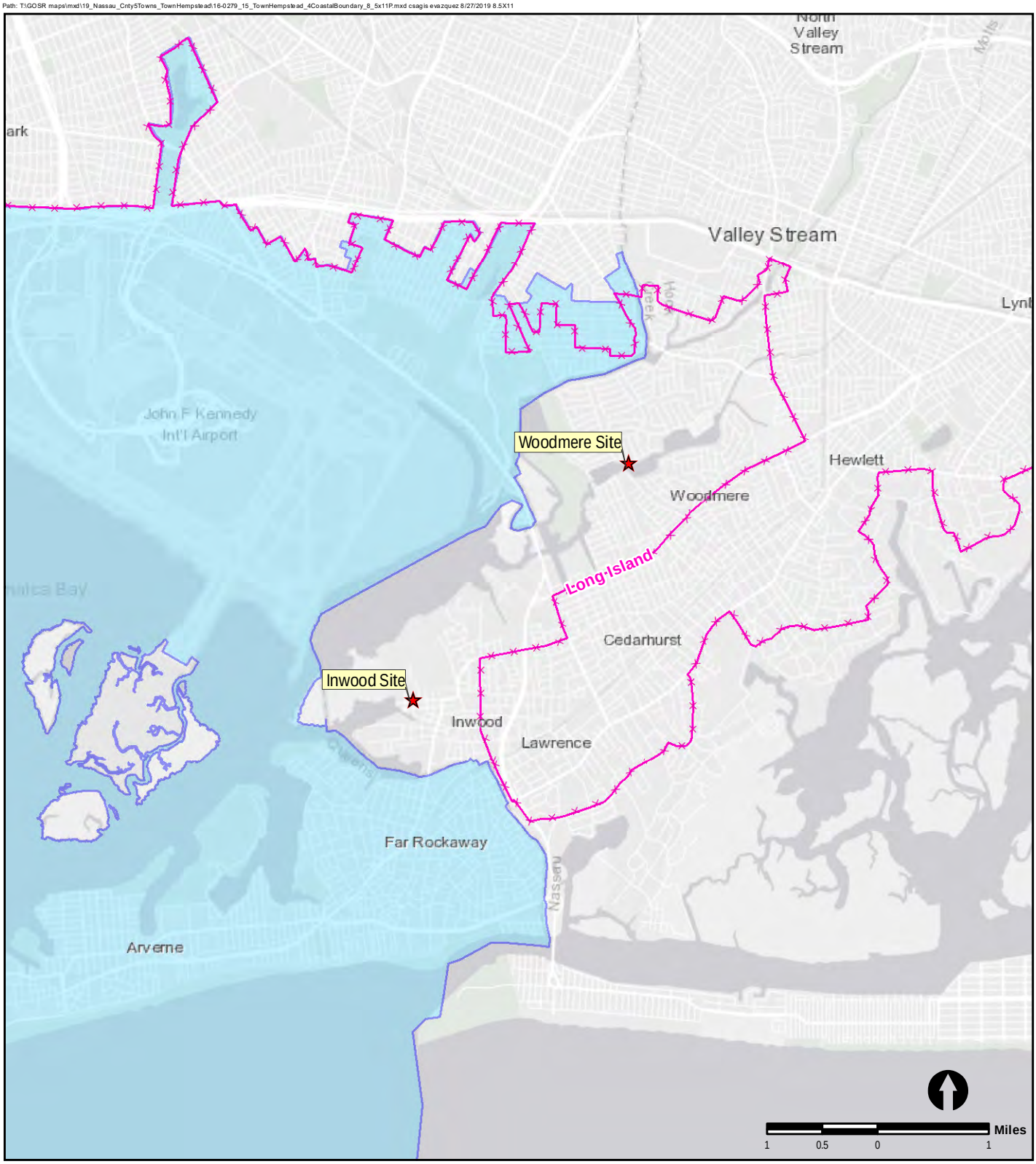

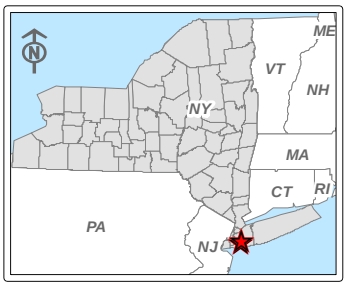

Project Sites

NYS Coastal Boundary

NYC Waterfront Coastal Zone Boundary

Figure 4

Coastal Boundary

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources: NYS Department of State, Office of Planning and Development (2014); New York City Department of City Planning (2016). Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

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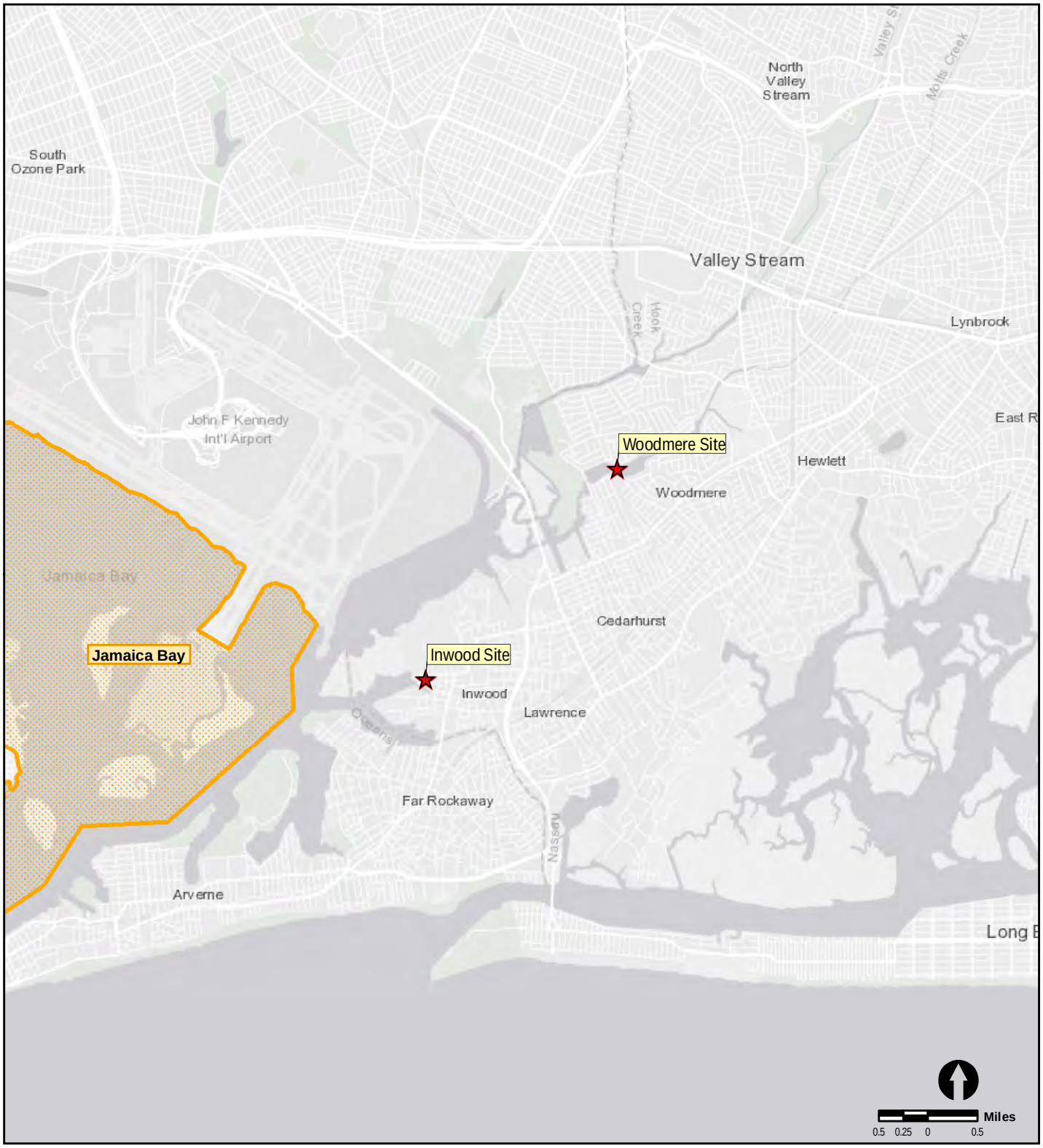

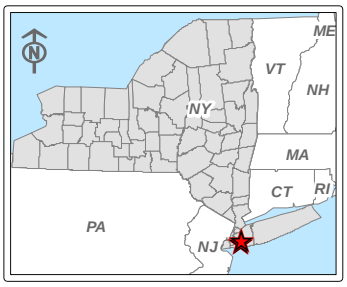

Project Site

Coastal Barrier Resource System

Figure 5

Coastal Barrier Resource System

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: U.S. Fish and Wildlife Service, John H. Chafee Coastal Barrier Resources System Approximate Polygons - Vector Digital Data Set (Polygon) - March 30, 2018. Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

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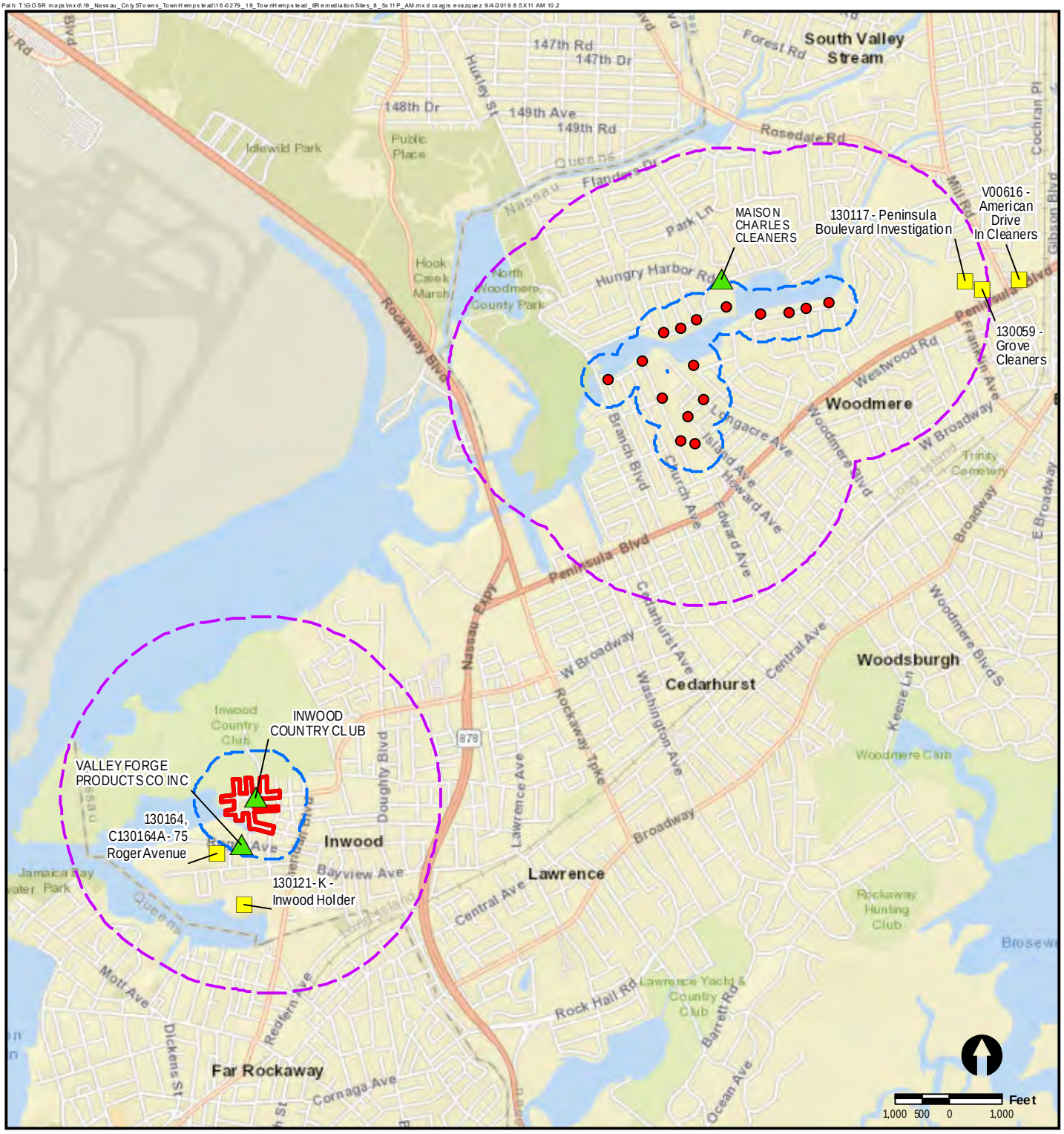

Source: New York State Department of Environmental Conservation (NYSDEC), September, 2019; NEPAssist (August 23, 2019). Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

- Woodmere Project Sites
- Inwood Project Area
- 500 foot radius
- 3,000 foot radius

Federal Database

- Hazardous Waste (RCRA)

NYSDEC Database

- Remediation Site

***No state bulk storage sites nor spills sites found inside the 500 ft radius.**

****No federal superfund, brownfields, nor TRI sites found within 3,000 ft radius.**

Figure 6

Remediation Sites

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

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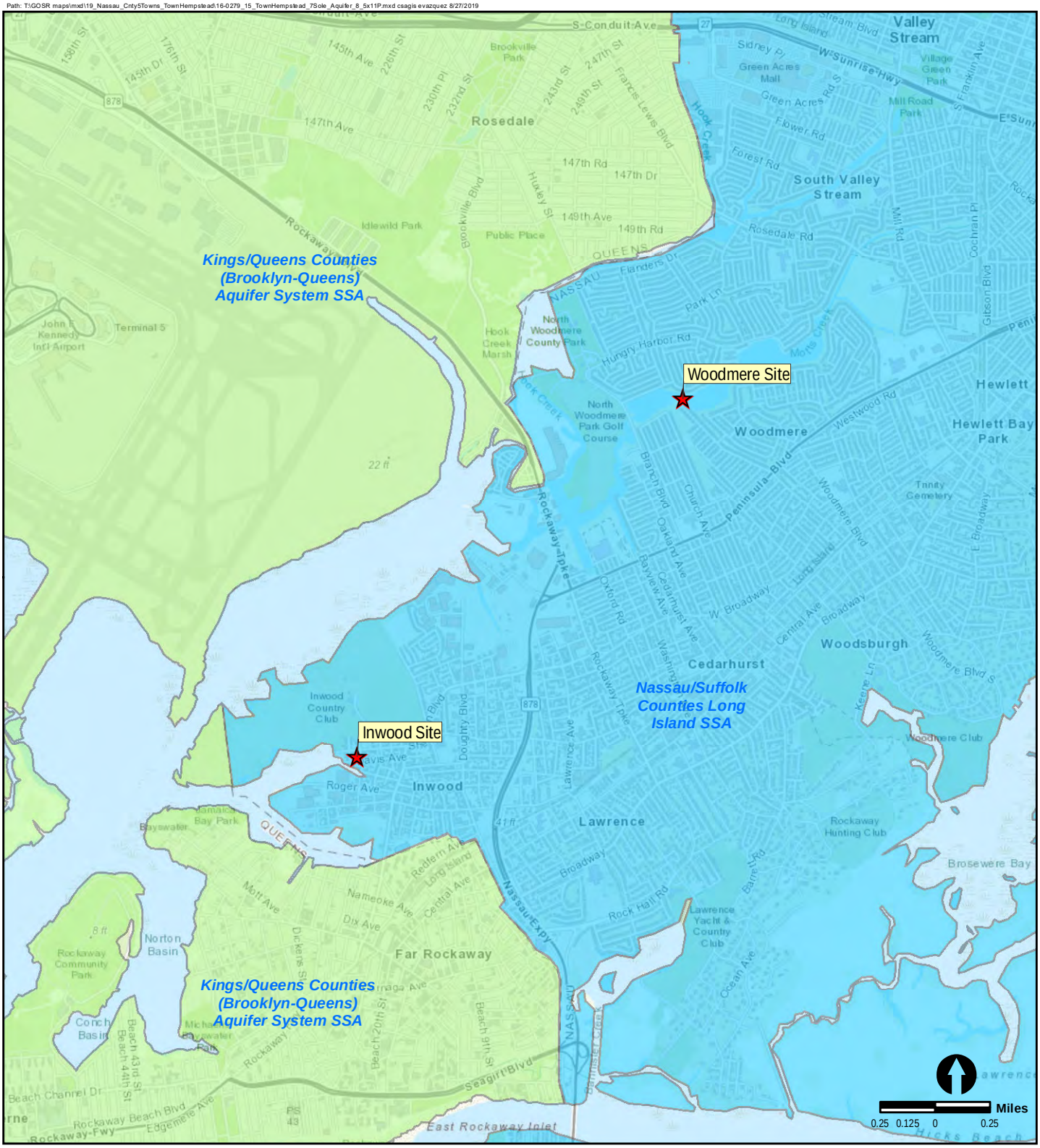

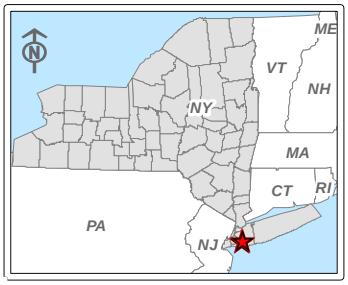

Project Sites

Sole Source Aquifers

Kings/Queens Counties (Brooklyn-Queens) Aquifer System SSA

Nassau/Suffolk Counties Long Island SSA

Source: U.S. EPA Office of Water, EPA National Sole Source Aquifers GIS Layer (2016). Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Figure 7

Sole Source Aquifers

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

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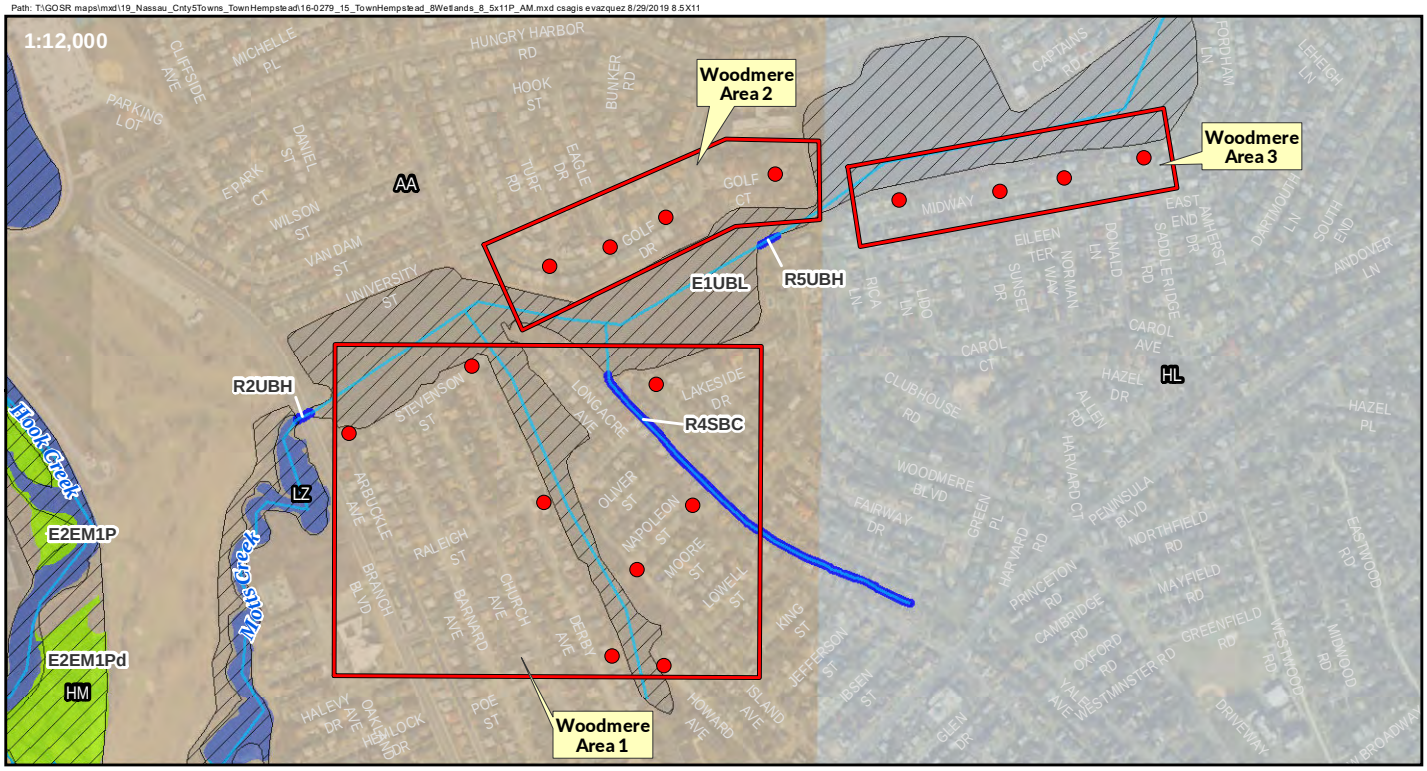

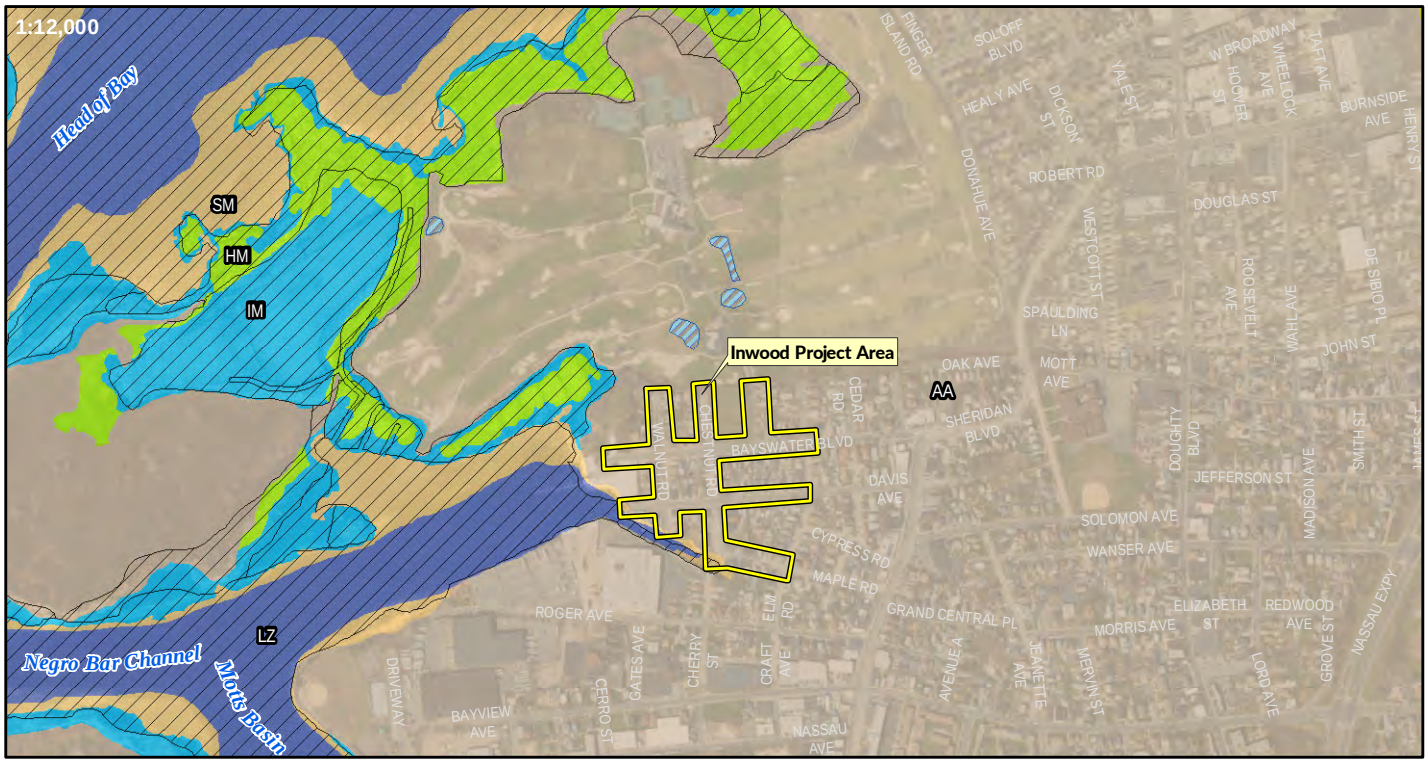

Sources: Tidal Wetlands - NYC and Long Island – 1974, New York State Department of Environmental Conservation (NYSDEC) November 1, 2005; US Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI); USGS National Hydrography Dataset. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- Woodmere Project Sites
- Woodmere Project Areas
- Inwood Project Area
- River\Stream

Wetland Type (FWS NWI)

- Estuarine and Marine Wetland
- Freshwater Wetland
- Freshwater Pond
- Riverine

Tidal Wetland Category (NYSDEC)

- SM - Coastal Shoals, Bars and Mudflats
- LZ - Littoral Zone
- IM - Intertidal Marsh
- HM - High Marsh
- AA - Adjacent
- HL - Hole Area includes areas that do not contain tidal wetlands or adjacent area

Figure 8
Wetlands

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

400 200 0 400 Feet

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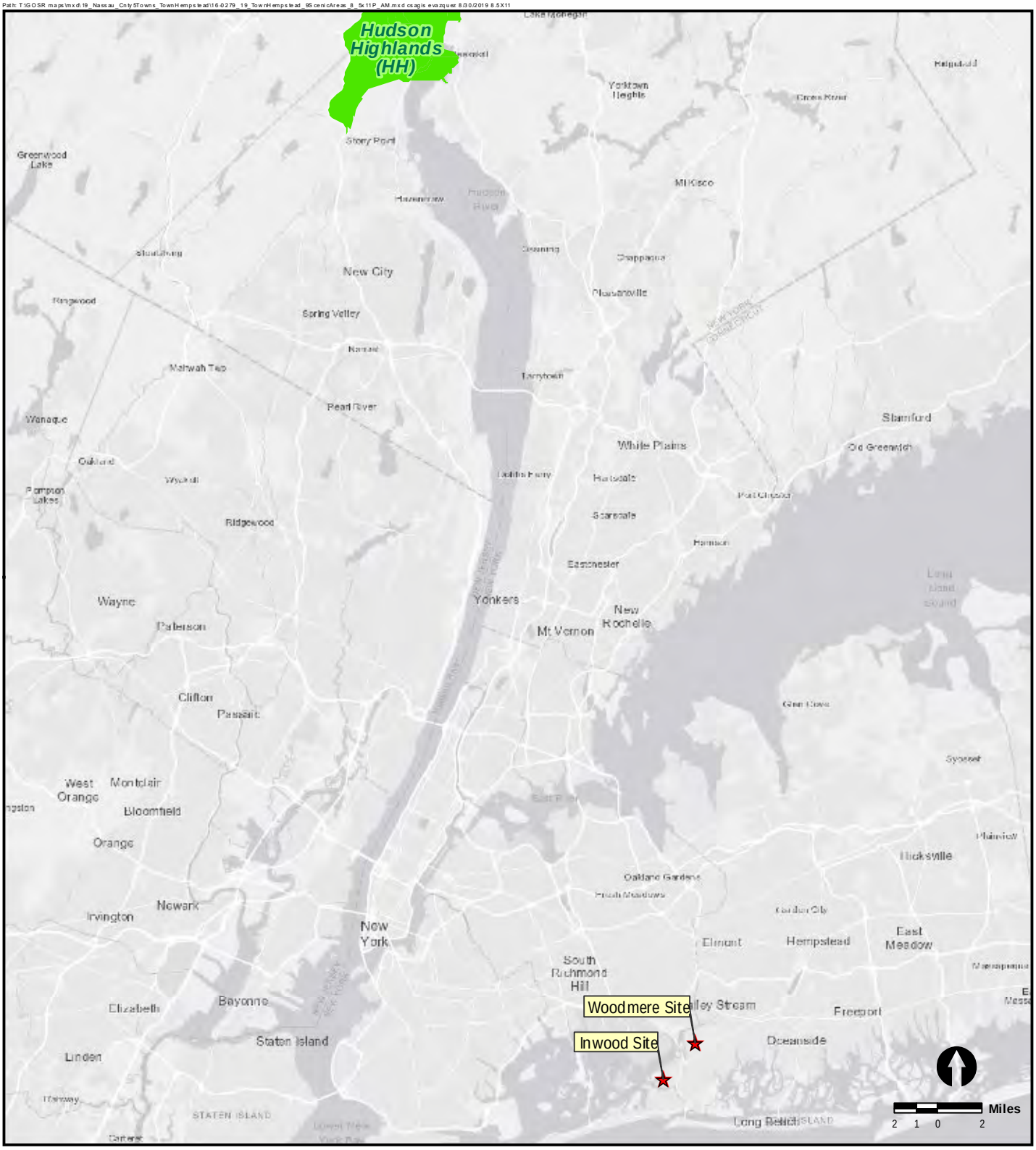

★ Project Sites

Scenic Area

Figure 9

Scenic Areas

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS Department of State, Office of Planning and Development (November 2014). Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

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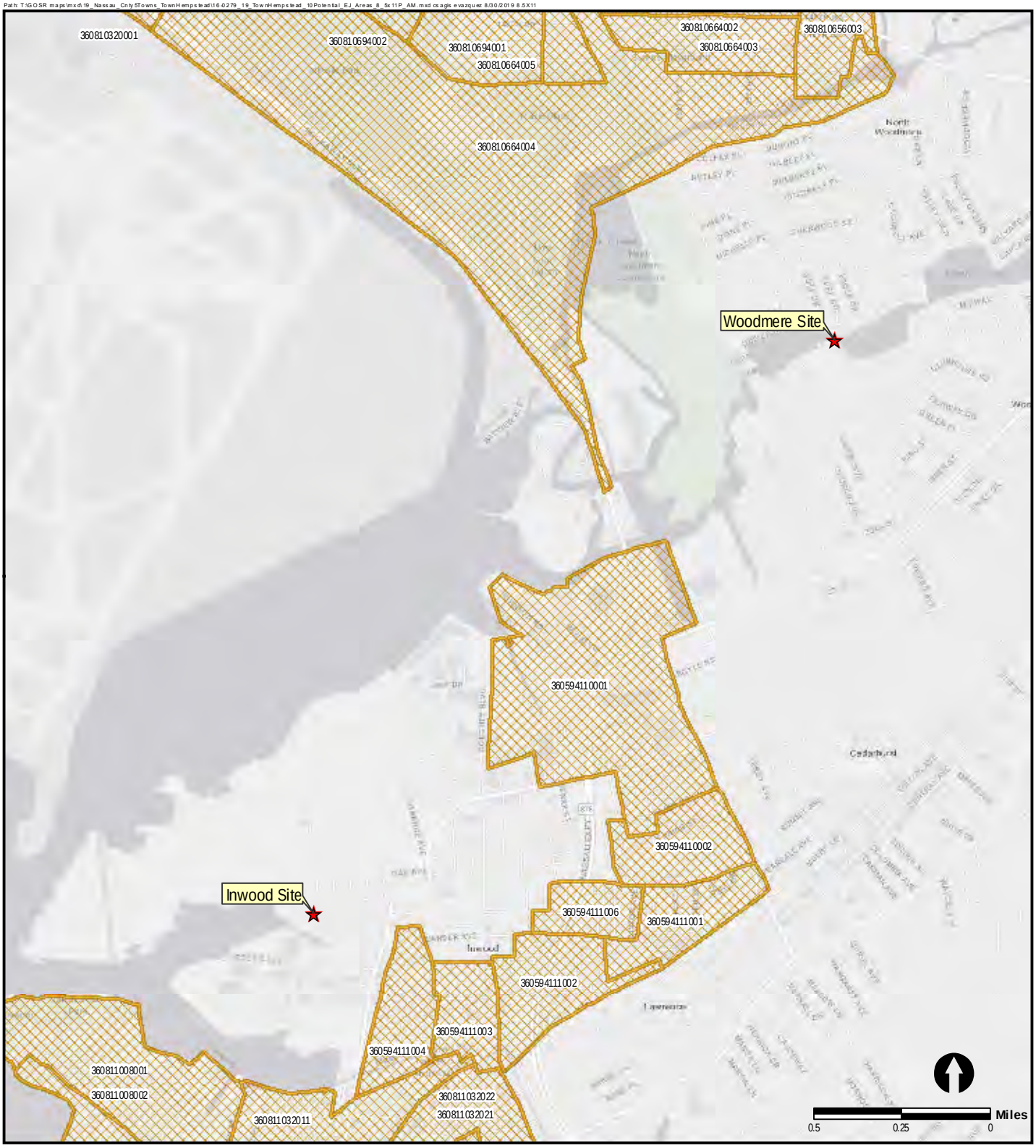

Project Sites

Potential Environmental Justice (EJ) Area

Figure 10

Potential Environmental Justice Areas

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: New York State Department of Environmental Conservation, Environmental Justice Areas (August 8, 2014). Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

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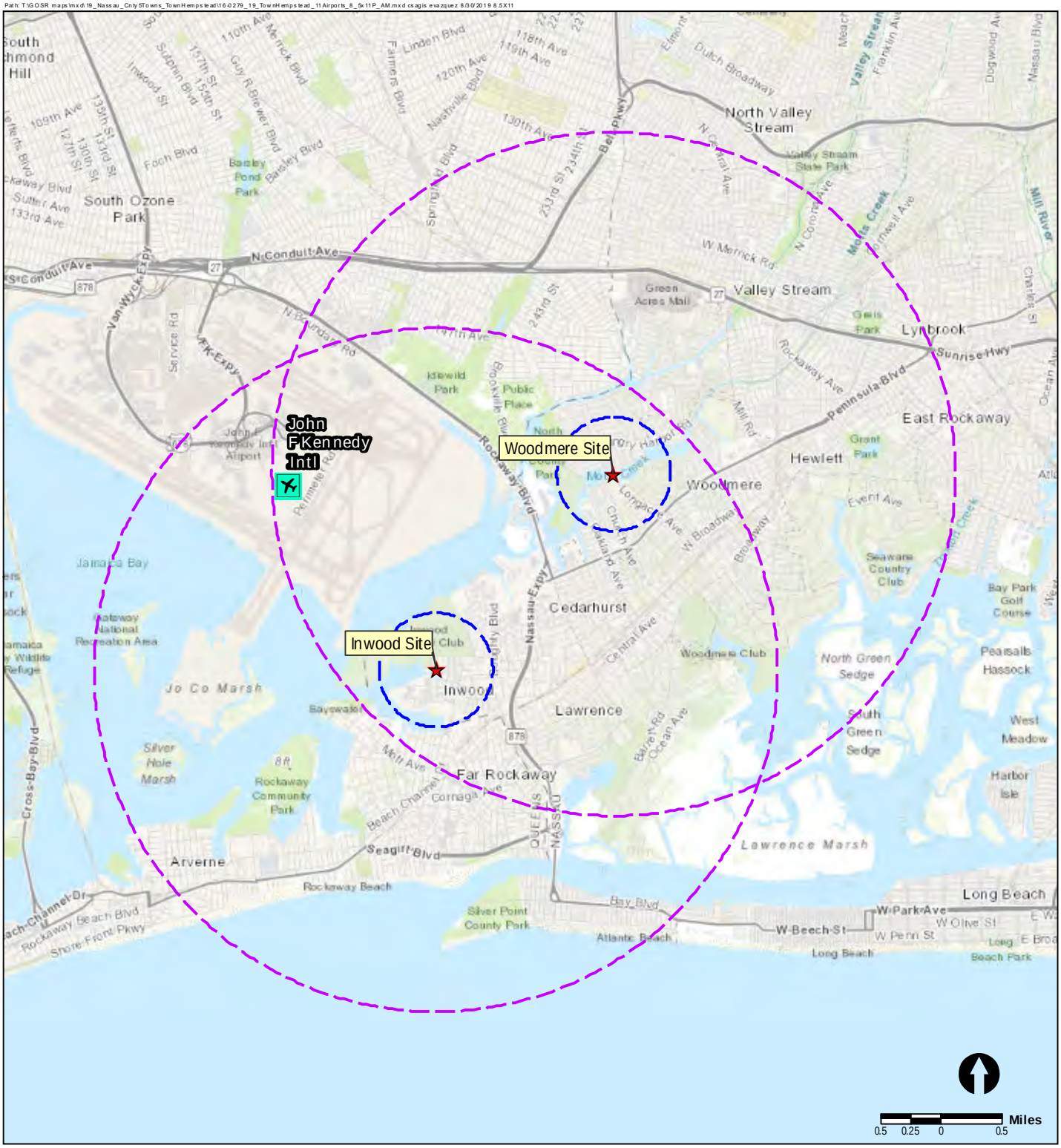

Project Sites

Airport

2,500 feet Radius

15,000 feet Radius

Figure 11

Airports within the Vicinity of the Proposed Project

Five Towns - Nassau County, Lawrence Pipes Project

Lawrence, New York

Source: Federal Aviation Administration (FAA), National Transportation Atlas; ESRI. Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

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Appendix B: Coastal Zone Management Act

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

ROSSANA ROSADO
SECRETARY OF STATE

September 30, 2019

James McAllister
Governor's Office of Storm Recovery
500 Bi-County Boulevard, Suite 300
Farmingdale, NY 11735

Re: **F-2019-0881 (FA)**
Applicant- Town of Hempstead
HUD-CDBG -Federal funding for implementation of storm water drainage improvements (catch basins, manholes, and backflow prevention devices) within the hamlets of Inwood and Woodmere
Inwood and Woodmere, Town of Hempstead, Nassau County
General Concurrence -No Objection to Funding

Dear Mr. McAllister:

The Department of State (DOS) received the information you submitted regarding the above proposed federal financial assistance on September 19, 2019. Based on this review, the Department of State has no objection to the release of the HUD Community Development Block Grant (CDBG) funding in support of the proposed project.

This concurrence pertains to the federal financial assistance activity or activities for this project only. If certain activities require a federal permit or other form of federal agency authorization, the Department of State would conduct separate consistency review(s) of permit activities at the time such application(s) may be made to a federal agency.

When communicating with us regarding this matter, please contact us at (518) 474-6000 and refer to our file # F-2019-0881 (FA).

Sincerely,

Matthew Maraglio
Supervisor, Consistency Review Unit
Office of Planning, Development and
Community Infrastructure

MM/rf

Cc: Cristy L Boyd, CSA Group

NEW YORK STATE OF OPPORTUNITY. | Department of State

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 23, 2019

Via email: Matthew.Maraglio@dos.ny.gov

Mr. Matt Maraglio
Supervisor, Consistency Review Unit Division of Coastal Resources
New York State Department of State
One Commerce Plaza
99 Washington Avenue Albany, New York 12231-0001

Re: Coastal Zone Management Act Consistency Review
CDBG-DR Funding Application
Inwood and Woodmere Stormwater Drainage Improvements
Town of Hempstead, Nassau County, NY

Dear Mr. Maraglio:

The New York State Governor's Office of Storm Recovery ("GOSR") received a funding application for the proposed "Inwood and Woodmere Stormwater Drainage Improvement Project" located in Nassau County, New York (**Attachment 1 - Project Location Maps**). The purpose of the project is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events.

The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD '88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and

east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

The majority of the project area is contained within previously disturbed ROWs located within the boundary of the New York State Coastal Zone. GOSR is acting as the Responsible Entity in accordance with 24 CFR Part 58 – Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities. Pursuant to the Coastal Zone Management Act, GOSR has prepared the attached Federal Consistency Assessment Form and a Summary of Compliance with Applicable DOS Policies to certify that the proposed project is consistent with New York State's Coastal Management Program.

The purpose of this letter is to provide the New York State Department of State (DOS) notice of the Proposed Action and to request a consistency review to confirm that the proposed activities will be in compliance with general consistency concurrence criteria. GOSR is requesting a response letter from your office that can be included as an attachment to our environmental documentation to confirm that coordination with the New York State Department of State has been completed, and general consistency concurrence criteria will be met. If you have any questions, please feel free to contact me via telephone number (631) 465-9677 or email: James.McAllister@stormrecovery.ny.gov . Thank you for your consideration and cooperation.

Sincerely,

James P. McAllister
Bureau of Environmental Review and Assessment

CC: Denise Caldwell

Enclosures:
Project Location Figures
Consistency Assessment Form and Policy Review

Schematic Summary Sheet

PROPOSED DRAINAGE IMPROVEMENTS BY LOCATION

LOCATION	DESCRIPTION	PROPOSED IMPROVEMENTS		
		CHECK VALVE INSTALLATION	INSTALL CDS STORMWATER TREATMENT	INCREASE OUTFALL PIPE SIZE
N3-1	NORTH OF INTERSECTION OF ARBUCKLE AVE AND STEVENSON ST	X	X	X
N3-2	NORTH OF INTERSECTION OF STEVENSON ST AND DERBY DR	X		
N3-3	EAST OF INTERSECTION OF RALEIGH ST AND DERBY DR	X	X	X
N3-4	NORTH END OF GREENE PLACE CUL-DE-SAC	X	X	X
N3-5	648 LONGACRE AVE	X		
N3-6	WEST SIDE OF ISLAND AVE AT NAPOLEAN ST			
N3-7	EAST SIDE OF DERBY DR ALIGNED WITH POE ST (TO THE WEST)	X	X	X
N3-8	WEST SIDE OF THE END OF HOWARD AVE	X	X	
N4-1	SOUTH SIDE OF GOLF DRIVE, OPPOSITE TURF ROAD	X	X	
N4-2	SOUTH SIDE OF GOLF DRIVE, OPPOSITE EAGLE DRIVE	X	X	
N4-3	SOUTH SIDE OF GOLF DRIVE, OPPOSITE BUNKER ROAD	X	X	
N4-4	EAST SIDE OF GOLF COURT	X	X	
N5-1	NORTH SIDE OF MIDWAY BETWEEN ****	X	X	X
N5-2	NORTH END OF BRIDGE ST	X	X	
N5-3	NORTH SIDE OF MIDWAY OPPOSITE NORMAN WAY	X	X	
N5-4	NORTH SIDE OF MIDWAY OPPOSITE SADDLE RIDGE RD	X	X	X

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
HORIZ. 1 inch = 20 ft.

NO.	DATE	REVISIONS

In Charge: –
Compilation:–
Design: JDB
Drawn: LMB
Checked: RJZ
Reviewed: –

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CAMERON ENGINEERING & ASSOCIATES, LLP
177 Crossways Park Drive, Woodbury, NY 11797 T: (516) 827-4900
45 West 36th Street, 3rd Floor, New York, NY 10018 T: (212) 324-4000
303 Tarrytown Road, 1st Floor, White Plains, NY 10603 T: (914) 721-8300
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TOWN OF HEMPSTEAD, N.Y. FOUNDED 1644
Department of Engineering

COMPREHENSIVE DRAINAGE PLAN

WOODMERE DRAINAGE IMPROVEMENTS
WOODMERE, NY

NAVD88

Scale:
Date: FEBRUARY 2019
File No.: CE2876
Dwg No.: C–100
Sheet No.: 3 of 9

Attachment 1: Project Location Maps

Coastal Zone Management Act Consistency Review

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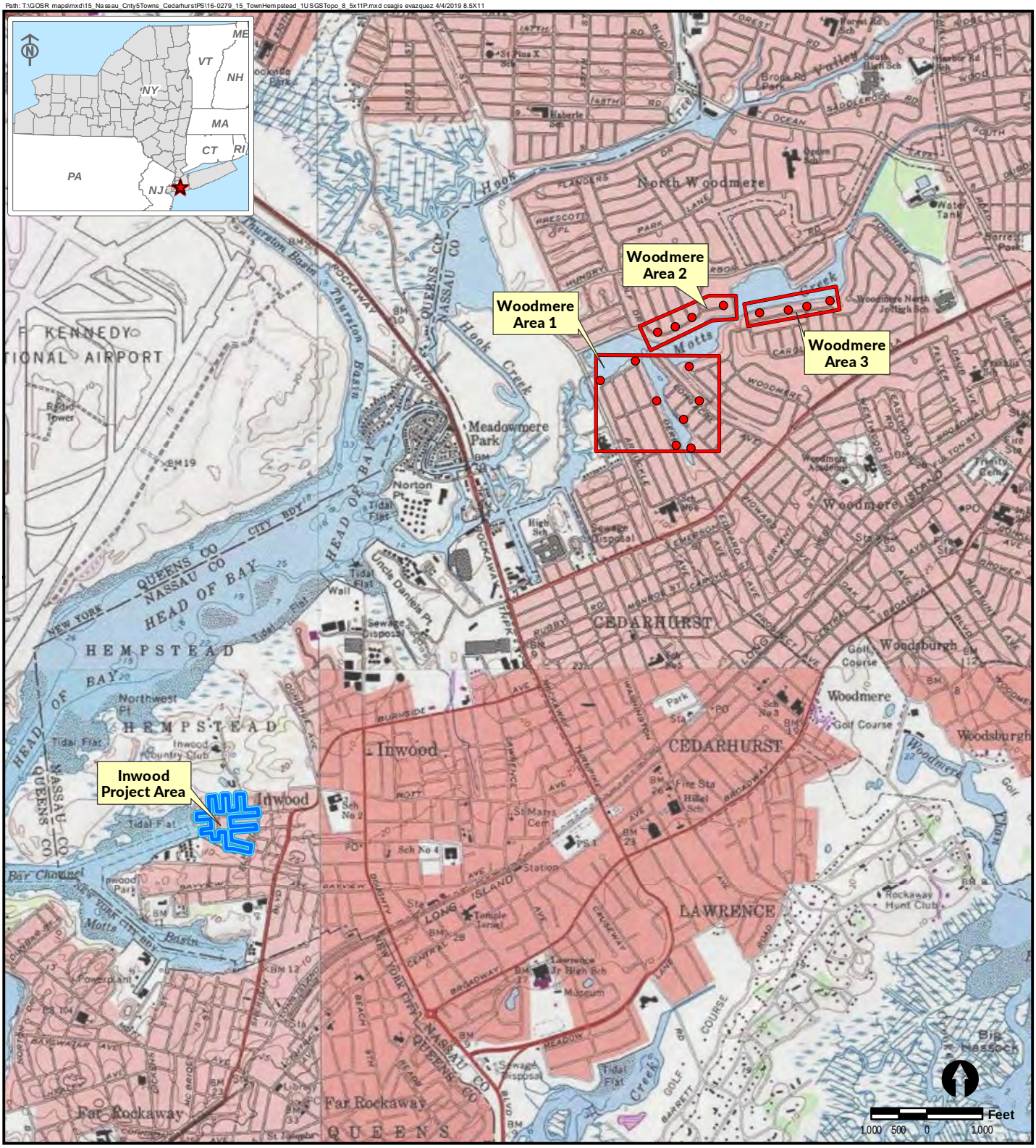

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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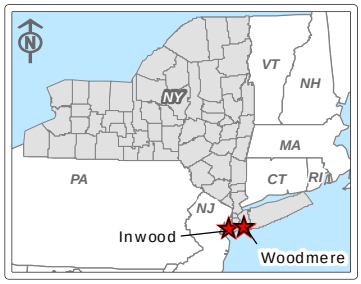

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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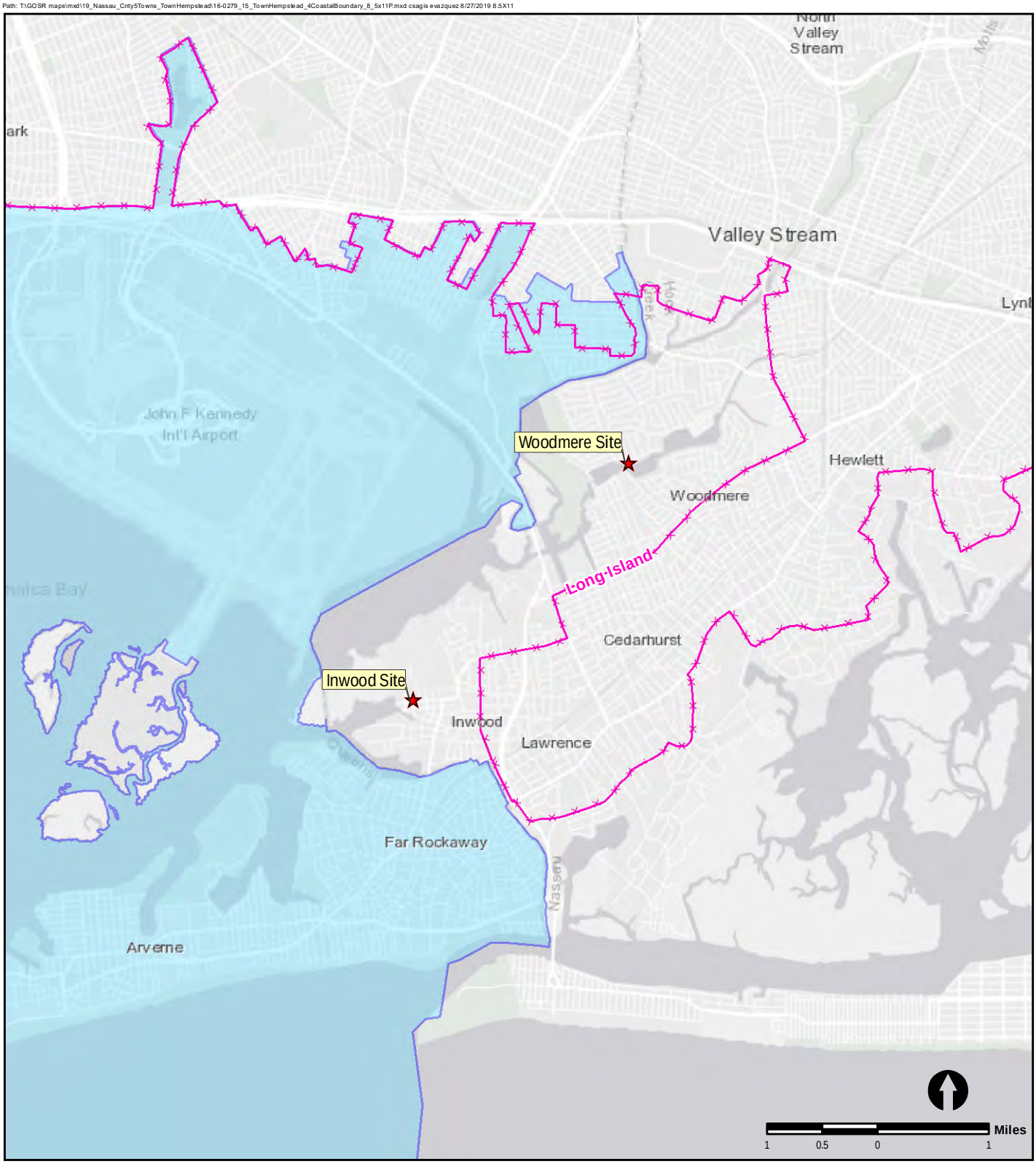

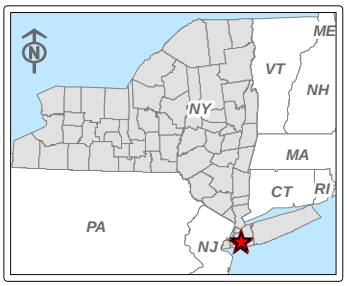

Project Sites

NYS Coastal Boundary

NYC Waterfront Coastal Zone Boundary

Figure 3

Coastal Boundary

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources: NYS Department of State, Office of Planning and Development (2014); New York City Department of City Planning (2016). Service Layer Credits: Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

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Attachment 2: Federal Consistency Assessment Form

Coastal Zone Management Act Consistency Review

NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. **APPLICANT** (please print)

1. Name: Town of Hempstead, Douglas L. Tuman, P.E., Commissioner
2. Address: 350 Front Street Hempstead, NY 11550
3. Telephone: Area Code (516) 812-3484

B. **PROPOSED ACTIVITY:**

1. Brief description of activity:

Implementation of storm water drainage improvements (catch basins and manholes, installation of backflow prevention devices) within the hamlets of Inwood and Woodmere

2. Purpose of activity:

To facilitate drainage of stormwater which would help reduce flooding during storm events.

3. Location of activity:

Nassau	Inwood and Woodme	Roadway segments
County	City, Town, or Village	Street or Site Description

4. Type of federal permit/license required: _____

5. Federal application number, if known: _____

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:

_____

C. **COASTAL ASSESSMENT** Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following:	YES	NO
a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)		✔
b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44)		✔
c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)		✔
d. Reduction of existing or potential public access to or along coastal waters? (19, 20)		✔
e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10)		✔
f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29)		✔
g. Siting of a facility essential to the generation or transmission of energy? (27)		✔
h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)		✔
i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)		✔
j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)	✔	
k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)		✔
l. Adverse effect upon land or water uses within the State's small harbors? (4)		✔

2. Will the proposed activity affect or be located in, on, or adjacent to any of the following:	YES	NO
a. State designated freshwater or tidal wetland? (44)		✔
b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17)	✔	
c. State designated significant fish and/or wildlife habitat? (7)	✔	
d. State designated significant scenic resource or area? (24)		✔
e. State designated important agricultural lands? (26)		✔
f. Beach, dune or Barrier Island? (12)		✔
g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)		✔
h. State, county, or local park? (19, 20)		✔
i. Historic resource listed on the National or State Register of Historic Places? (23)		✔

3. Will the proposed activity require any of the following:	YES	NO
a. Waterfront site? (2, 21, 22)		✔
b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)		✔
c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)		✔
d. State water quality permit or certification? (30, 38, 40)		✔
e. State air quality permit or certification? (41, 43)		✔

4. Will the proposed activity occur within and/or affect an area covered by a State-approved local waterfront revitalization program, or State-approved regional coastal management program? (see policies in program document*)		✔

D. **ADDITIONAL STEPS**

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

E. **CERTIFICATION**

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: James McAllister

Address: 500 Bi-County Boulevard, Suite 300, Farmingdale, NY 11735

Telephone: Area Code ( ) (631) 465-9677

Applicant/Agent's Signature: _____ Date: September 13, 2019

F. **SUBMISSION REQUIREMENTS**

1. The applicant or agent shall submit the following documents to the **New York State Department of State, Office of Planning and Development, Attn: Consistency Review Unit, One Commerce Plaza-Suite 1010, 99 Washington Avenue, Albany, New York 12231.**

a. Copy of original signed form.
b. Copy of the completed federal agency application.
c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

Attachment 3: Policy Review

Coastal Zone Management Act Consistency Review

NYDOS Consistency Assessment
Summary of Compliance with Applicable Policies

This document is the addendum to the Federal Consistency Assessment Form (FCAF) for the Inwood and Woodmere Stormwater Drainage Improvements Project. The Proposed Project is being designed and would be constructed in a manner that is consistent with the applicable New York State Department of State (NYSDOS) Coastal Management Program (CMP) State Coastal policies. The policies that are relevant to the Project are listed below and accompanied by a brief description of the way the Proposed Project is consistent with them.

I. PROJECT DESCRIPTION

The Town of Hempstead is proposing to implement storm water drainage improvements within the Hamlets of Inwood and Woodmere. Generally, improvements proposed include the addition of catch basins and manholes, installation of backflow prevention devices on storm water outfalls and roadway reconstruction within rights-of-way and private property. The Proposed Project was developed based on a comprehensive stormwater drainage study to improve storm water drainage on key roadway segments which tie into evacuation routes and frequently flood during heavy rainfall and/or extreme tidal events.

The proposed project within the hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina parking lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow elevation of 5.4 feet from NAVD ’88: Bayswater Boulevard from the Marina to Elm Road, Davis Avenue from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. The surface of the Marina parking lot is made up of a crushed shell and the existing roadways within the project limits consist of asphalt pavement. The roads within the work limits are fully developed and occupied, with the exception of a grass field on Bayswater Boulevard in-between Peppe Road and Chestnut Road. The proposed project would occur within existing road right of ways as well as private property. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. Uniform Relocation Act (URA) regulations would be complied with as implemented through the GOSR’s Community Reconstruction Program.

Proposed stormwater drainage improvements within the hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

II. PURPOSE OF ACTIVITY

The storm surge created by Hurricane Sandy caused significant stormwater back-up in the Five Towns Community, including Inwood and Woodmere. The south shore of New York City and western Long Island experienced record-high water elevations, as these areas were to the immediate right of the storm's center of circulation as it made landfall. Widespread record coastal flooding occurred in Lower New York Bay, Jamaica Bay, and the western bays along southern Nassau County. The peak water levels recorded at all stations in these areas also exceeded the Federal Emergency Management Agency (FEMA) 100-year base flood elevations. In all cases, the peaks from Sandy surpassed anything previously documented in Inwood and Woodmere, including the Oct. 31, 1991 and Dec. 11, 1992 storms and Hurricane Irene. The purpose of the project is to reduce flooding from storms, both tidal and rain events, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Project is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage disrupting ingress and egress areas. The Proposed Project would also provide for better access for emergency vehicles during and after flooding events.

III. CONSISTENCY WITH APPLICABLE CZMA POLICIES

Policy 2 - Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

Response: The roadway segments which would be impacted by the Proposed Project are roads that have been in place for many years and serve as important access routes The Proposed Project will not interfere with any water dependent uses or water dependent facilities and will be a benefit to this portion of the Town of Hempstead. Following the installation of storm water control devices, roadway reconstruction would not inhibit further restoration, revitalization or redevelopment of deteriorated and underutilized waterfront areas. Therefore, it is anticipated that the Proposed Project is consistent with this policy.

Policy 5 - Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Response: The Proposed Project will not interfere with public services and/or facilities nor will it encourage development. The Proposed Project involves the installation of stormwater control devices underneath road segments which are currently subject to flooding during storm events, rendering them unsafe. The Proposed Project is anticipated to protect the adjacent commercial and residential structures by allowing for proper flood control as well as access by emergency services during storm events or other emergencies. Therefore, it is anticipated that the Proposed Project is consistent with this policy.

Policy 7: Significant coastal fish and wildlife habitats will be protected, preserved, and, where practical, restored so as to maintain their viability as habitats.

Response: Although the Proposed Project is located near significant coastal fish and wildlife habitats, the Proposed Project involves stormwater drainage improvements primarily inside the limits of ROWs and would not result in any significant adverse impact to ecological resources including significant fish and wildlife habitats, wetlands, and rare ecological communities. The Proposed Project would not encroach on wetlands and would not result in any discharges of toxic and hazardous substances into coastal waters. Consultation with the USFWS and NYNHP regarding the Proposed Project and its location has been initiated. Therefore, it is anticipated that the Proposed Project is consistent with this policy.

Policy 11 - Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Response: The project area road segments have been in place for many years and serve as a primary access routes throughout the Hamlets of Inwood and Woodmere. The project area(s) are located within the 100-year flood plain and provide access to both commercial and residential properties. Stormwater drainage improvements would protect these road segments from flooding, allowing better access for public services and emergency vehicles during storm events. The Proposed Project would be consistent with this policy.

Policy 12 - Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Response: With the exception of small, previously disturbed, areas near streets that are privately owned, project construction would occur within the already developed ROWS and would comply with all federal and state permitting requirements. There will be no impacts to natural landforms. The Proposed Project has been designed with the appropriate base flood elevation in mind. No impacts to coastal barrier resources will result from the proposed project, therefore, it is anticipated that the Proposed Project is consistent with this policy.

Policy 17 - Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Response: The project site(s) include road segments within existing ROWs which are mapped within the Special Flood Hazard Area. Consequently, project plans were developed to ensure that construction would comply with 100-year floodplain regulations. This includes road reconstruction in accordance with the appropriate Base Flood Elevation (BFE). The Proposed Project is consistent with this policy.

Policy 33: Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Response: The Proposed Project includes improvements to an existing, outdated stormwater management system and does not involve sanitary sewer systems. The Proposed Project would simply facilitate drainage from road segments which are subject to flooding. Best Management Practices will be sued to ensure that sedimentation will not adversely affect surrounding waterbodies. Therefore, it is anticipated that the Proposed Project is consistent with this policy.

IV. ASSESSMENT

The assessment provided herein found that the proposed project would be consistent with all applicable policies. Therefore, the proposed project would not result in any significant adverse impacts related to the CZMA.

Appendix C: Hazardous Waste Supplemental Report

HUD Environmental Standards Review - Hazardous Waste Supplemental Report

FIVE TOWNS - TOWN OF HEMPSTEAD INWOOD AND WOODMERE

STORMWATER DRAINAGE IMPROVEMENTS PROJECT

Introduction: The purpose of this review is to ensure that the project complies with U.S. Department of Housing and Urban Development (HUD) environmental standards in relation to 24 CFR Part 58.5. Properties that are proposed for use in HUD programs "must be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property."

A desktop review was performed to identify whether the Subject Property referenced in the title of this document complies with the following criteria:

(i) is not Listed on an U.S. Environmental Protection Agency (EPA) Superfund National Priorities or Comprehensive Environmental Response Superfund National Priorities or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) List, or equivalent State list;

(ii) is not located within 3,000 feet of a toxic or solid waste landfill site;

(iii) does not have an underground storage tank;

(iv) is not known or suspected to be contaminated by toxic chemicals or radioactive materials.

Data Sources: CSA Group utilized the EPA's NEPAssist on-line tool (https://www.epa.gov/nepa/nepassist) and a search radius of 3,000 feet, Hazardous Waste (RCRA), Toxic Release Inventory Database (TRI), Radiation Information Database (RADInfo), Hazardous Waste (RCRAInfo), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) for sites listed under the CERCLA (otherwise known as Superfund), Brownfields and Toxic Substances Control Act databases were researched to determine if current or past uses of the project site and/or surrounding properties had/have the potential to adversely affect the proposed project.

In addition, the NYSDEC Facilities Viewer (http://www.dec.ny.gov/imsmaps/facilities/viewer.htm) and the NYSDEC's Chemical and Pollution Control Maps (http://www.dec.ny.gov/pubs/103459.html) were utilized to determine locations of sites listed on the New York State Environmental Remediation Database. Records reviewed include those listed under the NYS Superfund Program, Brownfield Cleanup, Environmental Restoration, and Voluntary Cleanup Programs (VCP) including active solid waste facilities. The Database also includes a Registry of Inactive Hazardous Waste Disposal Sites. Similar to the federal database search described above, a 3,000 foot radius surrounding the site was utilized.

The NYSDEC Bulk Storage Database was reviewed for records of facilities that are or have been regulated according to one of the Bulk Storage Programs - Chemical Bulk Storage or Major Oil Facility. The NYSDEC Spill Incident Database was used to determine the potential effects of spills on or or within 500 feet of the Subject Property. A desktop review of Google Earth was used in conjunction with a map of active municipal landfills (provided by the NYSDEC) in determining whether there was a landfill within 3,000 feet of the Subject Property.

Based on the EPA's Map of Radon Zones, the Subject Property is located within Zone 3, which is a zone that has predicted average indoor radon screening levels less than 2 pCi/L (Low Potential). http://www.epa.gov/radon/states/newyork.html

Summary Table of Potential Hazardous Waste Sites

EPA Listed Sites	On Site	Found within 3,000 ft Radius	NYSDEC Remedial Sites	On Site	Found within 3,000 ft Radius
NPL/Superfund/CERCLA	No	No	**Superfund/ER**	No	Yes (4)
Toxic Release Inventory (TRI)	No	No	**Brownfield Cleanup**	No	Yes (1)
Brownfields	No	No	**Voluntary Cleanup**	No	Yes (1)
NPDES-Water Discharger	No	No	**Former Haz Waste Disposal**	No	No
Toxic Substances (TSCA)	No	No	**NYSDEC Sites**	**On Site**	**Found within 500 ft Radius**
Resource Conservation and Recovery Act Information (RCRA Inventory) *500-foot radius	Yes (1)	Yes (2)	**SPILLS**	No	No
Toxic or Solid Waste Landfill	No	No	**Bulk Storage**	No	No

Records Review for the Subject Property

EPA Records: One RCRA site (Inwood Country Club) is listed on the RCRA database as occurring on Bayswater Boulevard and Spruce Street, part of the Inwood project area. Inclusion on the RCRA list does not indicate contamination, only that this facility is involved in the generation, transportation, treatment, storage and disposal of hazardous waste. According to Enforcement & Compliance History Online (ECHO) reports, published by the USEPA, there are no violations associated with this facility. The Subject Properties in Inwood and Woodmere are not listed on any other EPA Superfund National Priorities/CERCLA list nor are they listed on the TRI, Brownfield or TSCA databases.

New York State Department of Environmental Conservation (NYSDEC) Records: According to the NYSDEC Environmental Remediation database, the Subject Properties are not listed in the NYSDEC Environmental Site Remediation database, nor are they listed on NYSDEC's SPILLS or Bulk Storage databases.

Records Review for the Surrounding Properties

EPA Records: There are two EPA-permitted RCRA facilities located within 500 feet of the Subject Properties: Valley Forge Products (150 Roger Avenue) is located 400 feet south of the Maple Road portion of the Inwood project area and Mason Charles Cleaners (479 Hungry Harbor Road), located approximately 500 feet north of the Woodmere project area. ECHO reports from both these facilities were reviewed; no violations were noted.

NYSDEC Records:

NYSDEC records indicate that there are two State Superfund sites within 3,000 feet of the Inwood project area and two State Superfund sites within 3,000 feet of the Woodmere project area.

Inwood

NYSDEC# 130164, C130164A located approximately 800 foot southwest of the Inwood project site, is listed under both the State Superfund the Brownfield Cleanup Programs. The site consists of a 4.85-acre parcel of land that is developed with a 155,000 square foot one-story, warehouse building with a partial mezzanine. The remainder of the site consists of asphalt and concrete paved driveway/parking area with limited areas of grass. Historical documentation indicates that the site was built in three stages from 1954 through 1967. The site was used as a Sheet Metal Fabrication factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the site and left hazardous waste materials improperly stored and disposed of on-site. On June 1992, the United States Environmental Protection Agency (USEPA) personnel conducted a site inspection and discovered the following: approximately 240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and underground storage tanks (USTs) that contained potentially flammable liquids. To address the hazardous condition, the EPA conducted an Emergency Removal Action from beginning in August 1993. Drums of waste materials were removed, the tanker trailer, one 1,000-gallon heating oil UST located in the southeast portion of the site, and UST piping/ dispenser systems were also removed. Following the removal action, the Site was used as a warehouse by various tenants from 1990 through 2004, including Gunter Auto Shop, an auto repair shop. The Site was acquired by Nassau County Department of Real Estate in 1995 because of nonpayment of taxes and continues to own the Site. Since 2004 the site has remained vacant. The primary contaminants of concern at the site at this time include petroleum hydrocarbons, chlorinated volatile organic compound (VOCs), semi-volatile organic compounds (SVOCs) and metals. The media impacted include soil, soil vapor and groundwater. However, since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Further, groundwater flow direction is towards both the northwest and southeast, away from the Inwood project site. Therefore, this site does not pose a concern to the proposed project in Inwood.

K Inwood Holder (Site Code: 130121). The 27-acre Inwood Holder site is located in an urban area, approximately 900 feet south of the Inwood project area, on the southwest corner of Nassau Avenue and Sheridan Boulevard. The 27-acre site is currently active in the northeast corner, comprising of the natural gas metering and regulation station and the concrete pad of the former gas holder. The concrete pad is used for open-air storage of miscellaneous equipment. The 6-million cubic foot, water-sealed remote gas distribution holder was constructed between 1923 and 1940. The holder was demolished in 1993. During an unknown time period, the central area of the site was used as a fill area for fly ash, drums and construction debris. Groundwater flow is generally to south and southwest across the site, towards Jamaica Bay and away from the Inwood project area. Therefore, this site does not pose a concern to the proposed project in Inwood.

Woodmere

The Peninsula Boulevard Groundwater Contamination Superfund Site **(**Site Code: 130117), consists of the area within and around an approximately 50-acre groundwater plume located in the Village of Hewlett, approximately 2,000 feet east of the Woodmere project area. The Site slopes northwest toward Doxey

Brook Drain and Motts Creek with surface elevations decreasing from approximately 20 feet (ft) above mean sea level (msl) near the southern border of the Site to approximately one foot above msl in the vicinity of Doxey Brook Drain and the nearby Long Island American Water Company (LIAWC) property to the north. Conditions at the Peninsula Boulevard Groundwater Contamination Superfund Site would not pose a concern to the proposed activities (addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction) at the project location in Woodmere.

Grove Cleaners (Site Code: 130059), located at 1270-1274 Peninsula Boulevard in Hewlett, operated as a dry-cleaning facility from August 1987 to July 1992. Soil samples collected from an on-site drywell on February 25, 1991 showed contamination by PCE, 1,1,2-trichloroethylene, and 1,2-dichloroethylene. Subsequent groundwater samples indicated contamination by PCE. According to the NYSDEC, the site no longer presents a threat to the public health or the environment. A "No Further Action" Record of Decision was signed on February 20, 2003; therefore, Grove Cleaners does not pose a risk to the project site at Woodmere.

In Summary: Based on a review of available environmental records for the Subject Properties and surrounding area, the Subject Properties are unlikely to contain hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of workers or conflict with the intended proposed projects in Inwood or Woodmere.

NEPAssist Report

Inwood

August 12, 2019

- Project 4
- RCRAINFO (clustered)
- RCRAINFO (single)
- ACRES (single)
- TSCA (single)
- CERCLIS (single)
- TRI (clustered)
- TRI (single)
- Buffer Area

1:131,978

0 1 2 4 mi

0 1.75 3.5 7 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Location	40.617567,-73.757305
Within 3000 feet of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a Federal Land?	yes
Within 3000 feet of an impaired stream?	yes
Within 3000 feet of an impaired waterbody?	yes
Within 3000 feet of a waterbody?	yes
Within 3000 feet of a stream?	yes
Within 3000 feet of an NWI wetland?	Available Online
Within 3000 feet of a Brownfields site?	no
Within 3000 feet of a Superfund site?	no
Within 3000 feet of a Toxic Release Inventory (TRI) site?	no
Within 3000 feet of a water discharger (NPDES)?	yes
Within 3000 feet of a hazardous waste (RCRA) facility?	yes
Within 3000 feet of an air emission facility?	yes

Within 3000 feet of a school?	yes
Within 3000 feet of an airport?	no
Within 3000 feet of a hospital?	no
Within 3000 feet of a designated sole source aquifer?	yes
Within 3000 feet of a historic property on the National Register of Historic Places?	no
Within 3000 feet of a Toxic Substances Control Act (TSCA) site?	no
Within 3000 feet of a RADInfo site?	no
Within 3000 feet of a Land Cession Boundary?	no
Within 3000 feet of a tribal area (lower 48 states)?	no

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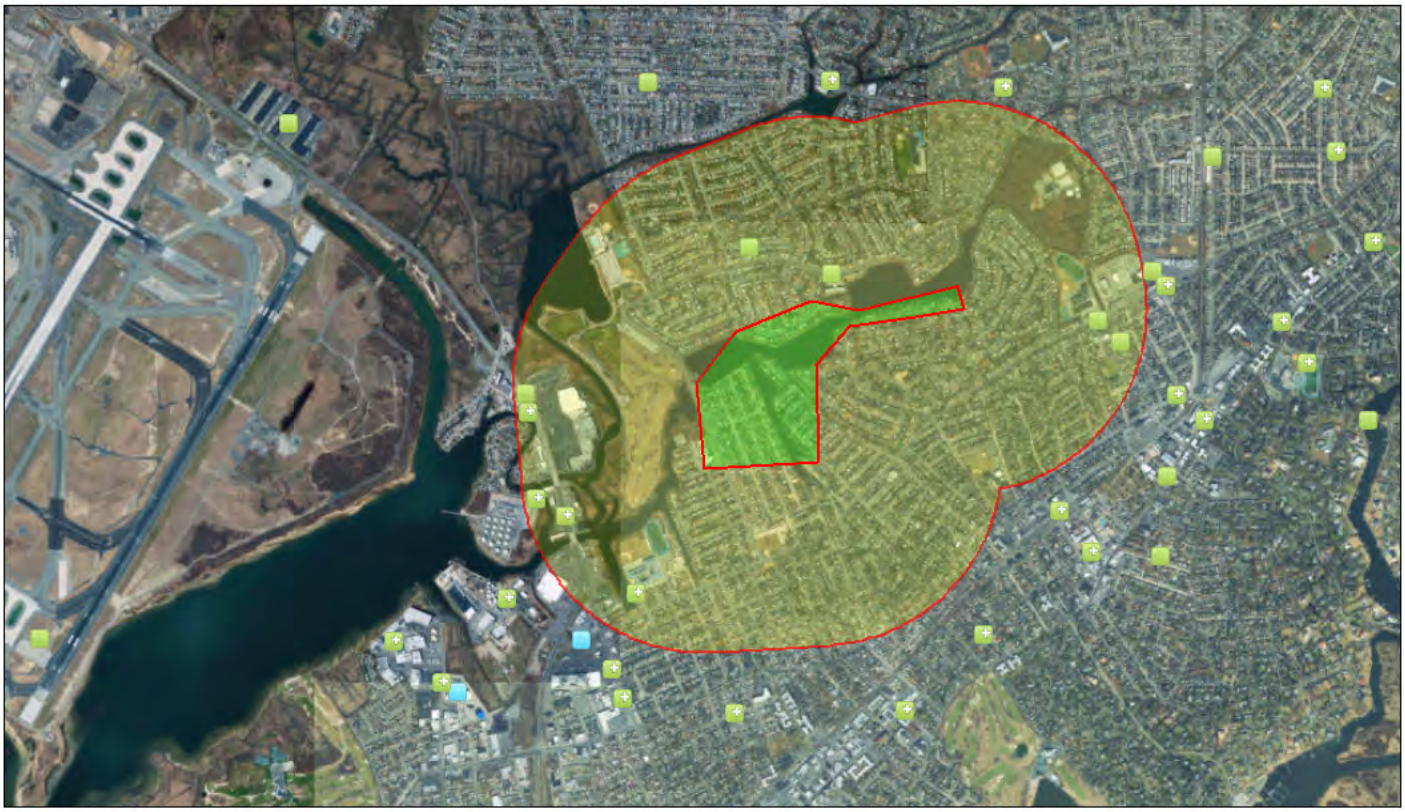
NEPAssist Report

Woodmere



August 12, 2019

Project 6
RCRAINFO (clustered)
RCRAINFO (single)
CERCLIS (single)
TRI (single)
Buffer Area

1:32,995

0 0.275 0.55 1.1 mi

0 0.45 0.9 1.8 km

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Input Coordinates: 40.639519,-73.731620,40.641669,-73.729560,40.641864,-73.729260,40.641864,-73.729260,40.641864,-73.729260,40.643199,-73.724925,40.642776,-73.722093,40.643883,-73.716257,40.642874,-73.715913,40.642059,-73.722651,40.640334,-73.724625,40.636035,-73.724453,40.635709,-73.731191,40.639519,-73.731620

Project Area	0.19 sq mi
Within 3000 feet of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	yes
Within 3000 feet of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 3000 feet of a Federal Land?	no
Within 3000 feet of an impaired stream?	yes
Within 3000 feet of an impaired waterbody?	yes
Within 3000 feet of a waterbody?	yes
Within 3000 feet of a stream?	yes
Within 3000 feet of an NWI wetland?	Available Online
Within 3000 feet of a Brownfields site?	no
Within 3000 feet of a Superfund site?	no
Within 3000 feet of a Toxic Release Inventory (TRI) site?	yes

Within 3000 feet of a water discharger (NPDES)?	yes
Within 3000 feet of a hazardous waste (RCRA) facility?	yes
Within 3000 feet of an air emission facility?	yes
Within 3000 feet of a school?	yes
Within 3000 feet of an airport?	no
Within 3000 feet of a hospital?	no
Within 3000 feet of a designated sole source aquifer?	yes
Within 3000 feet of a historic property on the National Register of Historic Places?	no
Within 3000 feet of a Toxic Substances Control Act (TSCA) site?	no
Within 3000 feet of a RADInfo site?	no
Within 3000 feet of a Land Cession Boundary?	no
Within 3000 feet of a tribal area (lower 48 states)?	no

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Detailed Facility Report

Facility Summary

INWOOD COUNTRY CLUB
BAYWATER BLVD & SPRUCE RD,
INWOOD, NY 11698

FRS (Facility Registry Service) ID: 110008066626
EPA Region: 02
Latitude: 40.617819
Longitude: -73.755152
Locational Data Source: RCRAINFO
Industry: No description found
Indian Country: N

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs with NC (Noncompliance) (of 12)	Qtrs with Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
RCRA	--	--	**No Violation Identified**	0	0	--	--	--	--	--

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information
Resource Conservation and Recovery Act (RCRA): Inactive (NYD986969855)
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information
Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Known Data Problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110008066626					N	40.617819	-73.755152
RCRAInfo	RCRA	NYD986969855	Other	Inactive ( )			N	40.617819	-73.755152

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110008066626	INWOOD COUNTRY CLUB	BAYWATER BLVD & SPRUCE RD, INWOOD, NY 11698
RCRAInfo	RCRA	NYD986969855	INWOOD COUNTRY CLUB	BAYWATER BLVD & SPRUCE RD, INWOOD, NY 11698

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
No data records returned			

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
No data records returned			

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned			

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
No data records returned							

Entries in italics are not counted in EPA compliance monitoring strategies or annual results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	NYD986969855	No	08/10/2019	0	08/09/2019

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: NYD986969855)		10/01-12/31/16	01/01-03/31/17	04/01-06/30/17	07/01-09/30/17	10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19
	Facility-Level Status	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**

Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned														

Environmental Conditions

Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
No data records returned									

Water Body Designated Uses

Reach Code	Water Body Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
No data records returned							

Air Quality

Nonattainment Area?	Pollutant(s)	Applicable Nonattainment Standard(s)
Yes	Ozone	8-Hour Ozone (1997), 8-Hour Ozone (2008), 8-Hour Ozone (2015)
No	Lead	
Yes	Particulate Matter	PM-2.5 (1997), PM-2.5 (2006)
Yes	Carbon Monoxide	Carbon Monoxide (1971)
No	Nitrogen Dioxide	
No	Sulfur Dioxide	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
No data records returned								

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

EJSCREEN EJ Indexes

Eleven primary environmental justice (EJ) indexes of EJSCREEN, EPA's screening tool for EJ concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Note that use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJSCREEN provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJSCREEN home page.

Census Block Group EJ Indexes (percentile)	
Particulate Matter (PM 2.5)	62.1
Ozone NATA Diesel PM	62.2
NATA Air Toxics Cancer Risk	62
NATA Respiratory Hazard Index (HI)	65.6
Traffic Proximity	63.4
Lead Paint Indicator	76.7
Superfund Proximity	72.6
Risk Management Plan (RMP) Proximity	61.6
Hazardous Waste Proximity	67.2
Wastewater Discharge Proximity	88.7

Number of EJ Indexes Above 80th Percentile
1

View EJSCREEN Report

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

General Statistics	
Total Persons	140,641
Population Density	6,995/sq.mi.
Percent Minority	66%
Households in Area	44,758
Housing Units in Area	48,475
Households on Public Assistance	2,675

Age Breakdown - Persons (%)	
Children 5 years and younger	11,206 (8%)
Minors 17 years and younger	40,074 (28%)
Adults 18 years and older	100,567 (72%)
Seniors 65 years and older	18,007 (13%)

Race Breakdown - Persons (%)	
White	57,999 (41%)

General Statistics	
Persons Below Poverty Level	43,906

Geography	
Radius of Selected Area	3 mi.
Center Latitude	40.617819
Center Longitude	-73.755152
Land Area	72%
Water Area	28%

Income Breakdown - Households (%)	
Less than $15,000	7,591 (17.36%)
$15,000 - $25,000	3,658 (8.36%)
$25,000 - $50,000	8,623 (19.72%)
$50,000 - $75,000	6,628 (15.16%)
Greater than $75,000	17,233 (39.41%)

Race Breakdown - Persons (%)	
African-American	61,672 (44%)
Hispanic-Origin	26,666 (19%)
Asian/Pacific Islander	3,739 (3%)
American Indian	730 (1%)
Other/Multiracial	16,501 (12%)

Education Level(Persons 25 & older) - Persons (%)	
Less than 9th Grade	7,086 (8.39%)
9th through 12th Grade	9,803 (11.61%)
High School Diploma	22,500 (26.64%)
Some College/2-year	18,040 (21.36%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	27,030 (32%)

ECHO
Enforcement and Compliance History Online

Detailed Facility Report

Facility Summary

VALLEY FORGE PRODUCTS CO INC
150 ROGER AVE, INWOOD, NY 11096

FRS (Facility Registry Service) ID: 110004368746
EPA Region: 02
Latitude: 40.61546
Longitude: -73.75612
Locational Data Source: FRS
Industry: No description found
Indian Country: N

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs with NC (Noncompliance) (of 12)	Qtrs with Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
RCRA	--	--	**No Violation Identified**	0	0	--	--	--	--	--

Regulatory Information

Clean Air Act (CAA): No Information
Clean Water Act (CWA): No Information
Resource Conservation and Recovery Act (RCRA): Inactive (NYD075781641)
Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information
Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Known Data Problems

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004368746					N	40.61546	-73.75612
RCRAInfo	RCRA	NYD075781641	Other	Inactive ( )			N	40.615535	-73.75729

Facility Address

System	Statute	Identifier	Facility Name	Facility Address
FRS		110004368746	VALLEY FORGE PRODUCTS CO INC	150 ROGER AVE, INWOOD, NY 11096
RCRAInfo	RCRA	NYD075781641	VALLEY FORGE PRODUCTS CO INC	150 ROGER AVE, INWOOD, NY 11096-1622

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
No data records returned			

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description
No data records returned			

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned			

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
No data records returned							

Entries in italics are not counted in EPA compliance monitoring strategies or annual results.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	NYD075781641	No	08/10/2019	0	08/09/2019

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: NYD075781641)		10/01-12/31/16	01/01-03/31/17	04/01-06/30/17	07/01-09/30/17	10/01-12/31/17	01/01-03/31/18	04/01-06/30/18	07/01-09/30/18	10/01-12/31/18	01/01-03/31/19	04/01-06/30/19	07/01-09/30/19
	Facility-Level Status	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**	**No Violation Identified**

Informal Enforcement Actions (5 Years)

Statute	System	Source ID	Type of Action	Lead Agency	Date
No data records returned					

Formal Enforcement Actions (5 Years)

Statute	System	Law/Section	Source ID	Action Type	Case No.	Lead Agency	Case Name	Issued/Filed Date	Settlements/Actions	Settlement/Action Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned														

Environmental Conditions

Water Quality

Permit ID	Combined Sewer System?	Number of CSO (Combined Sewer Overflow) Outfalls	12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Impaired Waters	Impaired Class	Causes of Impairment(s) by Group(s)	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
No data records returned									

Water Body Designated Uses

Reach Code	Water Body Name	Exceptional Use	Recreational Use	Aquatic Life Use	Shellfish Use	Beach Closure Within Last Year	Beach Closure Within Last Two Years
No data records returned							

Air Quality

Nonattainment Area?	Pollutant(s)	Applicable Nonattainment Standard(s)
Yes	Ozone	8-Hour Ozone (1997), 8-Hour Ozone (2008), 8-Hour Ozone (2015)
No	Lead	
Yes	Particulate Matter	PM-2.5 (1997), PM-2.5 (2006)
Yes	Carbon Monoxide	Carbon Monoxide (1971)
No	Nitrogen Dioxide	
No	Sulfur Dioxide	

Pollutants

Toxics Release Inventory History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Transfers
No data records returned								

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

EJSCREEN EJ Indexes

Eleven primary environmental justice (EJ) indexes of EJSCREEN, EPA's screening tool for EJ concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Note that use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJSCREEN provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJSCREEN home page.

Census Block Group EJ Indexes (percentile)	
Particulate Matter (PM 2.5)	62.1
Ozone NATA Diesel PM	62.2
NATA Air Toxics Cancer Risk	62
NATA Respiratory Hazard Index (HI)	65.6
Traffic Proximity	63.4
Lead Paint Indicator	76.7
Superfund Proximity	72.6
Risk Management Plan (RMP) Proximity	61.6
Hazardous Waste Proximity	67.2
Wastewater Discharge Proximity	88.7

Number of EJ Indexes Above 80th Percentile
1

View EJSCREEN Report

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

General Statistics	
Total Persons	131,968
Population Density	6,958/sq.mi.
Percent Minority	65%
Households in Area	42,267
Housing Units in Area	45,838
Households on Public Assistance	2,605

Age Breakdown - Persons (%)	
Children 5 years and younger	10,623 (8%)
Minors 17 years and younger	37,792 (29%)
Adults 18 years and older	94,176 (71%)
Seniors 65 years and older	17,080 (13%)

Race Breakdown - Persons (%)	
White	56,074 (42%)

General Statistics	
Persons Below Poverty Level	42,115

Geography	
Radius of Selected Area	3 mi.
Center Latitude	40.61546
Center Longitude	-73.75612
Land Area	67%
Water Area	33%

Income Breakdown - Households (%)	
Less than $15,000	7,557 (18.36%)
$15,000 - $25,000	3,558 (8.64%)
$25,000 - $50,000	8,218 (19.97%)
$50,000 - $75,000	6,115 (14.86%)
Greater than $75,000	15,714 (38.18%)

Race Breakdown - Persons (%)	
African-American	55,653 (42%)
Hispanic-Origin	26,058 (20%)
Asian/Pacific Islander	3,481 (3%)
American Indian	710 (1%)
Other/Multiracial	16,051 (12%)

Education Level(Persons 25 & older) - Persons (%)	
Less than 9th Grade	6,835 (8.69%)
9th through 12th Grade	9,289 (11.81%)
High School Diploma	20,937 (26.62%)
Some College/2-year	16,470 (20.94%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	25,110 (31.93%)

Appendix D: U.S. Fish and Wildlife and NYSDEC Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Field Office
340 Smith Road
Shirley, NY 11967
Phone: (631) 286-0485 Fax: (631) 286-4003
http://www.fws.gov/northeast/nyfo

To: James McAllister

Date: September 30, 2019

USFWS File No:

Regarding your: ☒ letter ☐ FAX ☒ E-mail dated: September 30, 2019

For project: Inwood and Woodmere Drainage Projects

Located: Inwood and Woodmere

In Town/County: Nassau

Pursuant to the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the U.S. Fish and Wildlife Service:

☒ Acknowledges receipt of your "no effect" determination. No further ESA coordination or consultation is required.

☐ Acknowledges receipt of your determination. Please provide copy of your determination and supporting materials to any involved Federal agency for their final ESA determination.

☐ Is taking no action pursuant to ESA or any other legislation at this time but would like to be kept informed of project developments.

As a reminder, until the proposed project is complete, we recommend that you check our website (http://www.fws.gov/northeast/nyfo/es/section7.htm) every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project area is current. Should project plans change or additional information on listed or proposed species or critical habitat become available, this determination may be reconsidered.

Pursuant to the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*),

☐ Requests additional time for review.

☐ Is providing FWCA comments (see attached).

☐ Will provide FWCA comments separately.

☐ Is taking no action pursuant to FWCA due to lack of funding.

☐ Has no objection pursuant to the FWCA.

☐ Is taking no action pursuant to the FWCA at this time but would like to be kept informed of project developments.

USFWS Contact(s): _____ Date 9/30/2019

Supervisor: _____ Date _____

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 24, 2019

via email: FW5ES_NYFO@fws.gov
steve_papa@fws.gov

U.S. Fish and Wildlife Service
Mr. Steven T. Papa
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967

Re: Section 7 Project Review - No Effect Determination
Five Towns - Inwood and Woodmere Drainage Projects
Hamlets of Inwood and Woodmere, Nassau County, NY
iPAC Consultation Codes: 05E1LI00-2019-SLI-0702 (Inwood); 05E1LI00-2019-SLI-0703 (Woodmere)

Dear Mr. Papa:

The Town of Hempstead is proposing to implement storm water drainage improvements within the hamlets of Inwood and Woodmere in Nassau County. The purpose of the project is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during storm events. The Proposed Project was developed to reduce risk of chronic flooding associated with extreme high tides in both residential and commercial areas.

The project sites are located within the Hamlets of Inwood and Woodmere (see **Attachment A, Site Location Maps**). The Proposed Project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD '88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The Proposed Project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing

outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

Compliance with Endangered Species Act

Review of the USFWS IPaC database system (accessed September 23, 2019) indicates three avian species with the potential to occur near the project vicinity: piping plover *(Charadrius melodus),* red knot *(Calidris canutus rufa),* and roseate tern *(Sterna dougallii dougallii).* In addition, the FWS indicates the potential presence of two plant species: seabeach amaranth *(Amaranthus pumilus* and sandplain gerardia *(Agalinis acuta).* One mammalian species: Northern long eared bat (*Myotis septentrionalis*) may also occur in the project vicinity. There are no critical habitats for these or any other species within the project area. The USFWS Official Species Lists for both project locations are included as **Attachment B**.

A description of each federally endangered or threatened species identified by USFWS and the likelihood that the species occurs within the project areas, is provided below. Species' descriptions are summarized from New York State Department of Environmental Conservation (NYSDEC) fact sheets and USFWS species profiles unless otherwise referenced.

Common/Latin Name	Critical Habitat	Federal Status	Potential for Occurrence on Project Site
Piping plover *(Charadrius melodus)*	Designated, but not inclusive of project site	Threatened	None, as this species typically nests on shell and sandy substrates; forage on beaches, dunes and tidal wrack in areas with limited human disturbance. The proposed project includes the replacement of infrastructure beneath and adjacent to a marina and road segments. There is no suitable piping plover habitat present in the project area and the proposed action would have no effect on this species.
Red knot *(Calidris canutus rufa)*	none	Threatened	None, typical habitat is beaches and mudflats. Forages on small clams, mussels, snails and other invertebrates. No such habitat occurs within the project area and the proposed action would have no effect on this species. .
Roseate tern *(Sterna dougallii dougallii)*	none	Endangered	None, requires salt marsh islands and beaches with sparse vegetation for breeding and foraging. No such habitat occurs within the project area and the proposed action would have no effect on this species.
Seabeach amaranth *(Amaranthus pumilus)*	none	Threatened	None, inhabits dunes on barrier island beaches and usually grows on a nearly pure sand substrate. No such habitat occurs within the project area and the proposed action would have no effect on this species.
sandplain gerardia (Agalinis acuta)	none	Endangered	None, as the sandplain gerardia occurs in dry, sandy soils and in sandy plains, remnant grasslands, shrublands, and along roadsides and railroads. No such habitat occurs within

			the project area and the proposed action would have no effect on this species.
Northern long eared bat (*Myotis septentrionalis*)	none	Threatened	None, since the northern long-eared bat is considered a forest-dependent species that is sensitive to fragmentation and requires forested/wooded habitats for both foraging and breeding. This species roosts underneath tree bark, in cavities, and in the crevices of dead and live trees. NLEB may occur in urbanized areas, near large, forested parks or other areas with abundant tree cover, however, there is no such habitat in proximity to the project area, therefore, the proposed action would have no effect on this species.

Source: Official Species List, USFWS iPAC System (accessed September 23, 2019)

ESA -Analysis and Determination of Effects

The USFWS IPaC Resource List identified the NLEB as a Federal threatened species potentially affected by activities at the project locations. According to the NYS Resource Map for Bat Occurrences, no NLEB hibernaculum has been documented within five miles from the project site. There are currently no known maternity roost trees or hibernacula known to be occupied by NLEB within the vicinity of the project location according to geospatial information provided by the USFWS. No caves or mines occur near the project site. Summer habitat of the NLEB generally includes upland and riparian forest within heavily forested landscapes. The NLEB is sensitive to fragmentation and urbanization and requires interior forest for both foraging and breeding. Roost trees are usually in intact forest, close to the core and away from large clearings, roads, or other sharp edges. The main impact of concern for bats would be the removal of potential roost trees. However, the project sites primarily consist of property located within and immediately adjacent to road rights-of-ways in previously disturbed urban areas with only scattered street trees.

Migratory Bird Treaty Act (MBTA)

The Proposed Project would occur within the Atlantic Flyway. However, because the majority of the Proposed Project would occur within street segments which are routinely subject to human disturbance, GOSR has determined that the Proposed Action would have no significant adverse impact to migratory birds or their habitat. Therefore, it is anticipated that migrating birds would not be impacted by the Proposed Project.

NYSDEC and NMFS Coordination

A search utilizing the New York State Environmental Resource Mapper indicated that the state may have records of rare or state-listed animals or plants at the project sites and the project vicinities are mapped within areas containing significant natural communities (**Attachment C**). A request for detailed records regarding rare species and significant natural communities was sent to the New York State Natural Heritage Program (NYSNHP). However, given the nature and locations of the proposed work, impacts to significant natural communities are not expected.

Project implementation would be conditioned upon applicable federal and state permits and would be constructed in accordance with federal and state permit conditions. The Proposed Project would not jeopardize the continued existence of ESA species or destroy or adversely modify their critical habitat. GOSR is submitting the above

information as notification of its "No Effect" determination and requests acknowledgement from USFWS that they have received this determination that the proposed project would have No Effect on endangered/threatened species under USFWS jurisdiction. If the USFWS does not respond within 30 days from submittal of this letter, then GOSR may presume that its determination is informed by the best available information and its project responsibilities under Section 7 of the ESA have been fulfilled. If you have any questions, please feel free to contact me via telephone number (631) 465-9677 or email: James.McAllister@stormrecovery.ny.gov. Thank you for your consideration and cooperation.

Sincerely,

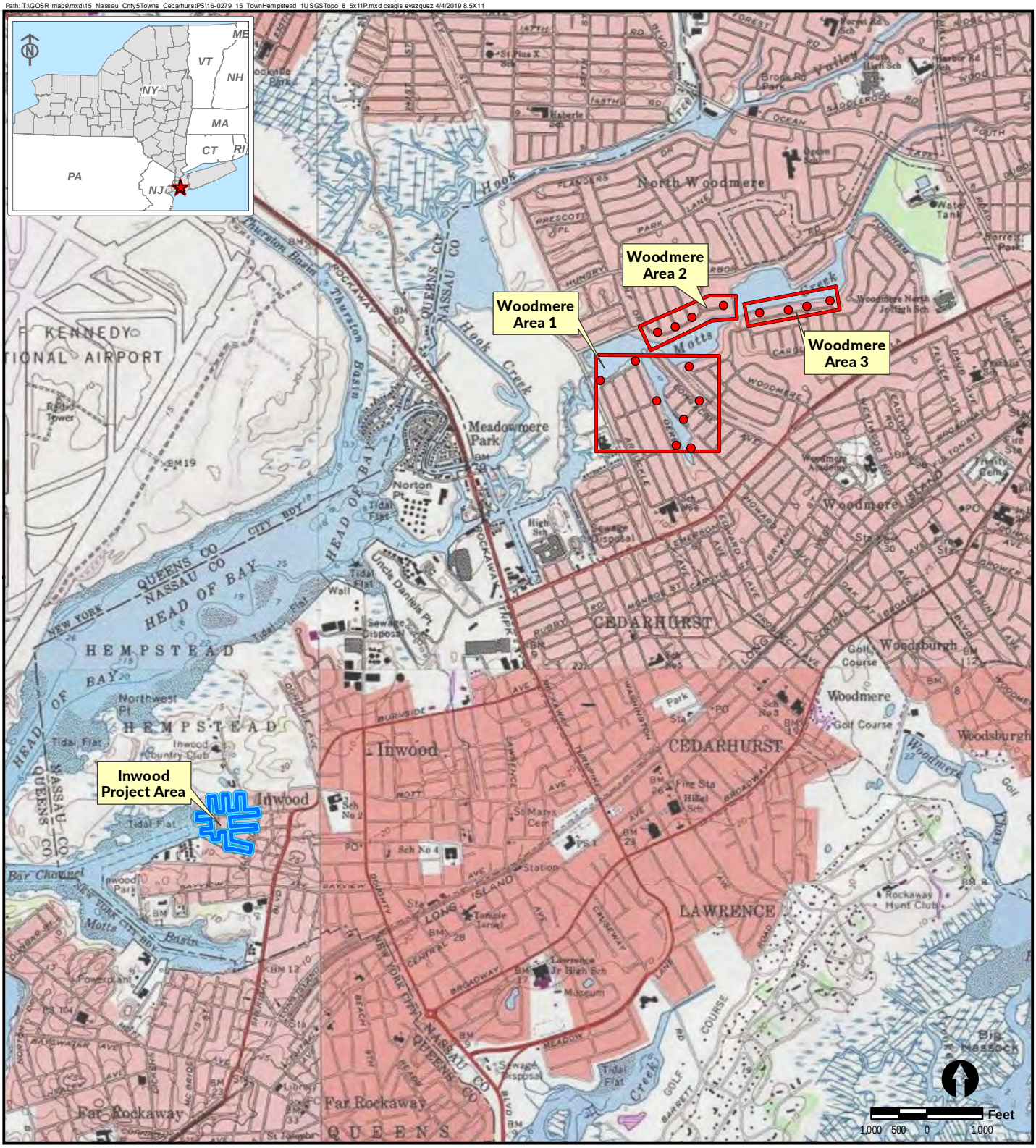
James P. McAllister
Bureau of Environmental Review and Assessment

Enclosures
Attachment A: Project Location Maps
Attachment B: USFWS Official Species Lists and Trust Resources Reports
Attachment C: NYSDEC Environmental Resource Mapper Results

Attachment A: Project Location Maps

Town of Hempstead, Woodmere and Inwood Stormwater Drainage Project

Path: T:\GOSR maps\mxd\15_Nassau_Cnty5Towns_CedarhurstPS\16-0279_15_TownHempstead_1USGSTopo_8_5x11P.mxd csagis evazquez 4/4/2019 8.5X11



Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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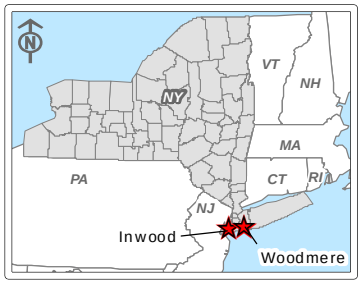
Path: T:\GOSR maps\mxd\15_Nassau_Cnty5Towns_CedarhurstPS\16-0279_15_TownHempstead_2SiteLocation_8_5x11P.mxd csagis evazquez 4/4/2019 8.5X11



Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

CSAGROUP EST. 1956

Attachment B: Official Species Lists and Trust Resources Report

Town of Hempstead, Woodmere and Inwood Stormwater Drainage Project

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: September 23, 2019
Consultation Code: 05E1LI00-2019-SLI-0702
Event Code: 05E1LI00-2019-E-01619
Project Name: 5 Towns -Town of Hempstead - Inwood Drainage Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1LI00-2019-SLI-0702

Event Code: 05E1LI00-2019-E-01619

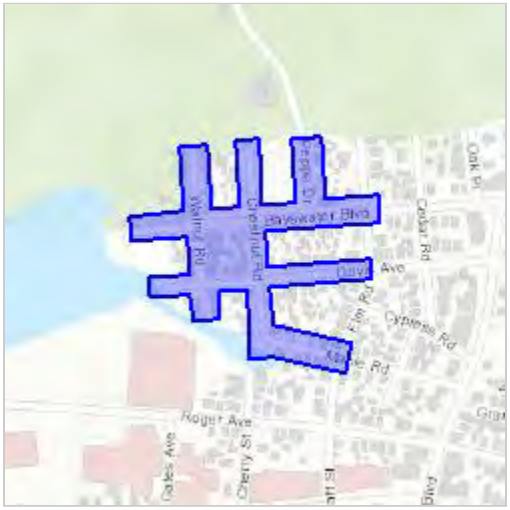
Project Name: 5 Towns -Town of Hempstead - Inwood Drainage Project

Project Type: Federal Grant / Loan Related

Project Description: The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD ’88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.61747514485796N73.75592926239318W



Counties: Nassau, NY

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern *Sterna dougallii dougallii* Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Sandplain Gerardia *Agalinis acuta* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8128	Endangered
Seabeach Amaranth *Amaranthus pumilus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Nassau County, New York

Local office

Long Island Ecological Services Field Office

(631) 286-0485
(631) 286-4003

340 Smith Road
Shirley, NY 11967-2258

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

NOT FOR CONSULTATION

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot Calidris canutus rufa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern Sterna dougallii dougallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Sandplain Gerardia Agalinis acuta No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8128	Endangered
Seabeach Amaranth Amaranthus pumilus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8549	Threatened

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NOT FOR CONSULTATION

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler Cardellina canadensis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Clapper Rail Rallus crepitans This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Oct 31
Dunlin Calidris alpina arcticola This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere

NOT FOR CONSULTATION

Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Gull-billed Tern Gelochelidon nilotica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9501	Breeds May 1 to Jul 31
Least Tern Sterna antillarum This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Nelson's Sparrow Ammodramus nelsoni This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Sep 5
Prairie Warbler Dendroica discolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Purple Sandpiper Calidris maritima This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Red-throated Loon Gavia stellata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Ruddy Turnstone Arenaria interpres morinella This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird Euphagus carolinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere

NOT FOR CONSULTATION

Semipalmated Sandpiper Calidris pusilla This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Snowy Owl Bubo scandiacus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Whimbrel Numenius phaeopus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wood Thrush Hylocichla mustelina This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

NOT FOR CONSULTATION

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

NOT FOR CONSULTATION

ESTUARINE AND MARINE DEEPWATER

E1UBL

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: September 23, 2019
Consultation Code: 05E1LI00-2019-SLI-0703
Event Code: 05E1LI00-2019-E-01621
Project Name: 5 Towns -Town of Hempstead - Woodmere Drainage Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1LI00-2019-SLI-0703

Event Code: 05E1LI00-2019-E-01621

Project Name: 5 Towns -Town of Hempstead - Woodmere Drainage Project

Project Type: Federal Grant / Loan Related

Project Description: Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/40.63815032674292N73.72752337587166W

Counties: Nassau, NY

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot *Calidris canutus rufa* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern *Sterna dougallii dougallii* Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Sandplain Gerardia *Agalinis acuta* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8128	Endangered
Seabeach Amaranth *Amaranthus pumilus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Nassau County, New York

Local office

Long Island Ecological Services Field Office

(631) 286-0485
(631) 286-4003

340 Smith Road
Shirley, NY 11967-2258

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

NOT FOR CONSULTATION

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot Calidris canutus rufa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Roseate Tern Sterna dougallii dougallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2083	Endangered

Flowering Plants

NAME	STATUS
Sandplain Gerardia Agalinis acuta No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8128	Endangered
Seabeach Amaranth Amaranthus pumilus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8549	Threatened

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Black Skimmer Rynchops niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink Dolichonyx oryzivorus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler Cardellina canadensis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler Dendroica cerulea This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 29 to Jul 20

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Clapper Rail Rallus crepitans This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Oct 31
Dunlin Calidris alpina arcticola This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Evening Grosbeak Coccothraustes vespertinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Golden-winged Warbler Vermivora chrysoptera This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Gull-billed Tern Gelochelidon nilotica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9501	Breeds May 1 to Jul 31
Least Tern Sterna antillarum This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Lesser Yellowlegs Tringa flavipes This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Nelson's Sparrow Ammodramus nelsoni This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Sep 5
Prairie Warbler Dendroica discolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31

NOT FOR CONSULTATION

Purple Sandpiper Calidris maritima This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Red-headed Woodpecker Melanerpes erythrocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Red-throated Loon Gavia stellata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Ruddy Turnstone Arenaria interpres morinella This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird Euphagus carolinus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Seaside Sparrow Ammodramus maritimus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 20
Semipalmated Sandpiper Calidris pusilla This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Snowy Owl Bubo scandiacus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Whimbrel Numenius phaeopus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9483	Breeds elsewhere
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5

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Wood Thrush *Hylocichla mustelina* Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

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1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER
- E1UBL

RIVERINE
- R4SBC

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

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The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Attachment C: NYS Environmental Resource Mapper

Town of Hempstead, Woodmere and Inwood Stormwater Drainage Project

Environmental Resource Mapper

Search

Tools

Layers and Legend

- All Layers
- Unique Geological Features
- Waterbody Classifications for Rivers/Streams
- Waterbody Classifications for Lakes
- State Regulated Freshwater Wetlands
  - State Regulated Wetland Checkzone
- Significant Natural Communities
  - Natural Communities Near This Location
- Rare Plants or Animals

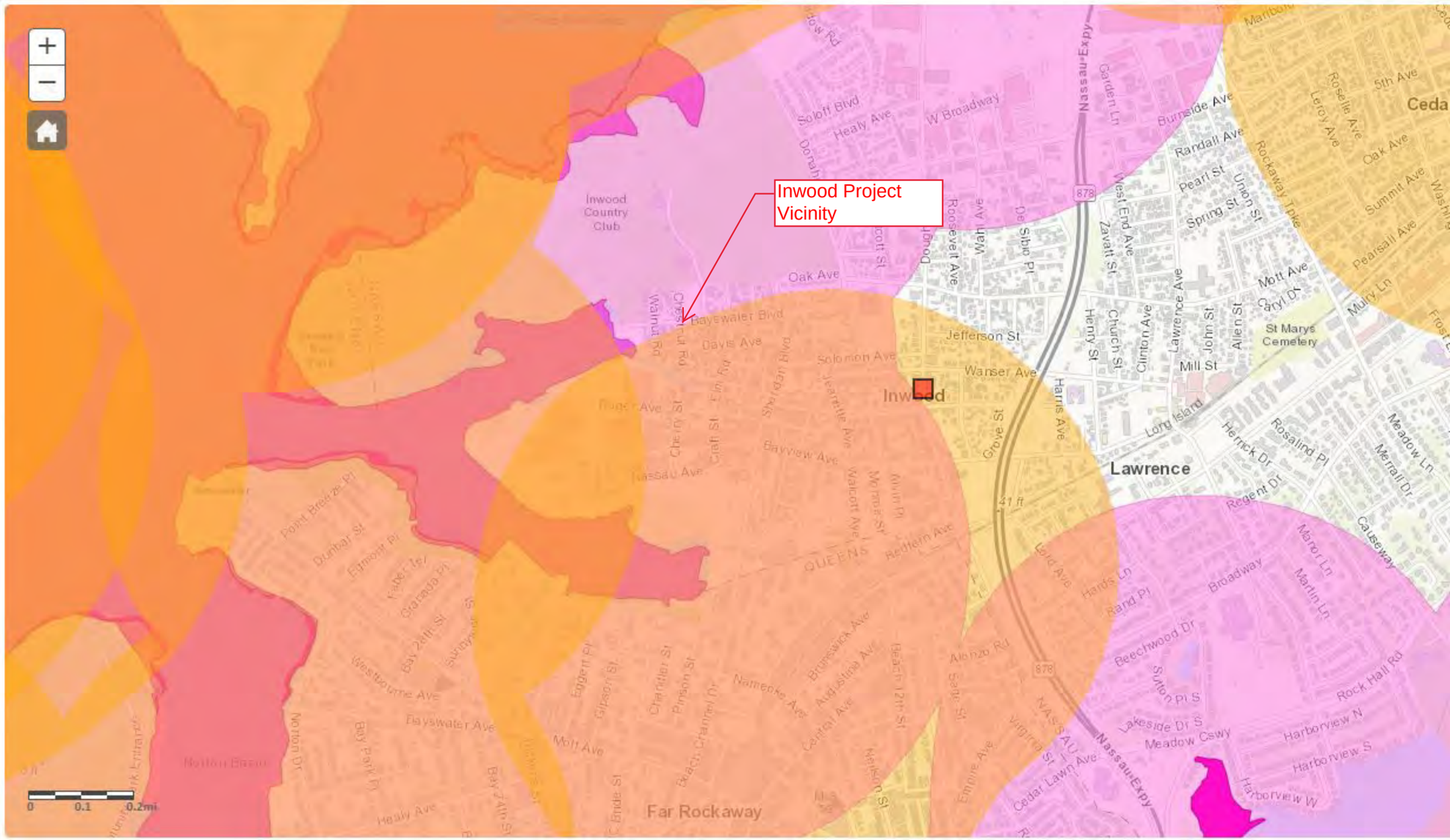
Other Wetland Layers

Reference Layers

Tell Me More...

Need A Permit?

Contacts



Environmental Resource Mapper

Base Map: Topographical Using this m

Search

Tools

Layers and Legend

All Layers

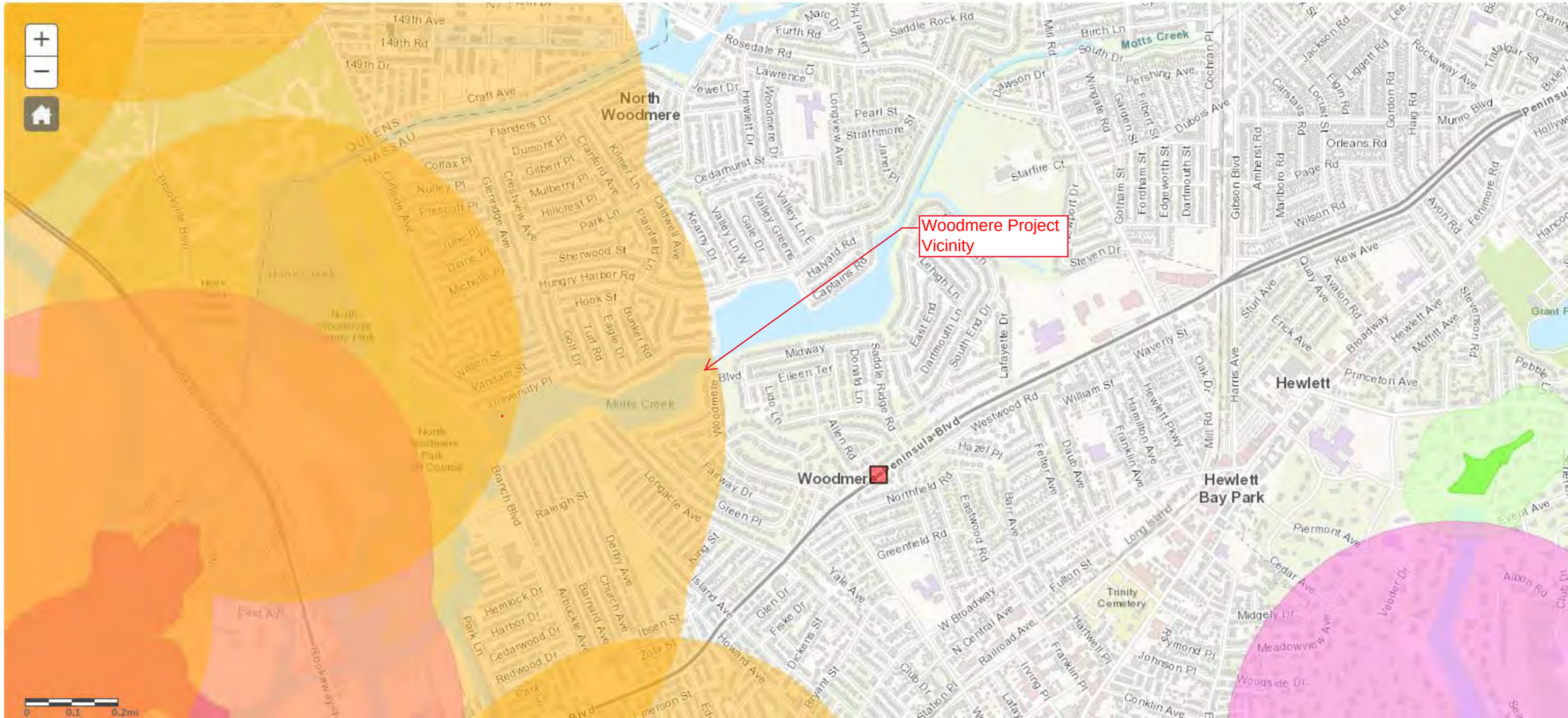
- Unique Geological Features
- Waterbody Classifications for Rivers/Streams
- Waterbody Classifications for Lakes
- State Regulated Freshwater Wetlands
  - State Regulated Wetland Checkzone
- Significant Natural Communities
  - Natural Communities Near This Location
- Rare Plants or Animals

Other Wetland Layers

Reference Layers

Tell Me More...

Need A Permit?



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

October 7, 2019

James McAllister
Governor's Office of Storm Recovery (GOSR)
25 Beaver Street
New York, NY 10004

Re: Five Towns – Inwood and Woodmere Drainage Improvement Projects
County: Nassau Town/City: Hempstead

Dear Mr. McAllister:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at neither the Woodmere nor the Inwood project areas.

The open area just to the west of Woodmere Area 1 has documented records of **Northern harrier** (*Circus hudsonius*, NYS-listed as Threatened) and of **annual saltmarsh aster** (*Symphyotrichum subulatum* var. *subulatum*, Threatened). While the proposed work may not be expected to have significant impacts on these species, if you would like an official determination from NYSDEC regarding any permit considerations for the Northern harrier, please contact the the Permits staff at the NYSDEC Region 1 Office at dep.r1@dec.ny.gov, (631) 444-0365.

The channel adjacent to the Inwood project area is part of the large state-significant **marine back-barrier lagoon** extending throughout Jamaica Bay; this natural community type is rare in New York. About 1/2 mile from the Inwood site, along the shore, is part of the large state-significant **low salt marsh** of Jamaica Bay; this is an uncommon community type in New York. We recommend that the project be conducted so as to avoid impacts to the waters and habitats of Jamaica Bay.

For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

For information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 1 Office, Division of Environmental Permits, as listed above.

Sincerely,

Nick Conrad

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

1120

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 23, 2019 Sent via email to: naturalheritage@dec.ny.gov

Mr. Nicholas Conrad
Division of Fish, Wildlife & Marine Resources
New York State Department of Environmental Conservation
New York Natural Heritage Program – Information Services
625 Broadway, 5th Floor
Albany, NY 12233-4757

Re: Natural Heritage Compliance Process Request
Five Towns - Inwood and Woodmere Drainage Improvement Projects
Town of Hempstead, Nassau County, New York

To Mr. Conrad:

The Governor's Office of Storm Recovery (GOSR), an office of the New York State Homes and Community Renewal's (NYSHCR) Housing Trust Fund Corporation (HTFC), on behalf of the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant for Disaster Recovery (CDBG-DR), is preparing an environmental review for the Inwood and Woodmere Stormwater Drainage Improvement Project located in the Town of Hempstead, Nassau County, New York (Proposed Action). The Proposed Project involves the implementation of storm water drainage improvements within the Hamlets of Inwood and Woodmere (**see Figure 1 and Figure 2**).

The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD '88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing

outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

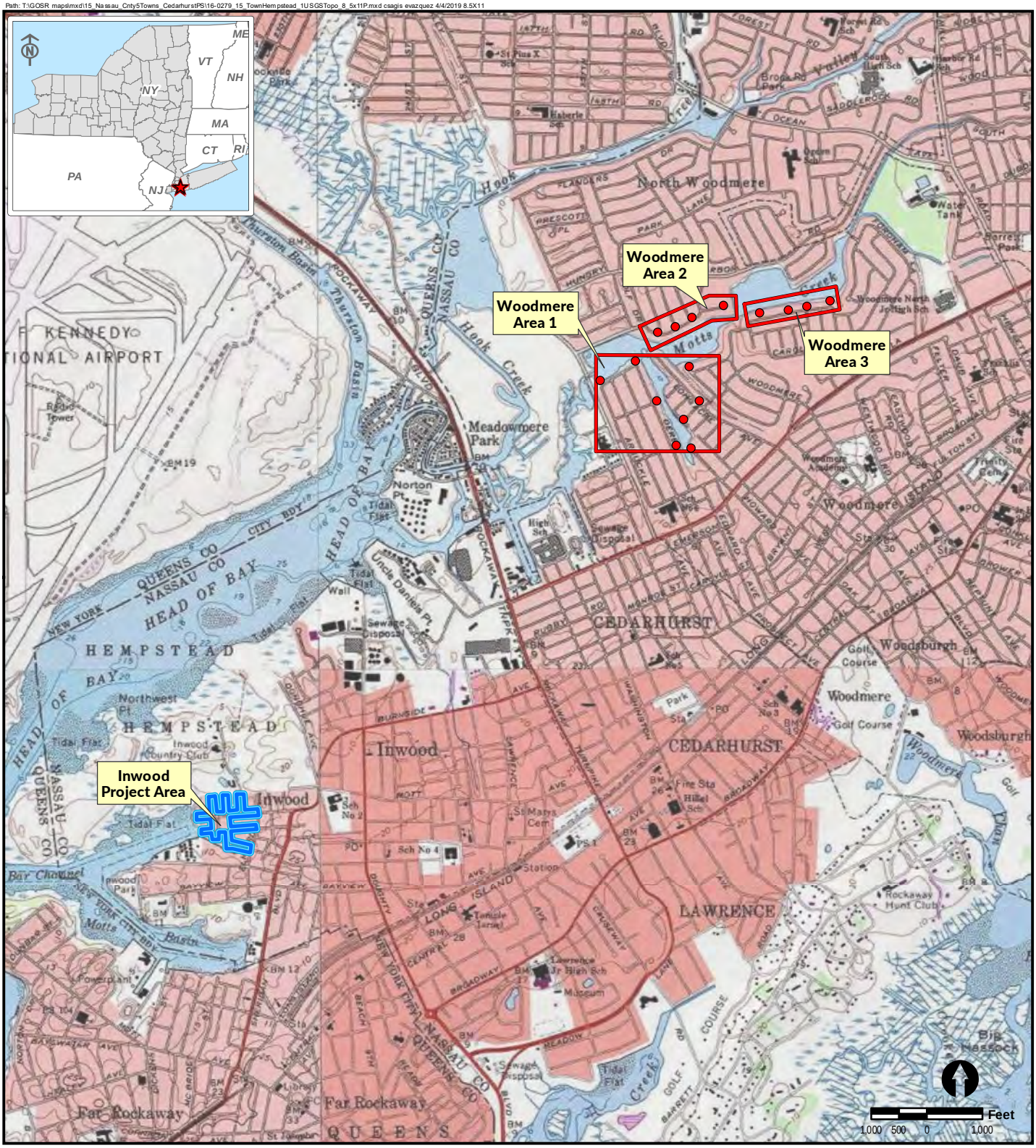
The purpose of this letter is to provide the New York State Department of Environmental Conservation Natural Heritage Program notice of the Proposed Action and to determine whether the Proposed Action has the potential to impact any state or federal endangered, threatened, and/or rare species or significant natural communities. A USGS topographic regional location map and aerial photograph showing the project location are attached. If you have any questions, please feel free to contact me via telephone number (631) 465-9677 or email: James.McAllister@stormrecovery.ny.gov . Thank you for your consideration and cooperation.

Sincerely,

James P. McAllister
Bureau of Environmental Review and Assessment

Enclosures:
Project Location Maps

Path: T:\GOSR maps\mxd\15_Nassau_Cnty5Towns_CedarhurstPS\16-0279_15_TownHempstead_1USGSTopo_8_5x11P.mxd csagis evazquez 4/4/2019 8.5X11



Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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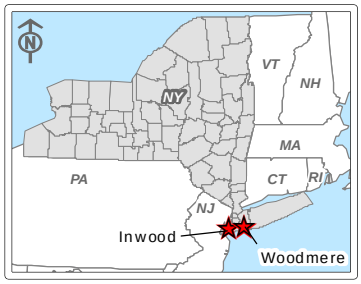

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Appendix E: Flood Management Plan

FLOODPLAIN 8-STEP PROCESS IN ACCORDANCE WITH EXECUTIVE ORDER 11988: FLOODPLAIN MANAGEMENT EXECUTIVE ORDER 11990: WETLAND MANAGEMENT

New York Governor's Office of Storm Recovery
Five Towns Drainage Improvements:
Inwood, Woodmere, Lawrence
Town of Hempstead and Nassau County, New York

December 2, 2019

Introduction and Overview

This Floodplain Management and Wetlands Protection Plan (Plan) Compliance Document meets the requirements of 24 CFR Part 55.20 and Executive Order 11988—Floodplain Management— and Executive Order 11990—Protection of Wetlands—for the Five Towns Drainage Improvements Projects located in Inwood, Woodmere and Lawrence, Town of Hempstead, Nassau County, New York (Proposed Project). On behalf of Grantee the State of New York, the Governor's Office of Storm Recovery (GOSR), serving under the auspices of the New York State Homes and Community Renewal's Housing Trust Fund Corporation, and acting under authority of the U.S. Department of Housing and Urban Development's (HUD) regulations at 24 CFR Part 58, and in cooperation with other involved, cooperating, interested agencies, is participating in the HUD's Community Development Block Grant Program as administered by the State of New York Action Plan for Community Development Block Grant Program – Disaster Recovery (CDBG-DR).

This Plan documents the eight-step decision making process for the Proposed Project and pertains to activities within the Special Flood Hazard Area (SFHA) as defined by the Federal Emergency Management Agency (FEMA) or its successors, pursuant to the National Flood Insurance Program (NFIP), or a successor program, whether advisory, preliminary, or final, and wetland as defined by 24 CFR 55.2(b)(11).

Description of Proposed Program Activities

The Town of Hempstead proposes to implement projects to improve drainage in the hamlets of Inwood and Woodmere. The hamlet of Inwood project is located within a FEMA designated regulatory floodplain and would involve the installation of stormwater detention systems under the Inwood Marina parking lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the adjacent local streets to a new, higher target flow line elevation. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Inwood location.

The proposed project within the hamlet of Woodmere is located within a FEMA designated regulatory floodplain and would involve the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Woodmere location.

Nassau County's proposed project within the Village of Lawrence involves roadway and drainage improvements to increase capacity of the existing stormwater management system by installing larger pipes, box culverts, vortex separators and backflow prevention devices. In addition, two new 60" outfall pipes

with backflow prevention devices will be installed between Bannister Pond and Bannister Bay. The Proposed Activity would result in temporary impacts to less than 1.0 acres of previously disturbed 100-Year Floodplain. There will be 0.026 acres of permanent impacts to the Barrister Pond area in the FEMA floodplain, from the placement of rip rap to stabilize the shoreline. All temporary impacts will be restored in kind.

Approximately 0.30 acres of temporary impacts to USFWS National Wetland Inventory (NWI) mapped wetlands would occur from the disturbance for installation of the 5' x 10' culvert box south of North Street and removal of sediment from Bannister Pond. Temporary impacts to approximately 0.05 acres of New York State Department of Environmental Conservation (NYSDEC) waterway and NYSDEC regulated streambank would also result from the Proposed Action. Approximately 0.026 acres of permanent impacts to USFWS NWI and NYSDEC mapped wetlands and waterway would occur from the removal of sediment and the placement of riprap in Barrister Pond. It should be noted that although the NWI map indicates the presence of a riparian feature extending along North Street, field studies have indicated that this linear feature is a paved golf cart path; no impacts to federal wetlands will occur at this location along North Street.

The purpose of the Proposed Action is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Action is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage and disrupting ingress and egress to these areas. The Proposed Action would also provide for better access for emergency vehicles during and after flooding events.

Executive Orders 11988 and 11990 & 24 CFR Part 55

Pursuant to 24 CFR §55.20, an 8-step process for floodplain management must be completed for proposed actions taking place in a floodplain or wetland. 24 CFR §55.20 implements Executive Order (EO) 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands). EO 11988 requires federal agencies (or a state agency implementing a federal funding program) to reduce the loss of life and property caused by floods, minimize impacts of floods on human safety, health, and welfare, and preserve the natural and beneficial functions of floodplains. EO 11990 requires federal agencies (or a state agency implementing a federal funding program) to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

In addition, federal agencies are required to demonstrate that consideration of all practicable alternatives has resulted in the reduction or elimination of long- and short-term adverse impacts associated with occupancy and modifications of the floodplain or wetlands. This 8-step process includes assessing all practicable alternatives and incorporating public review.

Projects located within a Special Flood Hazard Area (SFHA) are subject to Executive Order 11988. Information relative to where SFHAs are located is available on Flood Insurance Rate Maps (FIRMs) published by FEMA. FEMA uses engineering studies to determine the delineation of these areas or zones subject to flooding. The relevant data source for the SFHA is the latest issued FEMA data or guidance, which includes advisory data, such as Advisory Base Flood Elevations (ABFEs) or preliminary and final FIRMs.

24 CFR Part 55.20 Eight-Step Process

Step ONE: Determine if the proposed action is in a 100-year floodplain or wetland.

All of the Five Towns project sites are located in Zone AE of the SFHA. Areas designated as an SFHA are those subject to inundation by the one percent annual chance flood (e.g., a 100-year flood), also known as the base flood. Since the majority of construction would occur within the developed footprint of the existing roadways, only minimal disturbance to the floodplain would occur. The project locations at Inwood, and Woodmere are not situated within federal or state wetland communities. However, the proposed project within the Village of Lawrence is situated within wetlands mapped by both the state and the federal government.

Step TWO: Notify the public at the earliest possible time of a proposal to consider an action in a wetland or floodplain (or in the 500-year floodplain for a Critical Action) and involve the affected and interested public in the decision-making process.

Since the Proposed Activities will be located in the floodplain, GOSR published an early notice that allowed the public an opportunity to provide input into the decision to provide funding for the Proposed Action activities in this area. The early public notice and 15-day comment period is complete. No comments were received.

A 15-day "Early Notice and Public Explanation of a Proposed Activity in a 100-Year Floodplain and Wetland" was published in The Nassau County Herald on November 7, 2019 (see EXHIBIT 2 for affidavit of publication). The 15-day comment period expired on November 22, 2019. The notice was also sent to the following state and federal agencies on November 20, 2019: Federal Emergency Management Agency (FEMA), U.S. Department of the Interior (DOI), U.S. Environmental Protection Agency (EPA), U.S. Department of Homeland Security (DHS), U.S Fish and Wildlife Service (FWS NYS Department Environmental Conservation; the NYS Office of Parks, Recreation and Historic Preservation; NYS Department of Transportation; NYS Office of Emergency Management. The notice was also sent to the office of the Nassau County and Town of Hempstead Executives.

GOSR received 0 public comments on this notice.

Step THREE: Identify and evaluate practicable alternatives to locating the proposed action in a wetland or floodplain (or the 500-year floodplain for a Critical Action).

After a consideration of the following alternatives, GOSR has determined the best practicable alternative is the Proposed Action. The alternative actions considered are as follows: No Action and Limited Action Alternative.

No Action Alternative

Under a No Action alternative, the condition of the frequently flooded road segments would remain unchanged; still subject to flooding during major storm events. Flooding from both rainfall and rising tides would continue to cause major inland damage. Residents, as well as emergency responders would be unable to use these access routes during emergencies. Thus, the No Action alternative is not feasible in relation to the desired objective of creating resiliency and improved conditions under future tidal and rain events.

Limited Action Alternative

There is no limited action alternative since the proposed action involves the installation of stormwater control devices needed within existing pipe and roadway segments within vulnerable residential and commercial areas.

Step FOUR: Identify the potential direct and indirect impacts associated with the occupancy or modification of the wetland or floodplain (or 500-year floodplain for a Critical Action).

The Town of Hempstead and Nassau County are proposing replacement of undersized infrastructure that has been in place for many years. The 100-year floodplain as well as tidal wetlands situated within the Village of Lawrence were previously disturbed by the construction of roads and installation of the original

piping system. The Proposed Action would result in short-term impacts to previously disturbed areas and no substantive short- or long-term change to the natural and beneficial values of wetlands and floodplains.

GOSR has evaluated the alternatives to the proposed Project activities in the floodplain and wetlands and has determined that the proposed activities must take place in the floodplain and wetlands. Given that the majority of Proposed Project components located within the floodplain will be located underground and are not susceptible to damage from flooding, there are no adverse direct or indirect impacts anticipated as a result of Proposed Project activities. Potential adverse impacts from construction would be temporary (less than one year) and mitigated through detailed construction staging and traffic plans developed in partnership with the appropriate municipalities to minimize disturbance throughout the construction period. Work proposed as part of the Project will not disturb or modify the floodplain and appropriate state and federal permits will be obtained prior to construction to protect the adjacent wetlands and stream channels. The Proposed Project would result in a beneficial outcome for the residents of the Five Towns Community by ensuring that local key road segments remain open and passable during future storm events.

Step FIVE: Where practicable, design or modify the proposed action to minimize the potential adverse impacts within the wetland or floodplain (including the 500-year floodplain for a Critical Action) and to restore and preserve its natural and beneficial values.

The new infrastructure would be installed within the same general location of existing roadways and undersized infrastructure, which will minimize impacts to the floodplain. In addition, the new infrastructure would be larger, allowing more water to be directed through natural drainage channels, away from local roadways and homes. Strict requirements for the disposal of debris generated during construction will be in place to prevent, to the extent possible, negative impacts to the floodplain. The handling and disposal of demolition and construction debris, control of stormwater runoff, and noise impacts resulting from construction activities would be in accordance with all local and state regulations.

The Proposed Project would also implement and maintain erosion and sedimentation control measures to prevent deposition of sediment and eroded soil into adjacent wetlands and surface water bodies. Best management practices (BMPs), such as silt fence and erosion prevention, would be implemented as required by permits or agency discretion. Thorough planning, engineering review, and design, through the federal and state wetland permitting process, would minimize soil erosion and damage to wetlands and the floodplain that could result from Project activities. Because the Proposed Project would not result in adverse impacts on the natural and beneficial values of wetlands and the floodplain, no additional methods to minimize those impacts are proposed

Step SIX: Reevaluate the proposed action to determine if it is still practicable given its floodplain and wetland effects.

GOSR has reevaluated the proposed action and determined that the action is still practicable in light of its potential exposure to flood hazards in the floodplain. There is no practicable alternative to the Proposed Action since the Proposed Project involves the replacement of undersized drainage structures that have existed in place for years within the floodplain. The Proposed Action would not aggravate current hazards to the floodplain, nor will the Proposed Action permanently disrupt floodplain or wetland values. The addition of a larger infrastructure would cause only a slight increase in impervious surface, which will only minimally affect the floodplain and tidal wetlands.

Step SEVEN: If the reevaluation results in a determination that there is no practicable alternative to locating the proposal in the wetland or floodplain (or the 500-year floodplain for a Critical Action), publish a final notice.

It is GOSR's determination that the preferred alternative is implementing the Five Towns Stormwater Drainage Improvements Project. Beneficial results would include the resiliency of residential and

commercial properties as well as important transportation routes which currently experience extensive flooding during storm events. The Proposed Action would ensure that vehicular traffic can safely move through the area and minimize adverse community impacts from storm events.

A final notice, formally known as "Final Notice and Public Review of a Proposed Activity in a 100-Year Floodplain and Wetland", was published in accordance with 24 CFR 55. This public notice was combined with the Notice of Intent to Request Release of Funds (NOIRROF)" on December 5, 2019. The final notice requires a 7-day comment period after publication. The 7-day comment period started with the Final Notice publishing in the Nassau County Herald newspaper on December 5, 2019 and the 7-day comment period expires on December 13, 2019. The combined notice describes the reasons why the project must be located in the floodplain, alternatives considered, and all mitigation measures to be taken to minimize adverse impacts and preserve natural and beneficial floodplain values.

The notice was also sent to the following state and federal agencies on December 5, 2019: U.S. Department of the Interior (DOI); U.S. Environmental Protection Agency (EPA); U.S. Department of Homeland Security (DHS); U.S Fish and Wildlife Service (FWS); National Park Service (NPS); NYS Department Environmental Conservation; the NYS Office of Parks, Recreation and Historic Preservation; NYS Department of Transportation; and NYS Office of Emergency Management. The notice was also sent to Nassau County and Town of Hempstead Officials (see EXHIBIT 4 for the notice).

GOSR received 0 public comments on this notice.

Step EIGHT: The proposed action can be implemented after steps 1 through 7 have been completed.
Step eight is implementation of the Proposed Action. GOSR will ensure that all mitigation measures prescribed in the steps above will be adhered to. Also, prior to Proposed Action implementation, GOSR will conduct a National Environmental Policy Act (NEPA) review in accordance with 24 CFR Part 58 and a New York State Environmental Quality Review Act (SEQR) review in accordance with 6 NYCRR Part 617. Implementation of the Proposed Action requires additional permitting; therefore, any additional design modifications or mitigation requirements placed on the project will be followed.

EXHIBITS
EXHIBIT 1: FIRM and Wetland Site Location Maps
EXHIBIT 2: Copy of Notice Transmitting Notice of Early Public Review and Proof of Publication
EXHIBIT 3: Public Comments Received and Response, if applicable
EXHIBIT 4: Copy of Transmittal of Notice of Final Public Review and Proof of Publication

EXHIBIT 1a:
Nassau County, Lawrence Pipes FEMA Flood Hazard Map

Project Location (Zone AE and Zone X)

FEMA

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE Base Flood Elevations determined.
ZONE VE Coastal flood zone with velocity hazard (wave action); Base Food Elevations determined.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

Source: FEMA Flood Insurance Rate Map, Map Numbers: 36059C0301G and 36059C0302G (September 11, 2009)

Figure 3
Flood Hazard
Five Towns - Nassau County, Lawrence Pipes Project
Lawrence, New York

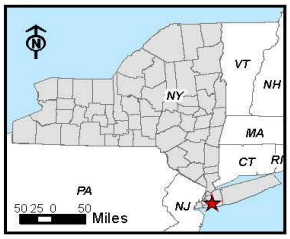

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EXHIBIT 1b:
Nassau County, Lawrence Pipes Wetland Map

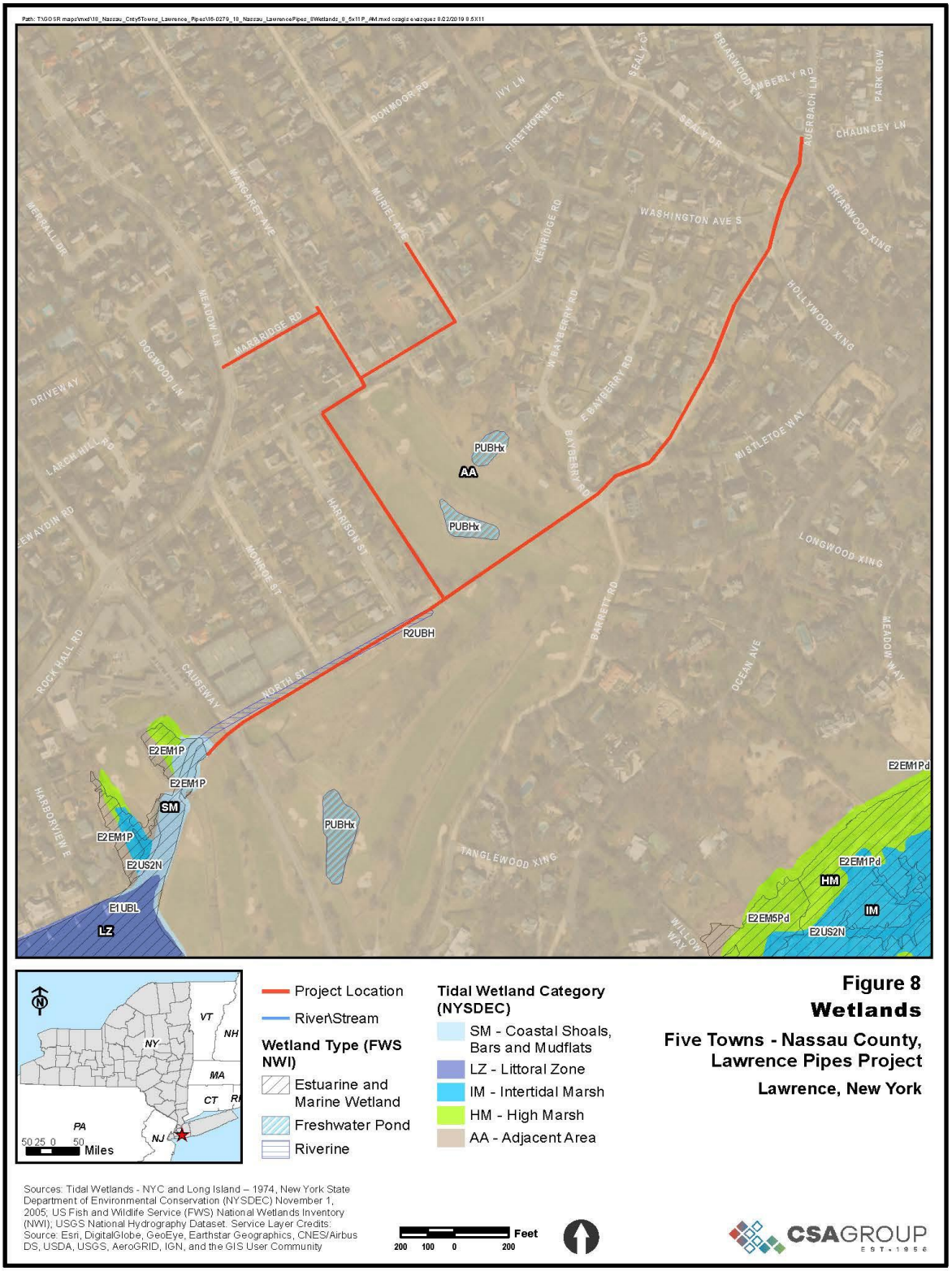
Path: T:\GIS\R maps\mxd\18_Nassau_Cnty5Towns_Lawrence_Pipes\16-0279_18_Nassau_LawrencePipes_8Wetlands_8_5x11P_AM.mxd ozagis ewazquez 8/22/2019 8.5X11
IVY LN
DORMOOR RD
FIREHORNE DR
SEALY CT
BRIARWOOD LN
AMBERLY RD
AUERBACH LN
PARK ROW
CHAUNCEY LN
SEALY DR
MARGARET AVE
MURIEL AVE
KENRIDGE RD
WASHINGTON AVE S
BRIARWOOD XING
MERRALL DR
MEADOW LN
MARBRIDGE RD
W BAYBERRY RD
HOLLYWOOD XING
DRIVEWAY
DOGWOOD LN
E BAYBERRY RD
LARCH HILL RD
BAYBERRY RD
MISTLETOE WAY
PUBHx
AA
PUBHx
HARRISON ST
MONROE ST
LONGWOOD XING
BARRETT RD
R2UBH
ROCK HALL RD
CAUSEWAY
NORTH ST
OCEAN AVE
MEADOW WAY
E2EM1P
E2EM1P
SM
E2EM1P
E2US2N
HARBORVIEW E
PUBHx
TANGLEWOOD XING
E2EM1Pd
E2EM1Pd
HM
IM
E2EM5Pd
E2US2N
E1UBL
LZ
WILLOW WAY
VT
NH
NY
MA
CT
RI
PA
NJ
50 25 0 50
Miles
Project Location
River\Stream
Wetland Type (FWS NWI)
Estuarine and Marine Wetland
Freshwater Pond
Riverine
Tidal Wetland Category (NYSDEC)
SM - Coastal Shoals, Bars and Mudflats
LZ - Littoral Zone
IM - Intertidal Marsh
HM - High Marsh
AA - Adjacent Area
Figure 8
Wetlands
Five Towns - Nassau County, Lawrence Pipes Project
Lawrence, New York
Sources: Tidal Wetlands - NYC and Long Island – 1974, New York State Department of Environmental Conservation (NYSDEC) November 1, 2005; US Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI); USGS National Hydrography Dataset. Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Feet
200 100 0 200
CSAGROUP
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EXHIBIT 1c:

Town of Hempstead FEMA Flood Hazard Map (Woodmere)

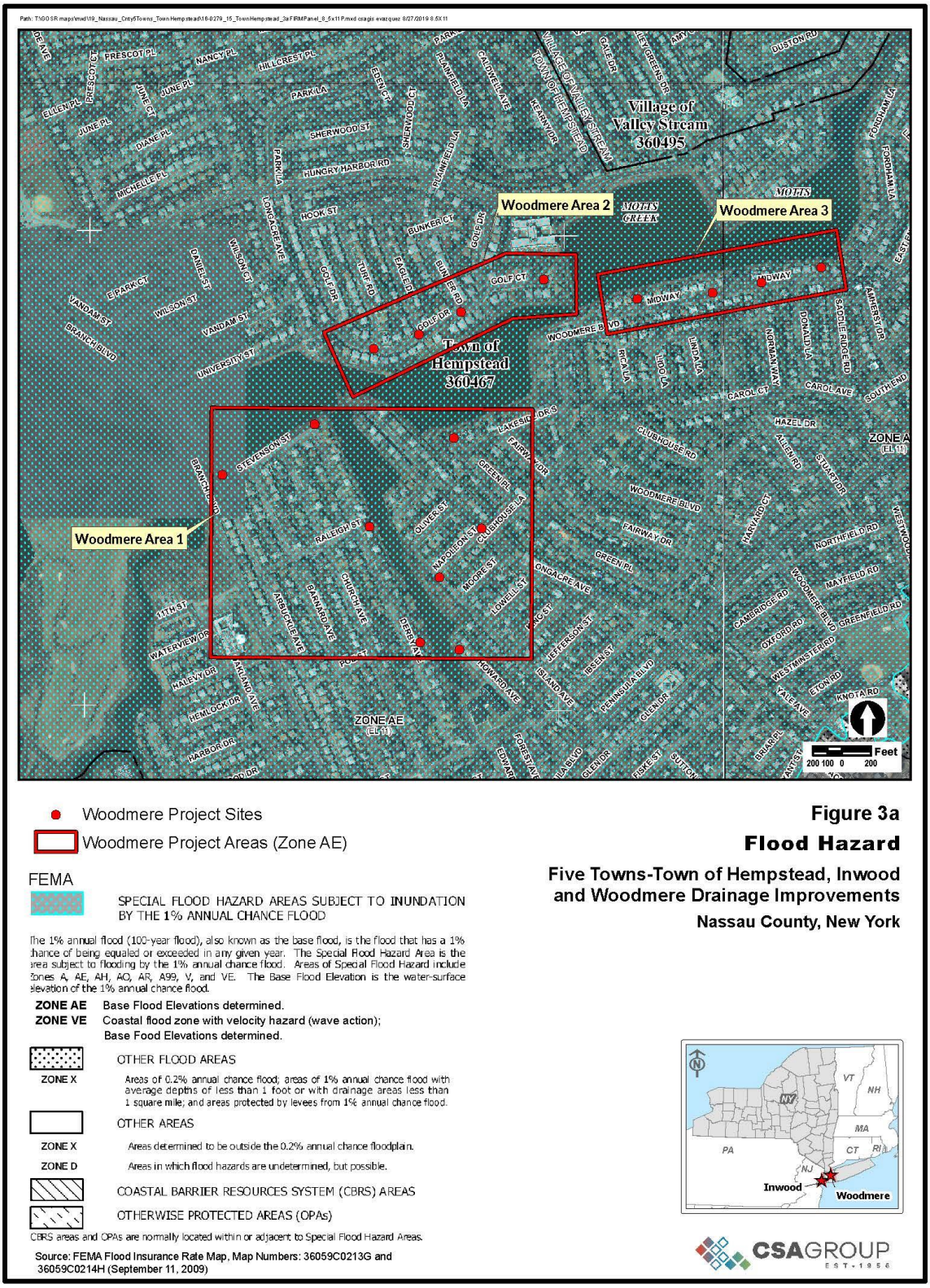
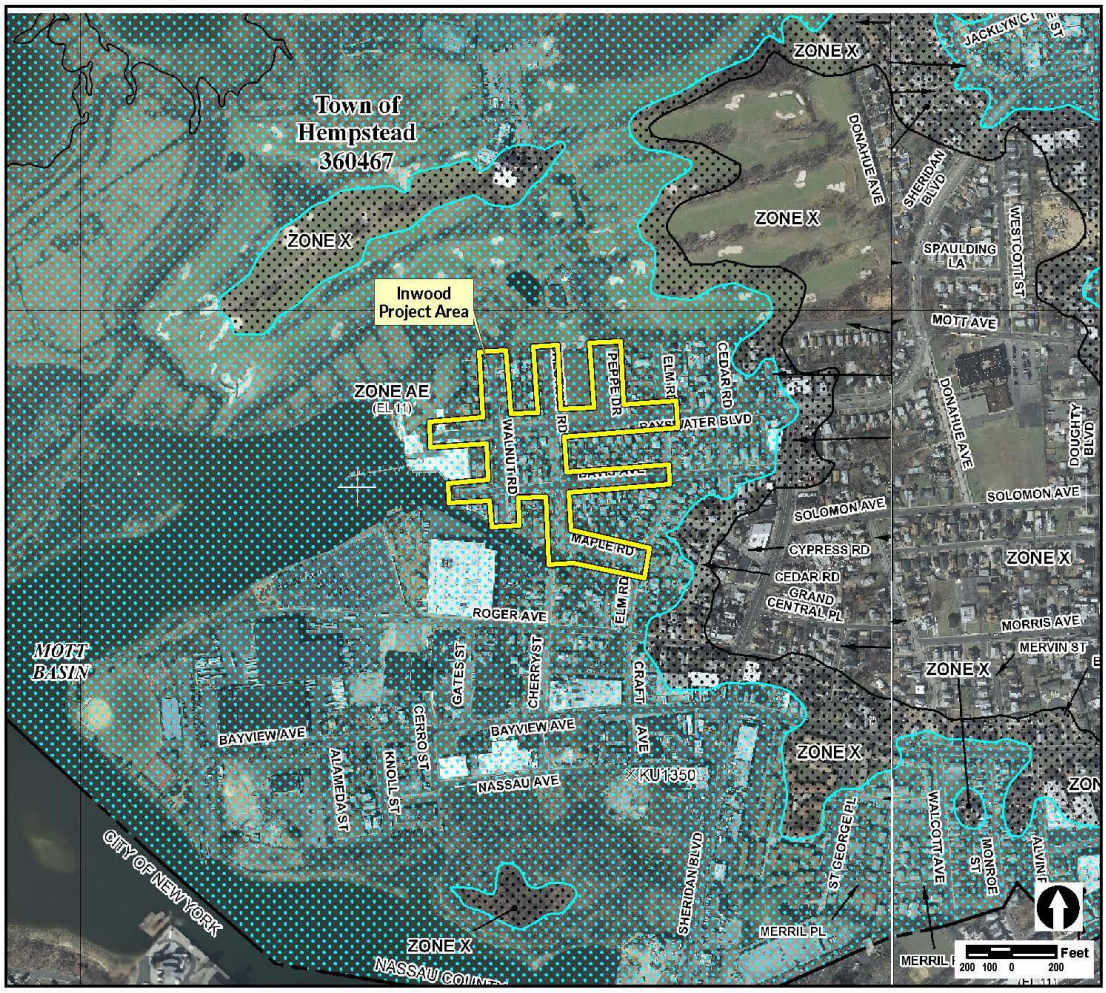


EXHIBIT 1d:
Town of Hempstead FEMA Flood Hazard Map (Inwood)



Inwood Project Area (Zone AE)

FEMA

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

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ZONE AE Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Food Elevations determined.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

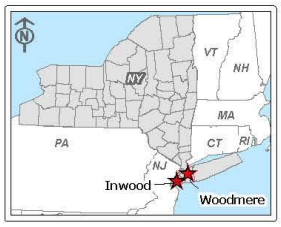
Source: FEMA Flood Insurance Rate Map. Map Numbers: 36059C0282G and 36059C0301G (September 11, 2009)

Figure 3b

Flood Hazard

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York



CSAGROUP EST. 1956

EXHIBIT 1e:

Town of Hempstead Wetland Map

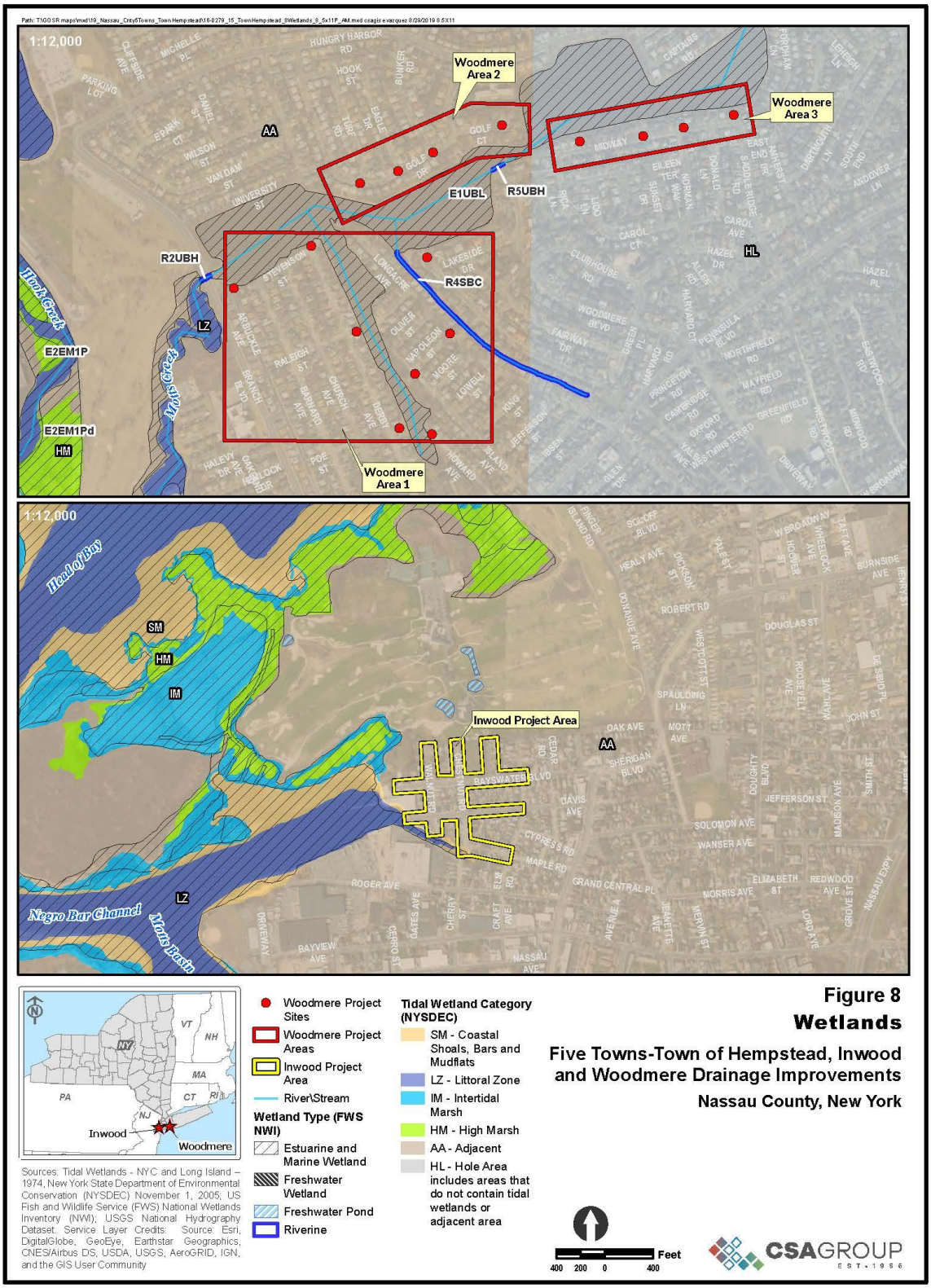


EXHIBIT 2
Copy of Notice Transmitting Notice of Early Public Review

and Proof of Publication

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

EARLY NOTICE OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLANDS
FIVE TOWNS DRAINAGE IMPROVMENT PROJECTS
INWOOD, WOODMERE, LAWRENCE, CEDARHURST
TOWN OF HEMPSTEAD, NASSAU COUNTY, NEW YORK
November 7, 2019

To: All interested Agencies, Groups, and Individuals

This is to give notice that the Governor's Office of Storm Recovery (GOSR), an office of the New York State Housing Trust Fund Corporation (HTFC), has received applications from the Town of Hempstead and Nassau County to use Community Development Block Grant – Disaster Recovery (CDBG-DR) funding from the NY Rising Community Reconstruction Program to implement stormwater drainage improvements at four locations within the Five Towns Communities of Inwood, Woodmere, Lawrence and Cedarhurst (hereinafter, the "Proposed Action") and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express their concerns and share information about the Proposed Action, including alternative locations outside of the 100-year floodplain and wetlands. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands facilitates and enhances governmental efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains or wetlands, it must inform those who may be put at greater or continued risk. Funding for the Proposed Action will be provided to the implementing parties, the Town of Hempstead and Nassau County, by the HUD CDBG-DR program for storm recovery activities in New York State.

The storm surge created by Hurricane Sandy caused significant stormwater back-ups and flooding within the Five Towns Communities. The purpose of the Proposed Action is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Action is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage and disrupting ingress and egress to these areas. The Proposed Action would also provide for better access for emergency vehicles during and after flooding events.

The Town of Hempstead proposes to implement projects to improve drainage in the hamlets of Inwood and Woodmere. The hamlet of Inwood project is located within a FEMA designated regulatory floodplain and would involve the installation of stormwater detention systems under the Inwood Marina parking lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the adjacent local streets to a new, higher target flow line elevation. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Inwood location.

The proposed project within the hamlet of Woodmere is located within a FEMA designated regulatory floodplain and would involve the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Woodmere location.

Nassau County's proposed project within the Village of Lawrence involves roadway and drainage improvements to increase capacity of the existing stormwater management system by installing larger pipes, box culverts, vortex separators and backflow prevention devices. In addition, two new 60" outfall pipes with backflow prevention devices will be installed between Bannister Pond and Bannister Bay. The Proposed Activity would result in temporary impacts to less than 1.0 acres of previously disturbed 100-Year Floodplain. There will be 0.026 acres of permanent impacts to the Barrister Pond area in the FEMA floodplain, from the placement of rip rap to stabilize the shoreline. All temporary impacts will be restored in kind.

Approximately 0.30 acres of temporary impacts to USFWS National Wetland Inventory (NWI) mapped wetlands would occur from the disturbance for installation of the 5' x 10' culvert box south of North Street and removal of sediment from Bannister Pond. Temporary impacts to approximately 0.05 acres of New York State Department of Environmental Conservation (NYSDEC) waterway and NYSDEC regulated streambank would also result from the Proposed Action. Approximately 0.026 acres of permanent impacts to USFWS NWI and NYSDEC mapped wetlands and waterway would occur from the removal of sediment and the placement of riprap in Barrister Pond. It should be noted that although the NWI map indicates the presence of a riparian feature extending along North Street, field studies have indicated that this linear feature is a paved golf cart path; no impacts to federal wetlands will occur at this location along North Sreet.

The proposed project within the Village of Cedarhurst involves construction of a stormwater pump station and associated infrastructure adjacent to Peninsula Boulevard to alleviate flooding in this flood-prone area. The Proposed Action would result in less than one acre of temporary and permanent impacts to previously disturbed 100-Year Floodplain. No federal or state wetlands would be impacted by the proposed Cedarhurst project.

Floodplain maps based on the FEMA Flood Insurance Rate Maps and wetlands maps based on the NWI and DEC data have been prepared and are available for review with additional information at http://www.stormrecovery.ny.gov/environmental-docs.

Any individual, group, or agency may submit written comments on the Proposed Activity or request further information by contacting Lori A. Shirley, Certifying Environmental Officer, Governor's Office of Storm Recovery, 500 Bi-County Boulevard, Farmingdale, NY 11735; email: NYSCDBG_DR_ER@nyshcr.org. Standard office hours are 9:00 AM to 5:00 PM Monday through Friday. For more information call 518-474-0755. All comments received by November 22, 2019 will be considered.

Sincerely,

Lori A. Shirley

Lori A. Shirley
Certifying Environmental Officer

FIVE TOWNS - EARLY NOTICE DISTRIBUTION LIST

FEDERAL AGENCIES

By Overnight Express:
Mrs. Tennille Smith Parker, Director
U.S. Dep. of Housing and Urban Development
Disaster Recovery and Special Issues Division
451 7th Street SW, Room 7272
Washington, DC 20410

By email only:
Ms. Rhoda M. Nicholson
U.S. Dep. Of Housing and Urban Development
disaster_recovery@hud.gov

Mr. Mike Poetzsch
U.S. Environmental Protection Agency
poetzsch.michael@epa.gov

Thomas Von Essen, Regional Administrator
U.S. Dep. of Homeland Security
Federal Emergency Management Agency, R II
26 Federal Plaza
New York, NY 10278-0002

Ms. Therese J. Fretwell, Enviro. Officer, R 1 & 2
U.S. Dep. of Housing and Urban Development
26 Federal Plaza, Room 3541
New York, NY 10278-0068

Mr. Steven T. Papa
U.S. Fish and Wildlife Service
Long Island Field Office
340 Smith Rd
Shirley, NY 11967

STATE/LOCAL AGENCIES

Ms. Susan Ackerman, Regional Permit Administrator, Region 1
New York State Department of Environmental Conservation
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409

Mr. Ron Rausch, Director
Environmental Management Bureau
Office of Parks, Recreation and Historic Preservation
625 Broadway, 2nd Floor
Albany, New York 12238

Marlene White
Supervisor, Mitigation Projects
NYS Division of Homeland Security & Emergency Services
1220 Washington Avenue
Bldg 7A, Floor 4
Albany, NY 12242

Laura Curran, County Executive
Nassau County
1550 Franklin Avenue,
Mineola, NY 11501

Sean Sallie, Deputy Commissioner
Department of Public Works
Nassau County
1194 Prospect Avenue
Westbury NY 11590

Douglas L. Tuman, P.E., Commissioner
Town of Hempstead
350 Front Street
Hempstead, NY 11550

Jeffrey Tierney, Deputy Commissioner
Town of Hempstead Department of Engineering
350 Front Street
Hempstead, NY 11550

David Vines
Town of Hempstead Department of Engineering
350 Front Street
Hempstead, NY 11550

RICHNER COMMUNICATIONS INC

www.liherald.com

Affidavit of Publication

State Of New York,
Nassau County

Nadia Powell being duly sworn, deposes and says that he/she is the principal clerk of Richner Communications, Inc., publishers of the

Nassau Herald

A weekly newspaper published and mailed at

Lawrence

New York and the attached notice of

FIVE TOWNS DRAINAGE IMPROVEMENT PROJECTS

was published in the issue(s) of that paper as follows:

11/7/19

Nadia Powell

Subscribed and sworn to before me this 7 November 2019

Notary Public

STUART RICHNER
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 02RI6155489
Qualified in NASSAU County
Commission Expires 11/13/22

LEGAL NOTICE
EARLY NOTICE OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLANDS
FIVE TOWNS DRAINAGE IMPROVMENT PROJECTS
INWOOD, WOODMERE, LAWRENCE, CEDARHURST
TOWN OF HEMPSTEAD, NASSAU COUNTY, NEW YORK

This is to give notice that the Governor's Office of Storm Recovery (GOSR), an office of the New York State Housing Trust Fund Corporation (HTFC), has received applications from the Town of Hempstead and Nassau County to use Community Development Block Grant - Disaster Recovery (CDBG-DR) funding from the NY Rising Community Reconstruction Program to implement stormwater drainage improvements at four locations within the Five Towns Communities of Inwood, Woodmere, Lawrence and Cedarhurst (hereinafter, the "Proposed Action") and is conducting an evaluation as required by Executive Order 11988 and Executive Order 11990 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations (24 CFR Part 55). There are three primary purposes for this notice. First, to provide the public an opportunity to express their concerns and share information about the Proposed Action, including alternative locations outside of the 100-year floodplain and wetlands. Second, adequate public notice is an important public education tool. The dissemination of information about floodplains and wetlands facilitates and enhances governmental efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the government determines it will participate in actions taking place in floodplains or wetlands, it must inform those who may be put at greater or continued risk. Funding for the Proposed Action will be provided to the implementing parties, the Town of Hempstead and Nassau County, by the HUD CDBG-DR program for storm recovery activities in New York State.

BALDWIN HERALD • BELLMORE HERALD LIFE • EAST MEADOW HERALD • FRANKLIN SQUARE/ELMONT HERALD • FREEPORT HERALD LEADER • GLEN COVE HERALD GAZETTE
LONG BEACH HERALD • LYNBROOK/EAST ROCKAWAY HERALD • MALVERNE/WEST HEMPSTEAD HERALD • MERRICK HERALD LIFE • NASSAU HERALD
OCEANSIDE/ISLAND PARK HERALD • OYSTER BAY GUARDIAN • ROCKAWAY JOURNAL • SEA CLIFF/GLEN HEAD HERALD GAZETTE • ROCKVILLE CENTRE HERALD
SEAFORD HERALD CITIZEN • SOUTH SHORE RECORD • VALLEY STREAM HERALD • WANTAGH HERALD CITIZEN
2 Endo Boulevard • Garden City, NY 11530 • Voice: 516-569-4000 • Fax: 516-569-4631

The storm surge created by Hurricane Sandy caused significant stormwater back-ups and flooding within the Five Towns Communities. The purpose of the Proposed Action is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Action is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage and disrupting ingress and egress to these areas. The Proposed Action would also provide for better access for emergency vehicles during and after flooding events.

The Town of Hempstead proposes to implement projects to improve drainage in the hamlets of Inwood and Woodmere. The hamlet of Inwood project is located within a FEMA designated regulatory floodplain and would involve the installation of stormwater detention systems under the Inwood Marina parking lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the adjacent local streets to a new, higher target flow line elevation. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Inwood location.

The proposed project within the hamlet of Woodmere is located within a FEMA designated regulatory floodplain and would involve the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Woodmere location.

Nassau County's proposed project within the Village of Lawrence involves roadway and drainage improvements to increase capacity of the existing stormwater management system by installing larger pipes, box culverts, vortex separators and backflow prevention devices. In addition, two new 60" outfall pipes with backflow prevention devices will be installed between Bannister Pond and Bannister Bay. The Proposed Activity would result in temporary impacts to less than 1.0 acres of previously disturbed 100-Year Floodplain. There will be 0.026 acres of permanent impacts to the Barrister Pond area in the FEMA floodplain, from the placement of rip rap to stabilize the shoreline. All temporary impacts will be restored in kind.

Approximately 0.30 acres of temporary impacts to USFWS National Wetland Inventory (NWI) mapped wetlands would occur from the disturbance for installation of the 5' x 10' culvert box south of North Street and removal of sediment from Bannister Pond. Temporary impacts to approximately 0.05 acres of New York State Department of Environmental Conservation (NYSDEC) waterway and NYSDEC regulated streambank would also result from the Proposed Action. Approximately 0.026 acres of permanent impacts to USFWS NWI and NYSDEC mapped wetlands and waterway would occur from the removal of sediment and the placement of riprap in Barrister Pond. It should be noted that although the NWI map indicates the presence of a riparian feature extending along North Street, field studies have indicated that this linear feature is a paved golf cart path; no impacts to federal wetlands will occur at this location along North Street.

The proposed project within the Village of Cedarhurst involves construction of a stormwater pump station and associated infrastructure adjacent to Peninsula Boulevard to alleviate flooding in this flood-prone area. The Proposed Action would result in less than one acre of temporary and permanent impacts to previously disturbed 100-Year Floodplain. No federal or state wetlands would be impacted by the proposed Cedarhurst project.

Floodplain maps based on the FEMA Flood Insurance Rate Maps and wetlands maps based on the NWI and DEC data have been prepared and are available for review with additional information at http://www.stormrecovery.ny.gov/environmental-docs.

Any individual, group, or agency may submit written comments on the Proposed Activity or request further information by contacting Lori A. Shirley, Certifying Environmental Officer, Governor's Office of Storm Recovery, 500 Bi-County Boulevard, Farmingdale, NY 11735; email: NYSCDBG_DR_ER@nyshcr.org. Standard office hours are 9:00 AM to 5:00 PM Monday through Friday. For more information call 518-474-0755. All comments received by November 22, 2019 will be considered. Sincerely, Lori A. Shirley, Certifying Environmental Officer

116907

Affidavit of Mailing

STATE OF NEW YORK)

:SS.:

CITY OF NEW YORK)

I, CYNTHIA WALLACE, being duly sworn, deposes and says:

1. I am over the age of 18 years
2. On November 5, 2019, I mailed true and correct copies of the early notice of proposed activity in a floodplain and wetland dated November 7, 2019 by placing in first class, post-paid envelopes addressed: SEE ATTACHED LIST.
3. On said day, I deposited said 11 envelopes in a mailbox at United State Post Office, West Village, 527 Hudson St. FRNT A, New York, NY 10014-9992 at 04:23pm
4. 1 via UPS overnight at 5:46pm

Sworn to before me this
5th Day of Nov, 2019

ELISA MEDINA
NOTARY PUBLIC State of New York
Notary Public No 01ME6117717
Qualified in Queens County
Commission Expires November 1 2020

EXHIBIT 3
Public Comments Received and Response

(no comments received)

EXHIBIT 4
Copy of Transmittal Notice of Final Public Review
and Proof of Publication

[Will be published December 5, 2019]

COMBINED NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS AND FINAL NOTICE AND PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A FLOODPLAIN AND WETLAND

FIVE TOWNS DRAINAGE IMPROVEMENTS: INWOOD, WOODMERE, LAWRENCE TOWN OF HEMPSTEAD, NASSAU COUNTY, NEW YORK

Name of Responsible Entity and Recipient: New York State Homes and Community Renewal (HCR), 25 Beaver Street, New York, New York 10004, in cooperation with the New York State Housing Trust Fund Corporation (HTFC), of the same address. Contact: Lori A. Shirley, Certifying Environmental Officer, Governor's Office of Storm Recovery, 38-40 State Street, Albany NY 12866; (518) 474-0755. The Governor's Office of Storm Recovery (GOSR), an office of HCR's HTFC, is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program in New York State.

Pursuant to 24 CFR part 58 and 24 CFR part 55, this combined Notice of Intent to Request Release of Funds (NOIRROF) and Final Notice and Public Explanation of a Proposed Activity in a Floodplain and Wetland satisfies two separate procedural requirements for project activities proposed to be undertaken by HCR

Project Description: The Governor's Office of Storm Recovery (GOSR), an office of HCR's HTFC, is responsible for the direct administration of the United States Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program in New York State. GOSR proposes to provide $6,723,000.00 in funding to the Town of Hempstead for the Inwood and Woodmere Projects and 8,776,000.00 in funding to Nassau County for the Lawrence Pipes Project.

Nassau County's proposed project within the Village of Lawrence involves roadway and drainage improvements to increase capacity of the existing stormwater management system by installing larger pipes, box culverts, vortex separators and backflow prevention devices. In addition, two new 60" outfall pipes with backflow prevention devices will be installed between Bannister Pond and Bannister Bay. The Proposed Activity would result in temporary impacts to less than 1.0 acres of previously disturbed 100-Year Floodplain. There will be 0.026 acres of permanent impacts to the Barrister Pond area in the FEMA floodplain, from the placement of rip rap to stabilize the shoreline. All temporary impacts will be restored in kind.

Approximately 0.30 acres of temporary impacts to USFWS National Wetland Inventory (NWI) mapped

wetlands would occur from the disturbance for installation of the 5' x 10' culvert box south of North Street and removal of sediment from Bannister Pond. Temporary impacts to approximately 0.05 acres of New York State Department of Environmental Conservation (NYSDEC) waterway and NYSDEC regulated streambank would also result from the Proposed Action. Approximately 0.026 acres of permanent impacts to USFWS NWI and NYSDEC mapped wetlands and waterway would occur from the removal of sediment and the placement of riprap in Barrister Pond. It should be noted that although the NWI map indicates the presence of a riparian feature extending along North Street, field studies have indicated that this linear feature is a paved golf cart path; no impacts to federal wetlands will occur at this location along North Street.

The Town of Hempstead proposes to implement projects to improve drainage in the hamlets of Inwood and Woodmere. The hamlet of Inwood project is located within a FEMA designated regulatory floodplain and would involve the installation of stormwater detention systems under the Inwood Marina parking lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the adjacent local streets to a new, higher target flow line elevation. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Inwood location.

The proposed project within the hamlet of Woodmere is located within a FEMA designated regulatory floodplain and would involve the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction. The Proposed Activity would result in temporary impacts to less than one acre of previously disturbed 100-Year Floodplain; no permanent impacts to the regulatory floodplain would occur from the proposed project. No federal or state wetlands would be impacted by the Proposed Activity at the Woodmere location.

PUBLIC EXPLANATION OF A PROPOSED ACTIVITY IN A 100-YEAR FLOODPLAIN AND WETLAND

GOSR has evaluated the alternatives to the proposed Project activities in the floodplain and wetlands and has determined that the proposed activities must take place in the floodplain and wetlands. Given that the majority of Proposed Project components located within the floodplain will be located underground and are not susceptible to damage from flooding, there are no adverse direct or indirect impacts anticipated as a result of Proposed Project activities. Potential adverse impacts from construction would be temporary (less than one year) and mitigated through detailed construction staging and traffic plans developed in partnership with the appropriate municipalities to minimize disturbance throughout the construction period. Work proposed as part of the Project will not disturb or modify the floodplain and appropriate state and federal permits will be obtained prior to construction to protect the adjacent wetlands and stream channels

The Governor's Office of Storm Recovery (GOSR) is conducting an evaluation as required by Executive Orders 11988 and 11990 in accordance with U.S. Department of Housing and Urban Renewal (HUD) regulations under 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain and Wetland Management, to determine the potential effects that its activity in a floodplain and wetlands would have on the human and natural environment. A draft Floodplain Management Plan (8-step process) documenting compliance with Executive Orders 11988 and 11990 as well as floodplain and wetland maps have been prepared for this project and are available for review at http://www.stormrecovery.ny.gov/environmental-docs.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains/ wetlands and those who have an interest in the protection of the natural environment have an opportunity to express their concerns and provide information about these areas. Second, adequate public notice is an important public education tool. The dissemination of information and request for public comment about floodplains/ wetlands can facilitate and enhance federal efforts to reduce the risks associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplain / wetlands, it must inform those who may be put at greater or continued risk.

Public Review: Public viewing of the environmental review record is available in person Monday – Friday, 9:00 AM – 5:00 PM at the following address: Governor's Office of Storm Recovery, 25 Beaver Street, 5th Floor, New York, NY 10004, contact Matt Accardi at (212) 480-6265.

Further information may be requested by writing to the above address, emailing NYSCDBG_DR_ER@nyshcr.org or by calling Lori Shirley at (518) 474-0755. This combined notice is being sent to individuals and groups known to be interested in these activities, local news media, appropriate local, state and federal agencies, the regional office of the U.S. Environmental Protection Agency having jurisdiction, and to the HUD Field Office, and is being published in a newspaper of general circulation in the affected community.

Public Comments on the Final Notice and Public Review of a Proposed Activity in a 100-year Floodplain and Wetland and/or the NOI RROF: Any individual, group or agency may submit written comments on the Proposed Project. The public is hereby advised to specify in their comments which "notice" their comments address. Comments should be submitted via email, in the proper format, on or before December 13, 2019 at NYSCDBG_DR_ER@nyshcr.org. Written comments may also be submitted at the following address, or by mail, in the proper format, to be received on or before December 13, 2019: Governor's Office of Storm Recovery, 38-40 State Street, Albany, NY 12207. All comments must be received on or before 5pm on December 13, 2019 or they will not be considered. If modifications result from public comment, these will be made prior to proceeding with the expenditure of funds.

REQUEST FOR RELEASE OF FUNDS AND CERTIFICATION

On or about December 16, 2019, the HCR certifying officer will submit a request and certification to HUD for the release of CDBG-DR funds as authorized by related laws and policies for the purpose of implementing this part of the New York CDBG-DR program.

HCR certifies to HUD that Lori A. Shirley, in her capacity as Certifying Officer, consents to accept the jurisdiction of the U.S. federal courts if an action is brought to enforce responsibilities in relation to the environmental review process and that these responsibilities have been satisfied. HUD's approval of the certification satisfies its responsibilities under NEPA and related laws and authorities and allows GOSR to use CDBG-DR program funds.

Objection to Release of Funds: HUD will accept objections to its release of funds and GOSR's certification for a period of fifteen days following the anticipated submission date or its actual receipt of the request (whichever is later). Potential objectors may contact HUD or the GOSR Certifying Officer to verify the actual last day of the objection period. The only permissible grounds for objections claiming a responsible

entity's non-compliance with 24 CFR Part 58 are: (a) Certification was not executed by HCR's Certifying Officer; (b) the responsible entity has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR Part 58; (c) the responsible entity or has committed funds or incurred costs not authorized by 24 CFR Part 58 before release of funds and approval of environmental certification; or (d) another Federal agency acting pursuant to 40 CFR Part 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality.

Objections must be prepared and submitted in accordance with the required procedures (24 CFR Part 58) and shall be addressed to Tennille Smith Parker, Director, Disaster Recovery and Special Issues Division, Office of Block Grant Assistance, U.S. Department of Housing & Urban Development, 451 7th Street SW, Washington, DC 20410, Phone: (202) 402-4649.

Sincerely,
Lori A. Shirley
Certifying Officer

Appendix F: State Historic Preservation Office Correspondence

NEW YORK STATE OF OPPORTUNITY. | Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

September 23, 2019

Ms. Cristy Boyd
Principal Scientist
CSA Group
55 Broadway
14th fl
new york, NY 10006

Re: GOSR
Five Towns – Town of Hempstead Inwood and Woodmere Drainage Project
Town of Hempstead and Village of Valley Stream, Nassau County, NY
19PR06697

Dear Ms. Boyd:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy State Historic Preservation Officer
Division for Historic Preservation

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 23, 2019

Historic Preservation Technical Specialist
New York State Office of Parks, Recreation and Historic Preservation
Division of Historic Preservation
Peebles Island
P.O. Box 189
Waterford, New York 12188-0189

Re: Section 106 Compliance for Five Towns – Town of Hempstead
Inwood and Woodmere Drainage Project

Dear Sir or Madam:

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), the Governor's Office of Storm Recovery (GOSR), an office of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD"), is serving as the entity responsible for compliance with the HUD environmental review procedures set forth in 24 CFR Part 58. GOSR is acting on behalf of HUD in providing the enclosed project information and request for consultation. GOSR processes environmental reviews for projects funded with HUD CDBG-DR on a case-by-case basis.

Area of Potential Effect: The project sites are located within the Hamlets of Inwood and Woodmere in Nassau County. The project areas contain primarily previously disturbed road segments as well as an approximately 10-foot buffer surrounding each segment.

Proposed Project Description: The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD '88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway.

Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

The storm surge created by Hurricane Sandy caused significant stormwater back-up in the Five Towns Community, including Inwood and Woodmere. The south shore of New York City and western Long Island experienced record-high water elevations, as these areas were to the immediate right of the storm's center of circulation as it made landfall. Widespread record coastal flooding occurred in Lower New York Bay, Jamaica Bay, and the western bays along southern Nassau County. The peak water levels recorded at all stations in these areas also exceeded FEMA's 100-year base flood elevations. In all cases, the peaks from Sandy surpassed anything documented previously in Inwood and Woodmere, including the Oct. 31, 1991 and Dec. 11, 1992 storms and Hurricane Irene. The purpose of the project is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. The Proposed Project is needed to reduce risk of chronic flooding associated with extreme high tides and storm events in both residential and commercial areas, thus improving resiliency for these areas in the face of sea level rise and increasing frequency and intensity of extreme weather events. In addition, flooding periodically extends to surrounding residential properties, causing damage disrupting ingress and egress areas. The Proposed Project would also provide for better access for emergency vehicles during and after flooding events.

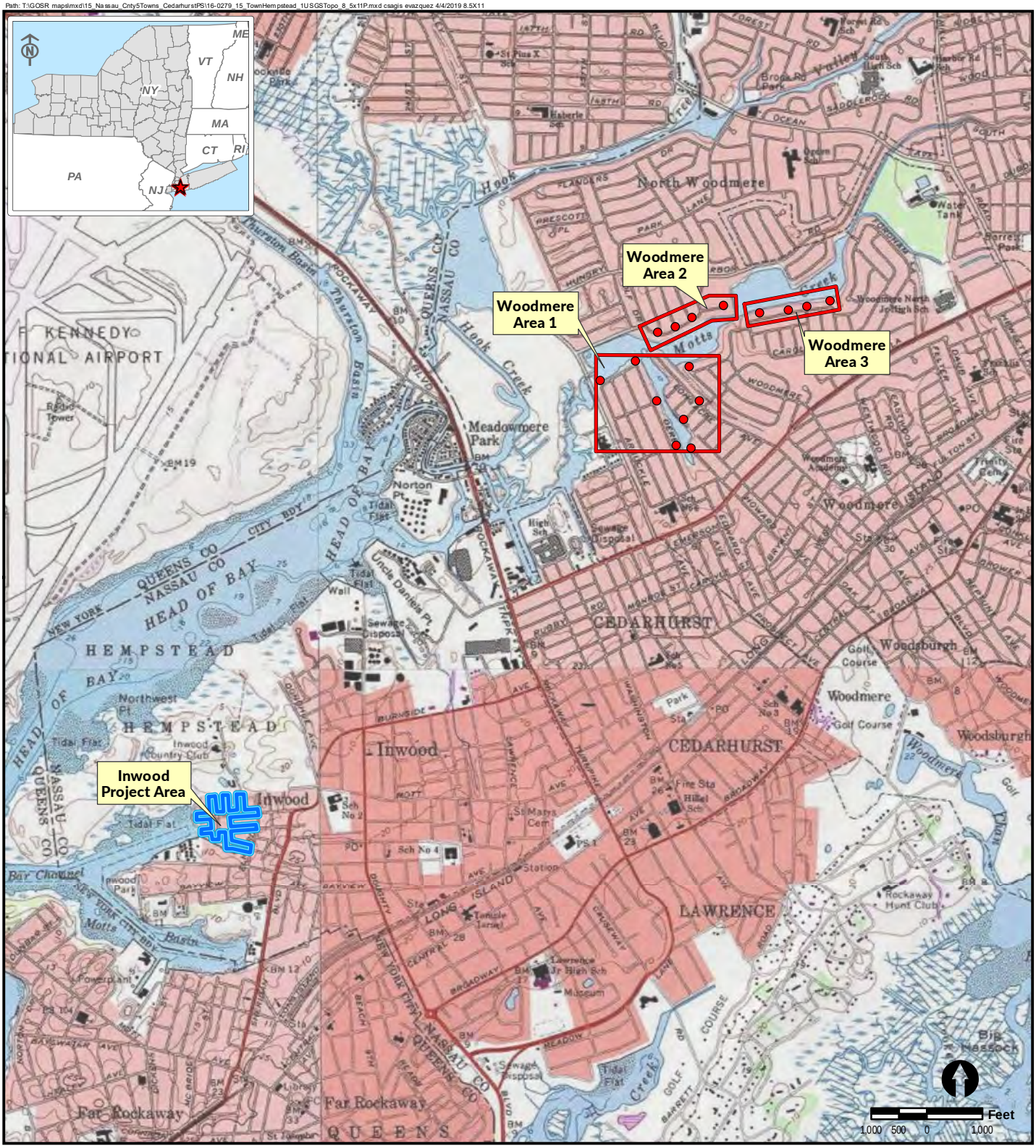
Request for Comment: The purpose of this letter is to initiate consultation pursuant to Section 106 of the NHPA per the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. GOSR respectfully requests your review of the proposed project described herein within the allotted 15-day time frame. If you have any questions, please feel free to contact me via telephone number (631) 465-9677 or email: James.McAllister@stormrecovery.ny.gov . Thank you for your consideration and cooperation.

Sincerely,

James P. McAllister
Bureau of Environmental Review and Assessment

Enclosures:
Project Location Maps/Schematic Plan

Path: T:\GOSR maps\mxd\15_Nassau_Cnty5Towns_CedarhurstPS\16-0279_15_TownHempstead_1USGSTopo_8_5x11P.mxd csagis evazquez 4/4/2019 8.5X11



Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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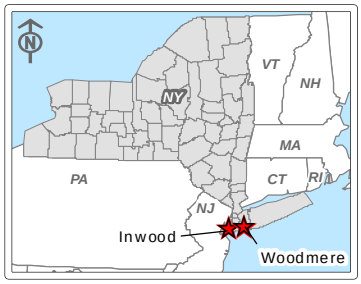

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

CSAGROUP EST. 1956

Appendix G: Sole Source Aquifer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

October 16, 2019

James McAllister
Senior Environmental Project Manager
Bureau of Environmental Review and Assessment
Governor's Office of Storm Recovery
500 Bi-County Boulevard, Suite 300, Farmingdale, NY 11735

Dear Mr. McAllister:

This is in response to your September 24, 2019 request for a Sole Source Aquifer review of the proposal to improve stormwater drainage and improve storm resiliency in the Hamlets of Inwood and Woodmere in the Town of Hempstead, Nassau County. The project will be receiving Housing and Urban Development Community Development Block Grant - Disaster Recovery Program funding. The project site is located above the Long Island Nassau/Suffolk Aquifer System, designated by EPA as a Sole Source Aquifer on June 21, 1978 (citation 43 FR 26611), and our review has therefore been conducted in accordance with Section 1424(e) of the Safe Drinking Water Act (SDWA).

The proposed project in the Hamlet of Inwood includes installation of stormwater detention systems under the Inwood Marina Parking Lot and installation of backflow prevention and stormwater quality treatment devices. The proposed stormwater drainage improvements in the Hamlet of Woodmere will include the addition of catch basins and manholes, installation of backflow prevention devices in existing stormwater outfall pipes and increasing the diameter of several existing outfall pipes.

The project includes raising the following streets; Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, and Walnut Road, Chestnut Road, and Peppe Drive. The roads would be re-paved with clean RCA-brand asphalt (https://www.rcaasphalt.com/). New sidewalks and driveway aprons would be constructed. The existing roadway asphalt would be torn up with a road-milling vehicle, pulverized and mixed into the roadway base material.

Based on the information provided, it is anticipated that this project will not pose a significant threat to public health or ground water resources and complies with Section 1424(e) of the SDWA. Please be advised that meeting the requirements of 1424(e) does not preclude the need to meet National Environmental Policy Act (NEPA) requirements to address direct, indirect, and cumulative impacts. This review does not constitute a review under Section 309 of the Clean Air Act; EPA therefore reserves the right to review additional environmental documents on this project.

If you have any questions concerning this matter or would like additional information, please feel free to contact Michael Poetzsch at (212) 637-4147.

Sincerely yours,

Steve Ferreira, Acting Team Leader
Environmental Review Team

cc: Stephen Gould

Governor's Office of
Storm Recovery

ANDREW M. CUOMO
Governor

September 24, 2019 *via email: poetzsch.michael@epa.gov*

Mr. Mike Poetzsch
Chief of the Environmental Review Section
U.S. Environmental Protection Agency
Region 2 Main Regional Office
290 Broadway
New York, NY 10007-1866

Re: Sole Source Aquifer Analysis – CDBG-DR Funding Application
Town of Hempstead, Woodmere and Inwood Stormwater Drainage Improvements Project
Nassau County, New York

Dear Ms. Poetzsch:

The New York State Governor's Office of Storm Recovery ("GOSR") received a funding application for the proposed "Town of Hempstead's Woodmere and Inwood Stormwater Drainage Improvements Project" located in the Town of Hempstead, Nassau County, New York. The purpose of the project is to reduce tidal and storm flooding, enhance roadway infrastructure and reduce pollutants and contaminants from reaching the adjacent water bodies during future storm events. Improvements proposed include the addition of catch basins and manholes, installation of backflow prevention devices on storm water outfalls and roadway reconstruction primarily within existing roadways as described below (**see Attachment 1, Figure 1 and 2, Project Location Maps**).

The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD '88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby

Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

The project sites overlie the Nassau-Suffolk Sole Source Aquifer (**Attachment 1, Figure 3**). However, other than fuel utilized by heavy equipment during construction, the proposed project would not involve the handling or storage of hazardous waste, solid waste or petroleum projects. No new water supply wells nor connection to any wastewater system are planned as part of the proposed project. The project will provide relief from flooding from heavy rain events within existing developed communities.

Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), GOSR is acting under the auspices of New York State Homes and Community Renewal's Housing Trust Fund Corporation as a recipient of Community Development Block Grant – Disaster Recovery ("CDBG-DR") funds from the United States Department of Housing and Urban Development ("HUD") and is the entity responsible for compliance with the HUD NEPA environmental review procedures set forth in 24 C.F.R. Part 58. 24 C.F.R. Part 58 requires GOSR to review projects for conformance with the Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300(f) et seq., and 21 U.S.C. 349) as amended, and Environmental Protection Agency ("EPA") regulations pertaining to Sole Source Aquifers found at 40 C.F.R. Part 149.

In accordance with the Memorandum of Understanding ("MOU") between EPA and HUD dated August 24, 1990, GOSR hereby requests an Initial Screen/Preliminary Review for the project described above. Please review the attached documentation, including SWAP Map (**Attachment 1, Figure 4**), Attachments 2.A *Non-Housing/Project Activity Initial Screen Criteria* **(Attachment 2)** to the MOU **Attachment 3** *SSA Preliminary Review Information Form*. In accordance with the MOU, a nonresponse within fifteen days shall constitute a favorable review of the project/activity.

If you have any questions, please feel free to contact me via telephone number (631) 465-9677 or email: James.McAllister@stormrecovery.ny.gov . Thank you for your consideration and cooperation.

Sincerely,

James P. McAllister
Bureau of Environmental Review and Assessment

Enclosures:
Project Location Maps

Attachment 1: Project Location, SSA and SWAP Maps
Attachment 2: MOU Attachment 2a
Attachment 3: SSA Preliminary Review Information Form

ATTACHMENTS

ATTACHMENT 1

Project Location/

SWAP Maps

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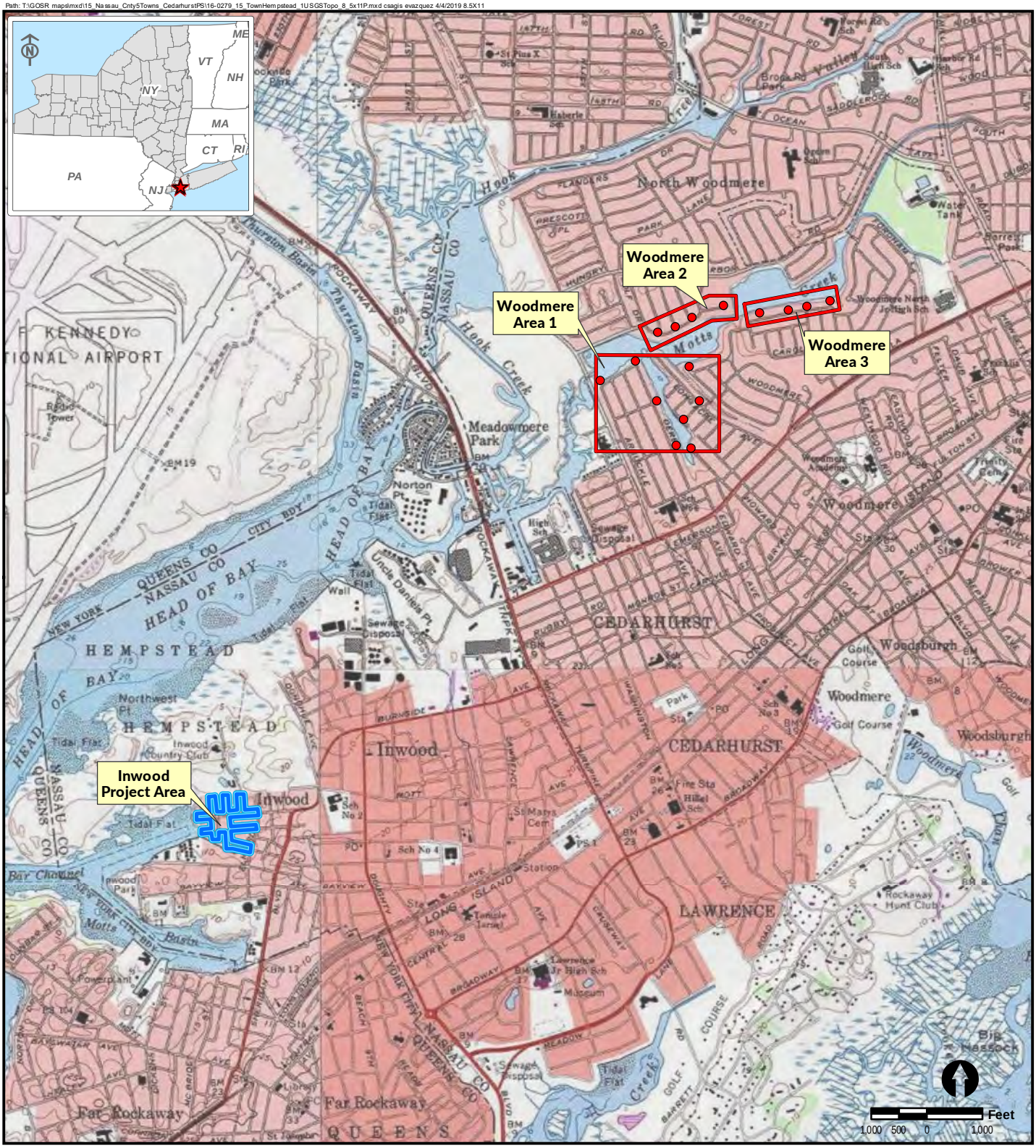

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 1

USGS Regional Location

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Sources:USGS Topographic Map, Far Rockaway and Lynbrook Quadrangles.
Service Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed

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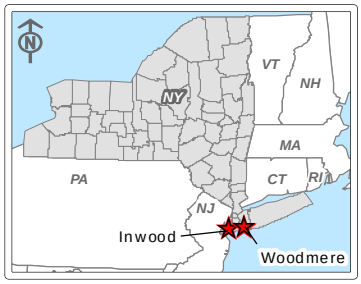

Woodmere Project Sites

Woodmere Project Areas

Inwood Project Area

Figure 2

Project Area

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

Source: NYS GIS Program Office, (2017). Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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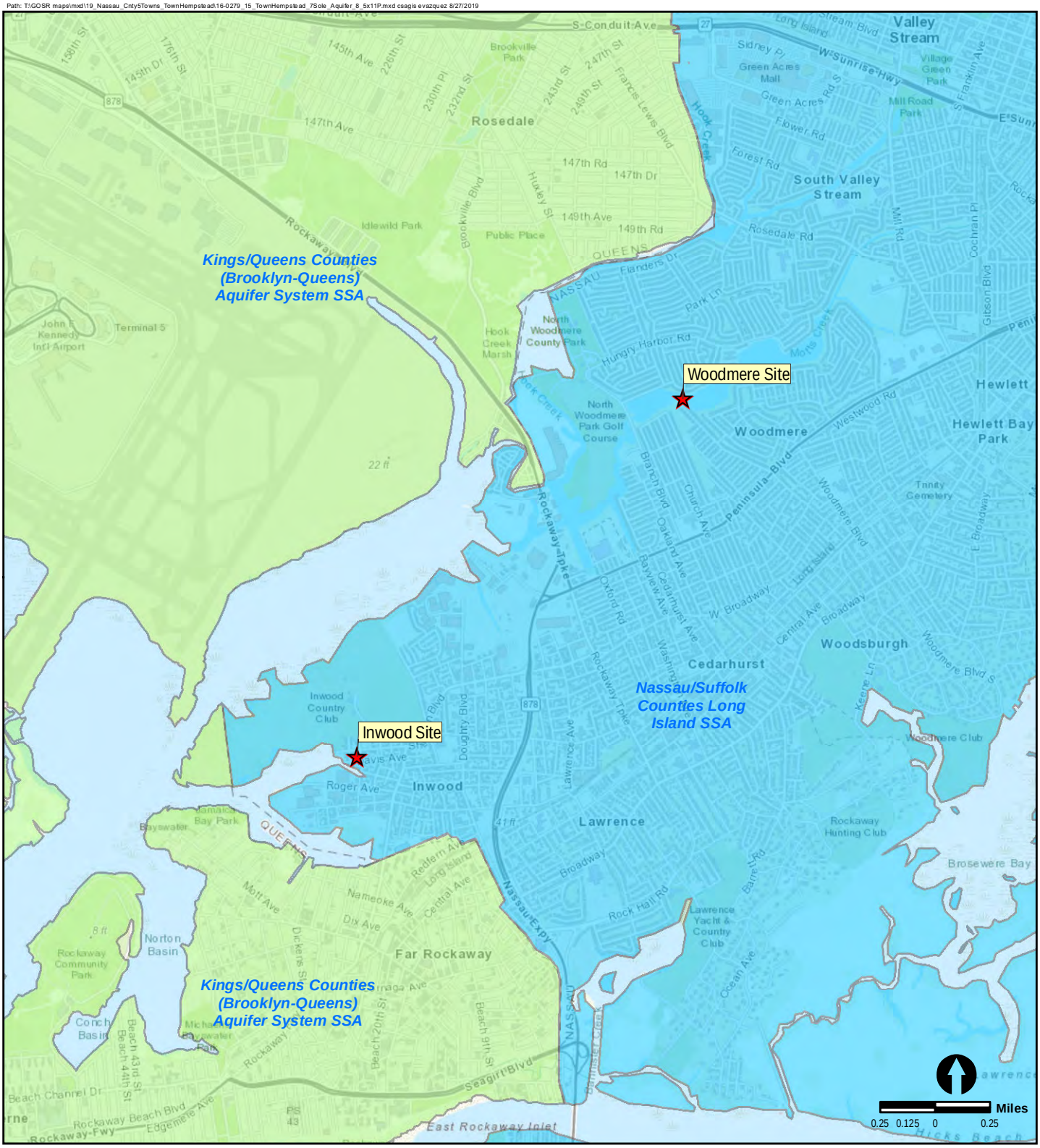
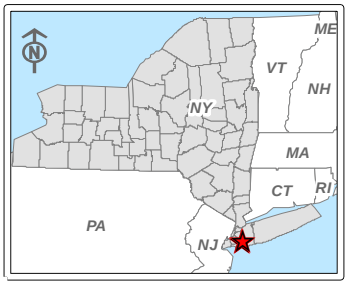
Path: T:\GOSR maps\mxd\19_Nassau_Cnty5Towns_TownHempstead\16-0279_15_TownHempstead_7Sole_Aquifer_8_5x11P.mxd csagis evazquez 8/27/2019





Project Sites

Sole Source Aquifers

Kings/Queens Counties (Brooklyn-Queens) Aquifer System SSA

Nassau/Suffolk Counties Long Island SSA

Source: U.S. EPA Office of Water, EPA National Sole Source Aquifers GIS Layer (2016). Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Figure 3

Sole Source Aquifers

Five Towns-Town of Hempstead, Inwood and Woodmere Drainage Improvements

Nassau County, New York

CSAGROUP EST. 1956

Sole Source Aquifer-SWAP Analysis Map

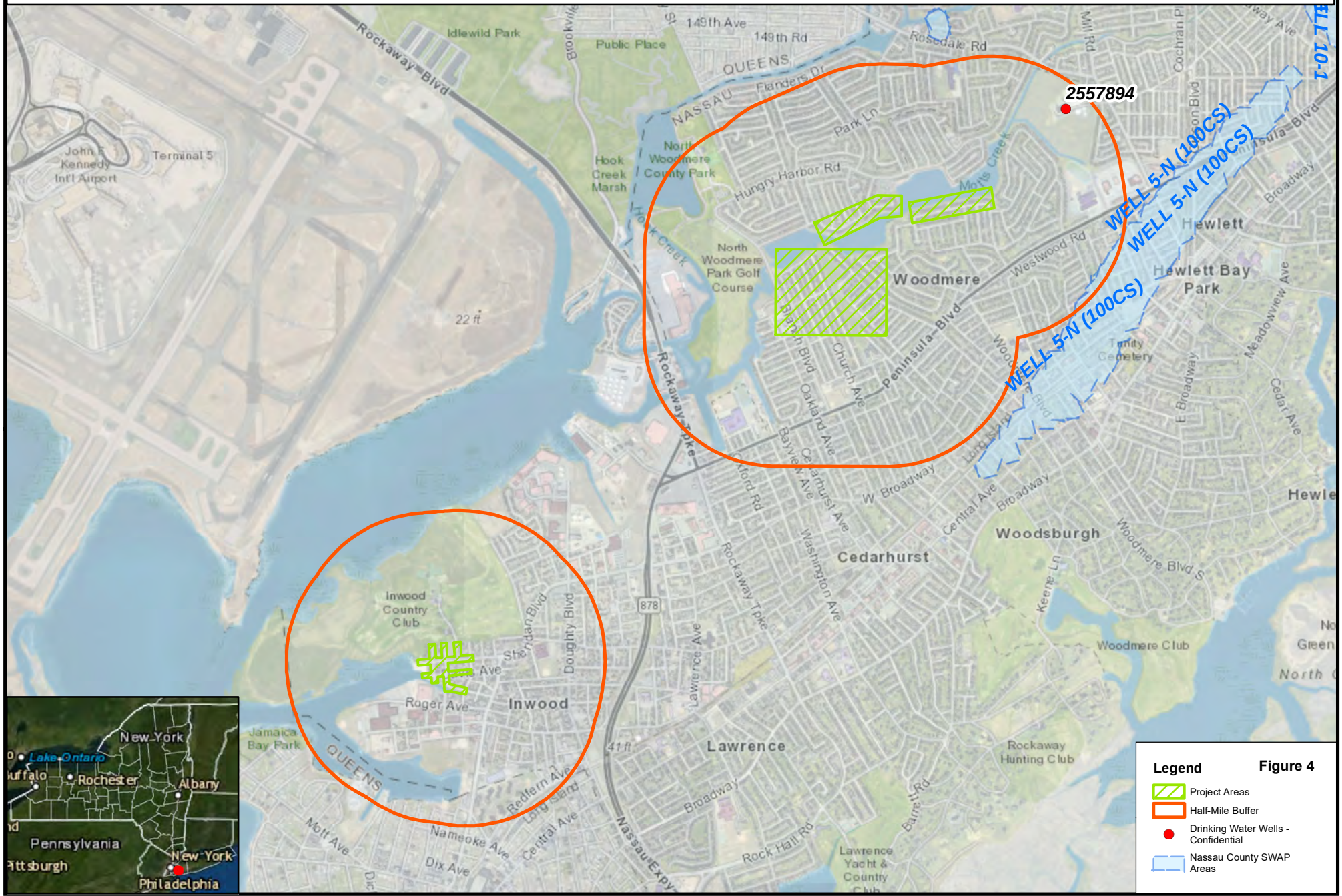


Figure 4

0 2,100 4,200 Feet

Five Towns Drainage Improvements: Inwood-Woodmere

Town of Hempstead, Nassau County, New York

Half-Mile Buffer SSA and SWAP Analysis

Governor's Office of Storm Recovery

N

Drawn By: ASL | Version: 1.0 | Date:8/30/2019

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ATTACHMENT 2

MOU Attachment 2.A

NON-HOUSING/PROJECT ACTIVITY

INITIAL SCREEN CRITERIA

ATTACHMENT 2.A

NON-HOUSING/PROJECT ACTIVITY INITIAL SCREEN CRITERIA

The following list of criteria questions are to be used as an initial screen to determine which **non-housing** projects/activities should be forwarded to the Environmental Protection Agency (EPA) for Preliminary Sole Source Aquifer (SSA) Review. (For housing projects/activities see Attachment 2.B) If any of the questions are answered affirmatively, Attachment 3, SSA Preliminary Review Requirements, should also be completed. The application/final statement, this Attachment, Attachment 3, and any other pertinent information should than be forwarded to EPA at the address below.

Any project/activity not meeting the criteria in this Attachment, but suspected of having a potential adverse effect on the Sole Source Aquifer should also be forwarded.

CRITERIA QUESTIONS	**YES**	**NO**	**N/A**
1. Is the project/activity located within a currently designated or proposed groundwater sensitive area such as a special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area, etc.? [This information can be obtained from the County or Regional Planning board, the local health department, the State health department or the State environmental agency.]	☐	☒	☐
2. Is the project/activity located within a one half mile radius (2640 feet) of a current or proposed public water supply well or wellfield? [This information can be obtained from the local health department, the State health department or the State environmental agency.]	☒	☐	☐

3. Will the project/activity include or directly cause (check appropriate items):

	YES	NO	N/A
construction or expansion of solid waste disposal, recycling or conversion facilities	☐	☒	☐
construction or expansion or closure of landfills	☐	☒	☐
construction or expansion of water supply facilities	☐	☒	☐
construction or expansion of on-site wastewater treatment plants or sewage trunk lines	☐	☒	☐
construction or expansion of gas or petroleum trunk lines greater than 1320 feet	☐	☒	☐
construction or expansion of railroad spurs or similar extensions	☐	☒	☐
construction or expansion of municipal sewage treatment plants	☐	☒	☐

4. Will the project/activity include storage or handling of any hazardous constituents as listed in Attachment 4, Hazardous Constituents	☐	☒	☐
5. Will the project/activity include bulk storage of petroleum in underground or above ground tanks in excess of 1100 gallons? (Please give what assurance they are done in a proper manner.)	☐	☒	☐
6. Will the project/activity require a federal or state discharge elimination permit or modification of an existing permit?	☐	☒	☐

This attachment was completed by:

Name:	James P. McAllister
Title:	Senior Environmental Project Manager Bureau of Environmental Review and Assessment Governor's Office of Storm Recovery
Address:	500 Bi-County Boulevard, Suite 300 Farmingdale, NY 11735
Telephone number:	(631) 465-9677
Date:	September 24, 2019

ATTACHMENT 3

SSA Preliminary Review Information Form

ATTACHMENT 3

SSA PRELIMINARY REVIEW INFORMATION REQUIREMENTS

Where currently available, the information in this Attachment should be provided to the Environmental Protection Agency (see address below) along with the application/final statement; Attachment 2.A, Non-Housing Initial Screen Criteria or Attachment 2.B, Housing Initial Screen Criteria; and any other information which may be pertinent to a Sole Source Aquifer review. Where applicable, indicate the source of your information.

I. Project/Activity Location	**Enclosed?**	
	Yes	No
1. Provide the geographic location and total acreage of the project/activity site. Include a site map which identifies the site in relation to the surrounding area. [Examples of maps which can be used include: 1:24,000 or 1:25,000 U.S. Geological Survey quadrangle sheet, Hagstroms Street Map.]	☒	☐
2. If applicable, identify which groundwater sensitive areas (Special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area, etc.) the project/activity is located within or adjacent to. [This information may be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.]	☐	☒

II. Nature of Project/Activity	**Enclosed?**	
	Yes	No
3. Provide a general narrative describing the project/activity including but not limited to: type of facility; type of activities to be conducted; number and type of units; number of residents, etc. Provide the general layout of the project/activity site and site-plan if available.	☒	☐

III. Public Water Supply	**Enclosed?**	
	Yes	No
4. Provide a description of plans to provide water supply.	☐	☒

5. Provide the location of nearby existing or proposed public water supply wells or wellfields within one half mile radius (2640 feet) of the project/activity. Provide the name of the supplier(s) of those wells or wellfields. This information should be available from the local health department, State health department or the State environmental agency.	☒	☐

IV. Wastewater and Sewage Disposal	**Enclosed?**	
	Yes	No
6. Provide a description of plans to handle wastewater and sewage disposal. If the project/activity is to be served by existing public sanitary sewers provide the name of the sewer district.	☐	☒
7. Provide a description of plans to handle storm water runoff.	☐	☒
8. Identify the location, design, size of any on-site recharge basins, dry wells, leaching fields, retention ponds, etc.	☐	☒

V. Use, Storage, Transport of Hazardous or Toxic Materials *(Applies only to non-housing projects/activities)*	**Enclosed?**	
	Yes	No
9. Identify any products listed in Attachment 4, Hazardous Constituents, of the Housing and Urban Development-Environmental Protection Agency Memorandum of Understanding which may be used, stored, transported, or released as a result of the project not related to construction	☐	☒
10. Identify the number and capacity of underground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.	☐	☒
11. Identify the number and capacity of above ground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site	☐	☒

This attachment was completed by:

Name:	James P. McAllister
Title:	Senior Environmental Project Manager Bureau of Environmental Review and Assessment Governor's Office of Storm Recovery
Address:	500 Bi-County Boulevard Suite 300 Farmingdale, NY 11735
Telephone number:	(631) 465-9677
Date:	September 24, 2019

I. Project/Activity Location

1. Provide the geographic location and total acreage of the project/activity site. Include a site location map which identifies the site in relation to the surrounding area. [Examples of maps which can be used include: 1:24,000 or 1:25,000 U.S. Geological Survey quadrangle sheet, Hagstroms Street Map.]

The Proposed Project area primarily includes portions of roadways located within the hamlets of Woodmere and Inwood in the Town of Hempstead (see **Attached Project Location Maps, Figure 1 and Figure 2**).

2. If applicable, identify which groundwater sensitive areas (Special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area etc.) the project/activity is located within or adjacent to. [This information may be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.]

The project site overlies the Nassau-Suffolk Sole Source Aquifer (**Figure 3**). No Special Ground Water Protection, Critical Supply nor Wellhead Protection Areas are located near the project site.

II. Nature of Project Activity

3. Provide a general narrative describing the project/activity including but not limited to: type of facility; type of activities to be conducted; number and type of units; number of residents etc. Provide the general layout of the project/activity site and a site-plan if available.

The proposed project within the hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of the following streets to a target flow line elevation of 5.4 feet NAVD ’88: Bayswater Boulevard from the Marina to Elm Road, Davis Ave from Dead End to Elm Road, Maple Road from Chestnut Road to Elm Road, Walnut Road, Chestnut Road and Peppe Drive. Following installation of the new system, the roads would be repaved, and new sidewalks and driveway aprons would be installed. The proposed project would occur within existing right of ways as well as previously disturbed private property.

Proposed stormwater drainage improvements within the hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. The first area includes outfalls located at Arbuckle Avenue, along Derby Avenue, at Howard Avenue and at Greene Place. The second area is comprised of the outfalls along Golf Drive; and the third area would include the outfalls along Midway. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased at the following locations: Area 1: north the intersection of Arbuckle Avenue and Stevenson Street, east of intersection of Raleigh Street and Derby Drive, north end of Greene Place cul-de-sac and east side of Derby Drive aligned with Poe Street (to the west); Area 3: the north side of Midway near Saddlebrook Road. Any in-water work to tie the pipe replacements into the existing outfall structures (if required) would be minimal. Following construction, new concrete curbs, ramps, and driveways will be installed within the ROWs. The proposed work would be conducted on public ROW as well as private property.

III. Public Water Supply
4. Provide a description of plans to provide water supply.

Water service is not required as part of the proposed project.

5. Provide the location of nearby existing or proposed public water supply wells or wellfields within a one-half mile radius (2,640 feet) of the project/activity. Provide the name of the supplier(s) of those wells or wellfields. This information should be available from the local health department, State health department or the State environmental agency.

One drinking water well (#2557894) is located within ½ mile of the Woodmere project site. See SWP Map attached as **Figure 4**.

IV. Wastewater and Sewage Disposal

6. Provide a description of plans to handle wastewater and sewage disposal. If the project/activity is to be served by existing public sanitary sewers provide the name of the sewer district.

Wastewater and sewage service are not required as part of the proposed project.

7. Provide a description of plans to handle storm water runoff.

The proposed project involves improvements to the existing stormwater system. Following project completion, stormwater flow will be directed away from commercial and residential development situated adjacent to these road segments.

8. Identify the location, design, size of any on-site recharge basins, dry wells, leaching fields, retention ponds etc.

No recharge basins, dry wells, leaching fields, or retention ponds are included in the proposed project.

V. Use, Storage, Transport of Hazardous or Toxic Materials (Applies only to non-housing projects/activities)

9. Identify any products listed in Attachment 4, Hazardous Constituents, of the Housing and Urban Development-Environmental Protection Agency Memorandum of Understanding which may be used, stored, transported, or released as a result of the project not related to construction.

No hazardous constituents will be used, stored, transported or released as a result of the proposed project.

10. Identify the number and capacity of underground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.

The project site consists primarily of active road segments. No underground storage tanks are located at the project site(s).

11. Identify the number and capacity of above ground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.

The project site consists of active road segments. No above ground storage tanks are located at the project site (s).

Appendix H: SEQRA Type II Memorandum

Governor's Office of Storm Recovery

ANDREW M. CUOMO
Governor

TO: Environmental Review Record
FROM: Lori A Shirley, Certifying Officer,
GOSR DATE: November 27, 2019
RE: SEQRA Type II Determination-Town of Hempstead Improvements Project, Nassau County, New York

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Proposed Action: The Governor's Office of Storm Recovery (GOSR) proposes to provide Community Development Block Grant – Disaster Recovery (CDBG-DR) funding to the Town of Hempstead for the implementation of storm water drainage improvements within the Hamlets of Inwood and Woodmere in Nassau County. The proposed project within the Hamlet of Inwood would involve the installation of stormwater detention systems under the Inwood Marina Parking Lot, installation of stormwater quality treatment devices, installation of inline backflow prevention devices, and the raising of several streets.

Proposed stormwater drainage improvements within the Hamlet of Woodmere include the addition of catch basins and manholes, installation of backflow prevention devices on existing storm water outfalls and roadway reconstruction within three separate locations in Woodmere. Drainage improvements would include the installation of backflow prevention, check valves and stormwater treatment devices. In addition, the diameter of the existing outfall pipes would be increased.

State Environmental Quality Review Act (SEQRA) Classification: Pursuant to the Disaster Relief Appropriations Act, 2013 (Public Law 113-2) and the Housing and Community Development Act (42 U.S.C. § 5301 et seq.), GOSR, operating under the auspices of New York State Homes and Community Renewal's (HCR) and the New York Rising Community Reconstruction and Infrastructure Program Fund, disburses funding made available by the U.S. Department of Housing & Urban Development's (HUD) CDBG-DR program. In this role, GOSR serves as an Involved Agency and must make a discretionary decision to fund the proposed action. It is independently responsible for ensuring that its own decision is consistent with the requirements of the New York State Environmental Conservation Law Article 8 (SEQRA) with regulations found at 6 NYCRR Part 617.

This action would constitute the replacement, rehabilitation or reconstruction within existing utility and road ROWs, on the same site (617.5(c)(2)). Replacement in kind refers to function, size and footprint. The size and footprint of disturbance resulting from the improvements will not change. In addition, the proposed Project will result in improved function of existing structures. Therefore, GOSR has classified the Town of Hempstead's Stormwater Drainage Improvements Project within the Town of Hempstead, Nassau County, New York as a Type II action pursuant to 6 NYCRR 617.5(c)(2).