

**TABLE OF CONTENTS: APPENDICES**

APPENDIX A: Documents.....2

    Document A – Record of Environmental Consideration.....3

    Document B – Utility Management Project.....11

    Document C – 8-Step Floodplain Review .....15

    Document D – Proposed NYCHA Development Project .....27

APPENDIX B: Figures .....30

    Figure A – Geological Map of the Project Area .....31

    Figure B – Asian Longhorn Beetle Quarantine Zone .....33

    Figure C – Coastal Zone.....35

APPENDIX C: Tables .....37

    Table A – Thresholds that Would Trigger a Site Specific EA .....39

    Table B – NYCHA Developments .....43

    Table C – New York State NAAQS levels.....47

    Table D – Minority Population by Census Block.....50

APPENDIX D: Correspondence.....52

    Correspondence A – State of New York Department of State Coastal Zone  
    Management Act Consultation and Correspondence.....53

**Appendix A:  
Documents**

**Document A:  
Record of Environmental Consideration**

# Record of Environmental Consideration

See 44 Code of Federal Regulation Part 10.

**Project Name/Number:** Public Housing Resiliency, Project number and name

**Project Location:** County Name, Site Name, and (Latitude, Longitude)

**Project Description:** The project calls for the construction of new boiler plant, new backup generators, new utility buildings, new utility corridors, or a combination there of to be able to consistently and reliably provide essential building utility services including electricity, heat, and hot water to NYCHA residents during future storm and flood events. The new boiler plant will be a new elevated building that would elevate the boilers to one foot plus base flood elevation and would not exceed **2,500 sq ft** in area and a height of **55 ft** above base flood elevation. New backup generators will be dual fueled by natural gas with #2 fuel as backup. Generator is located at either **Roof top, new boiler plant, in new standalone structure, or co-located in new utility buildings.** New utility building will house the electrical systems and controls, and in some instances, the backup generator. Building size will not exceed **900 sq ft** and will have a maximum height of **30 ft**. Utility building will either be a separate, standalone building or a room attached to the existing buildings. New utility corridors will support new electrical buildings and boiler plants including **new natural gas lines, steam distribution systems, and/or electrical lines.** Trenching would not exceed **six ft** from either side of line location and maximum depth would be no more than **12 ft**.

## National Environmental Policy Act (NEPA) Determination

- Statutorily excluded from NEPA review. (**Review Concluded**)
- Categorical Exclusion - Category \_\_\_\_\_ Type Single Project
- No Extraordinary Circumstances exist.  
Are project conditions required?  Yes (see section V)  No (**Review Concluded**)
- Extraordinary Circumstances exist (See Section IV).  
 Extraordinary Circumstances mitigated. (See Section IV comments)  
Are project conditions required?  Yes (see section V)  No (**Review Concluded**)
- Environmental Assessment required. See FONSI for determination, conditions and approval.
- Environmental Assessment required. See FONSI for determination, conditions and approval.

*Comments: NYCHA, County Name County (Lat, Long), Category E: New Boiler Houses, New Generators, New Utility Buildings, and/or new Utility Corridors. Due to the extraordinary circumstance of the presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources, and environmental assessment of the proposed action was required. See the attached signed FONSI from Programmatic Environmental Assessment.*

## Reviewer and Approvals

FEMA Environmental Reviewer  
Name: \_\_\_\_\_, Environmental Specialist

Signature \_\_\_\_\_ . Date \_\_\_\_\_ .

FEMA Historic Preservation Reviewer

Name: \_\_\_\_\_, Historic Preservation Specialist  
Signature \_\_\_\_\_ . Date \_\_\_\_\_.

FEMA Environmental Officer Reviewer or delegated approving official.

Name: \_\_\_\_\_  
Signature \_\_\_\_\_ . Date \_\_\_\_\_.

## **I. Compliance Review for Environmental Laws (other than NEPA)**

### **A. National Historic Preservation Act**

- Not type of activity with potential to affect historic properties. **(Review Concluded)**
- Applicable executed Programmatic Agreement . (insert date) Otherwise, conduct standard Section 106 review.
  - Activity meets Programmatic Allowance # \_\_\_\_\_
  - Are project conditions required?  Yes (see section V)  No **(Review Concluded)**

#### **HISTORIC BUILDINGS AND STRUCTURES**

- No historic properties 50 years or older in project area. **(Review Concluded)**
- Building or structure 50 years or older in project area and activity not exempt from review.
  - Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)  
Are project conditions required?  Yes (see section V)  No **(Review Concluded)**
  - Determination of Historic Properties Affected (FEMA finding/SHPO/THPO concurrence on file)
    - Property a National Historic Landmark and National Park Service was provided early notification during the consultation process. If not, explain in comments
    - No Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file).  
Are project conditions required?  Yes (see section V)  No **(Review Concluded)**
    - Adverse Effect Determination (FEMA finding/SHPO/THPO concurrence on file)
      - Resolution of Adverse Effect completed. (MOA on file)  
Are project conditions required  Yes (see section V)  No **(Review Concluded)**

#### **ARCHEOLOGICAL RESOURCES**

- Project affects only previously disturbed ground. **(Review Concluded)**
- Project affects undisturbed ground.
  - Project area has no potential for presence of archeological resources
    - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence or consultation on file). **(Review Concluded)**
  - Project area has potential for presence of archeological resources
    - Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence on file)  
Are project conditions required  Yes (see section V)  No **(Review Concluded)**
    - Determination of historic properties affected
      - NR eligible resources not present (FEMA finding/SHPO/THPO concurrence on file).  
Are project conditions required  Yes (see section V)  No **(Review Concluded)**
      - NR eligible resources present in project area. (FEMA finding/ SHPO/THPO concurrence on file)
        - No Adverse Effect Determination. (FEMA finding/ SHPO/THPO concurrence on file)  
Are project conditions required?  Yes (see section V)  No **(Review Concluded)**
        - Adverse Effect Determination . (FEMA finding/ SHPO/THPO concurrence on file)
          - Resolution of Adverse Effect completed. (MOA on file)  
Are project conditions required?  Yes (see section V)  No **(Review Concluded)**

Comments: NHPA: Per consultation with the SHPO initiated on \_\_\_\_\_ and completed on \_\_\_\_\_, FEMA has determined that the proposed scope of work will not have an adverse effect to historic properties. Please see attached correspondence. Or NHPA: Per consultation with the SHPO initiated on \_\_\_\_\_ and completed on \_\_\_\_\_, FEMA has determined that the proposed scope of work will have an adverse effect to historic properties. Treatment Measures agreed upon by all parties to mitigate the adverse effect are \_\_\_\_\_ and \_\_\_\_\_ and are to be completed by (FEMA, applicant, sub-grantee, etc.) with notification sent to FEMA within thirty (30) days of completion of mitigation measures.  
Conditions:  
Correspondence/Consultation/References:

## B. Endangered Species Act

- No listed species and/or designated critical habitat present in the action area. **(Review Concluded)**
- Listed species and/or designated critical habitat present in the action area.
- No effect to species or designated critical habitat. (See comments for justification) **(Review Concluded)**
- May affect, but not likely to adversely affect species or designated critical habitat (FEMA determination/USFWS/NMFS concurrence on file) **(Review Concluded)**
- Likely to adversely affect species or designated critical habitat
- Formal consultation concluded. (Biological Assessment and Biological Opinion on file)
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments: ESA: Per review of U.S. Fish and Wildlife Service's Information for Planning, and Conservation System (IPaC) listing of threatened and endangered species for this project site (GPS coordinates), accessed on MM/DD/YYYY, species are present, but the work proposed involves repairs to pre-disaster condition within the same footprint or with small-scale mitigation and will have no effect on the species or the habitat.  
Conditions:  
Correspondence/Consultation/References:

## C. Coastal Barrier Resources Act

- Project is not located in Coastal Barriers Resource System or Otherwise Protected Area.
- Project does not affect a coastal barrier within the COBRA System (regardless of in or out) **(Review Concluded)**
- Project is located in a coastal barrier system and/or affects a coastal barrier. (FEMA determination/USFWS consultation on file)
- Proposed action an exception under Section 3505.a.6? **(Review Concluded)**
- Proposed action not excepted under Section 3505.a.6.
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments:  
Conditions:  
Correspondence/Consultation/References:

## D. Clean Water Act

- Project site located outside of and would not affect any waters of the U.S. **(Review Concluded)**
- Project site located in or would affect waters, including wetlands, of the U.S.
- Project exempted as in kind replacement or other exemption. **(Review Concluded)**
- Project requires Section 404/401/10 permit, including qualification under Nationwide Permits.
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments:  
Conditions:  
Correspondence/Consultation/References:

## E. Coastal Zone Management Act

- Project is not located in a coastal zone area – **(Review concluded)**
- Record of Environmental Consideration

- Project is located in a coastal zone area:  
 State administering agency does not require consistency review. **(Review Concluded)**.  
 State administering agency requires consistency review.  
Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

*Comments: Per consultation with New York Department of State initiated on 08/12/2015 and completed on 09/30/2015, no further consistency review is required. Please see attached correspondence.*

*Conditions:*

*Correspondence/Consultation/References:*

## F. Fish and Wildlife Coordination Act

- Not applicable for financial assistance. **(Review Concluded)**

## G. Clean Air Act

- Project will not result in permanent air emissions. **(Review Concluded)**  
 Project is located in an attainment area. **(Review Concluded)**  
 Project is located in a non-attainment area.  
 Coordination required with applicable state administering agency..  
Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

*Comments: The project is located in (name) County which is a (maintenance/nonattainment) area for (criteria pollutant(s)). Based on the scope of work, the potential emissions from project activities are clearly below de minimis thresholds for the General Conformity Rule. Thus, the project does not require a conformity determination and coordination with the state administering agency is not required.*

*Conditions: The Subgrantee is responsible for complying with all applicable sections of the CAA (excepting the General Conformity Rule). Any changes to the scope of work require submittal to FEMA for General Conformity Rule review prior to initiation of any work.*

*Correspondence/Consultation/References:*

## H. Farmlands Protection Policy Act

- Project does not affect prime or unique farmland. **(Review Concluded)**  
 Project causes unnecessary or irreversible conversion of prime or unique farmland.  
 Coordination with Natural Resource Conservation Commission required.  
 Farmland Conversion Impact Rating, Form AD-1006, completed.  
Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

*Comments:*

*Conditions:*

*Correspondence/Consultation/References:*

## I. Migratory Bird Treaty Act

- Project not located within a flyway zone. **(Review Concluded)**  
 Project located within a flyway zone.  
 Project does not have potential to take migratory birds. **(Review Concluded)**  
 Project has potential to take migratory birds.  
 Contact made with USFWS  
Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

*Comments:*

*Conditions:*

Correspondence/Consultation/References:

### J. Magnuson-Stevens Fishery Conservation and Management Act

- Project not located in or near Essential Fish Habitat. **(Review Concluded)**
- Project located in or near Essential Fish Habitat.
- Project does not adversely affect Essential Fish Habitat. **(Review Concluded)**
  - Project adversely affects Essential Fish Habitat (FEMA determination/USFWS/NMFS concurrence on file)
    - NOAA Fisheries provided no recommendation(s) **(Review Concluded)**.
    - NOAA Fisheries provided recommendation(s)
      - Written reply to NOAA Fisheries recommendations completed.
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments:

Conditions:

Correspondence/Consultation/References:

### K. Wild and Scenic Rivers Act

- Project is not along and does not affect Wild or Scenic River - **(Review Concluded)**
- Project is along or affects Wild or Scenic River
- Project adversely affects WSR as determined by NPS/USFS. **FEMA cannot fund the action.** (NPS/USFS/USFWS/BLM consultation on file)
  - Project does not adversely affect WSR. (NPS/USFS/USFWS/BLM consultation on file)
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments:

Conditions:

Correspondence/Consultation/References:

### L. RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)

Comments: See RCRA Conditions.

Conditions: The Subgrantee shall handle, manage, and dispose of all solid and hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. The Subgrantee shall ensure that all debris is separated and disposed in a manner consistent with New York State Department of Environmental Conservation guidelines at a permitted site or landfill. **And/or** If any asbestos containing material, lead paint, and/or other hazardous materials are found during remediation or repair activities, the Subgrantee must comply with all Federal, state, and local abatement/disposal requirements.

Correspondence/Consultation/References:

## II. Compliance Review for Executive Orders

### A. E.O. 11988 - Floodplains

- Outside Floodplain and No Effect on Floodplains/Flood levels - **(Review Concluded)**
- Located in Floodplain or Effects on Floodplains/Flood levels
- No adverse effect on floodplain or can be adversely affected by the floodplain. **(Review Concluded)**.
  - Beneficial Effect on Floodplain Occupancy/Values **(Review Concluded)**.
  - Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment
    - 8 Step Process Complete - documentation on file **(Review Concluded)**



Comments: Based on the effective **FIRM/ PFIRM/ABFE** panel XXXXXXXXX, dated MM/DD/YYYY, the project is outside the floodplain and has no effect on the floodplain or flood levels. **OR** The project is located within the XX Zone per XXXXXXXXX County flood insurance rate map (FIRM) panel number XXXXXXXXX dated MM/DD/YYYY. Per 44 CFR §9.6, FEMA has applied the 8-step decision-making process, and has determined that the project will result in no short- or long-term adverse effects to the floodplain. Per 44 CFR §9.11(d)(6) the Subgrantee is responsible for compliance with local floodplain ordinances. See attached 8-step documentation.

Conditions:

Correspondence/Consultation/References:

### **B. E.O. 11990 - Wetlands**

- Outside Wetland and No Effect on Wetland(s) - **(Review Concluded)**
- Located in Wetland or effects Wetland(s)
  - Beneficial Effect on Wetland - **(Review Concluded)**
  - Possible adverse effect associated with constructing in or near wetland
    - Review completed as part of floodplain review
    - 8 Step Process Complete - documentation on file **(Review Concluded)**

Comments: Per review of the USFWS National Wetlands Inventory (NWI) mapper, accessed MM/DD/YYYY, the project is not located in a wetland.

Conditions:

Correspondence/Consultation/References:

### **C. E.O. 12898 - Environmental Justice For Low Income and Minority Populations**

- No Low income or minority population in, near or affected by the project - **(Review Concluded)**
  - Low income or minority population in or near project area
    - No disproportionately high and adverse impact on low income or minority population- **(Review Concluded)**
    - Disproportionately high or adverse effects on low income or minority population
- Are project conditions required?  YES (see section V)  NO **(Review Concluded)**

Comments:

Conditions:

Correspondence/Consultation/References:

## **III. Other Environmental Issues**

**Identify other potential environmental concerns in the comment box not clearly falling under a law or executive order (see environmental concerns scoping checklist for guidance).**

Comments:

Conditions:

Correspondence/Consultation/References:

## **IV. Extraordinary Circumstances**

**Based on the review of compliance with other environmental laws and Executive Orders, and in consideration of other environmental factors, review the project for extraordinary circumstances.**

\* A "Yes" under any circumstance may require an Environmental Assessment (EA) with the exception of (ii) which should be applied in conjunction with controversy on an environmental issue. If the circumstance can be mitigated, please explain in comments. If no, leave blank.

**Yes**

- (i) Greater scope or size than normally experienced for a particular category of action
- (ii) Actions with a high level of public controversy
- (iii) Potential for degradation, even though slight, of already existing poor environmental conditions;
- (iv) Employment of unproven technology with potential adverse effects or actions involving unique or unknown environmental risks;
- (v) Presence of endangered or threatened species or their critical habitat, or archaeological, cultural, historical or other protected resources;
- (vi) Presence of hazardous or toxic substances at levels which exceed Federal, state or local regulations or standards requiring action or attention;
- (vii) Actions with the potential to affect special status areas adversely or other critical resources such as wetlands, coastal zones, wildlife refuge and wilderness areas, wild and scenic rivers, sole or principal drinking water aquifers;
- (viii) Potential for adverse effects on health or safety; and
- (ix) Potential to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.
- (x) Potential for significant cumulative impact when the proposed action is combined with other past, present and reasonably foreseeable future actions, even though the impacts of the proposed action may not be significant by themselves.

*Comments:*

**V. Environmental Review Project Conditions**

General comments:

Project Conditions:

Monitoring Requirements:

*Programmatic Environmental Assessment*  
*New York City Housing Authority Public Housing Resiliency*

**Document B:**  
**Utility Management Project**

## **NYCHA Community Center Hardening**

The New York City Housing Authority (NYCHA) is proposing the hardening of ten (10) Community Centers to be funded through the FEMA 404 Hazard Mitigation Grant Program (HMGP) to ensure better support for NYCHA developments during future disaster events. These Community Centers are located in Brooklyn, Queens and Manhattan and The measures are to be installed above the 500-year storm elevation so that they will remain operable during a future storm event.

The proposed mitigation measures will transform these centers into safe-havens for the community. Currently, NYCHA community centers are utilized by multiple organizations offering a wide range of community, educational, recreational, arts and cultural activities as well as a place for residents to take refuge in extreme heat and in times of emergency. NYCHA's use of FEMA 404 HMGP funding will be utilized to harden these community centers where they will no longer experience loss of function from severe storms, flooding and power outages to provide the residents and surrounding community a safe haven to meet, gather information and supplies and access resources in the event of a disaster. The following (10) Community Centers have been selected for hardening by NYCHA:

- NYCHA 7827 (Beach 41<sup>st</sup>)
- NYCHA 7822 Far Rockaway (Campos Plaza II)
- NYCHA 7843 (Coney Island Site 4 and 5)
- NYCHA 7816 (Gravesend Houses)
- NYCHA 7834 Coney Island (Hammel Houses)
- NYCHA 7849 Far Rockaway (Jacob Riis Houses)
- NYCHA 7810 Far Rockaway (Red Hook: East)
- NYCHA 7847 Red Hook (Ocean Bay: Bayside)
- NYCHA 7845 Far Rockaway (Redfern Houses)
- NYCHA 7854 East Side(Two Bridges)

The following list of mitigation measures have been identified for each of the facilities and focus on the flood and wind hazard. After completing an engineering assessment of each center, NYCHA will be able to determine the mitigation measures appropriate to each building. The intended hardening measures are:

### Floodproofing of doors, windows, and other water entry points

- Protects building from water inundation to an elevation of 1'-0" above the current ABFE plus Sea Level Rise

### Elevation of critical systems

- Protects building systems from water inundation to an elevation of 1'-0" above the current ABFE plus Sea Level Rise

### Impact resistant windows

- Protects center users from broken glass debris caused by high winds: approved for the impact of projectiles at a velocity of 130 MPH

### Emergency Generators

- Eliminate power loss during disasters - including brown/black-outs

### Stand-alone heating and cooling

- Elevated boilers and HVAC will allow center to be acclimatized during and following an event

### Storm shutters

- Can be closed to add additional protections to the windows from flying debris

### Fortified roofing membrane

- Protects the roof from heavy rains, excessive snow load and the impact of flying debris

### New Façade (wind screen)

- Steel Insulated Panels protect the facade against flying debris and the abrasion of windblown sand during an event as well as deterioration of existing facade condition

### Comprehensive exterior lighting

- Combination of solar and generator powered exterior lighting allows center users to safely enter/exit the building during an event

### Flood-Damage-Resistant Materials

- Flood resistant flooring will prevent water inundation damage

### Expanded data/electrical infrastructure - to include phone and electrical outlet banks

- This expanded infrastructure will provide a continuous life-line to receive and distribute critical emergency information and will prevent those inside the devastated areas from having limited means to send and receive information

- These upgrades would limit the heightened emergency situation created during a disaster where there the public experiences crippling interruptions to traditional information and communication paths like:
  - Cell sites out of service
  - Cable television lines out of service
  - Telephone calls unable to be completed
  - Broadcast radio stations disabled
  - Telephone switching centers out of service
  - Public safety answering points out of service
  - Radio and television stations off the air

Project benefits include:

1. The community centers will provide the same services as are currently offered, but in a facility that is resistant to a variety of external impacts that currently render them off-line (i.e. blackouts, high winds, flood events, etc.).
2. Because each site will be provided independent heating, cooling and power generation systems during an incident, these centers will be able to transform into community information hubs where citizens (both residents and neighbors) can go for safety, plug-in medical devices that require power, refrigerate critical medicines, receive information updates and gather emergency supplies (food, water and clothing).
3. These upgrades will allow external groups, like the Red Cross, to have the infrastructure required to run operations out of these buildings during a disaster event.
4. Increased ability for community centers to maintain normal operations so that services that the community relies on, such as child care, will no longer experience loss of function from power outages and flood-related damages.

**Document C:  
8-Step**

**New York City Housing Authority,  
New York, Kings, Queens, and Richmond Counties,  
34 Sites  
FEMA 4085-DR-NY**

Executive Order 11988 – FLOODPLAIN MANAGEMENT  
Executive Order 11990 – WETLAND PROTECTION

**PROGRAMATIC 8-STEP PROCESS SUMMARY**

**Date:** 07/22/2015

**Prepared By:** Aaron Clark, CFM, Floodplain / Environmental Specialist

**Project:** The New York City Housing Authority (the Applicant) seeks Federal Emergency Management Agency (FEMA, the Agency) Public Assistance federal grant funds to restore hurricane damaged facilities, buildings, and appurtenances throughout the area serviced under their authority. The New York City Housing Authority proposes to complete Category “E” work in New York, Kings, Queens, and Richmond Counties at 33 sites. The proposed scope of work (SOW) includes: existing utilities may be repaired, replaced, or rerouted and new utility lines may be required. Previously existing underground electrical lines would be repaired or replaced. New natural gas and underground steam distribution systems would be installed. The utility corridors would be trenched across previously developed NYCHA property where existing NYCHA utilities currently form a utility corridor where the ground disturbance associated with prior utility installation varies from six (6) to eight (8) feet. Trenches for repairs and replacements would be excavated alongside existing utilities within these existing utility corridors. In the case of replacements, the old utilities would be removed. Maximum depth of ground disturbance for repair/replacement activities would be no more than 12 feet. Each residential building will receive a new energy-efficient power generator. In most cases, these generator sets would be located on the building rooftops which would be structurally reinforced. Some of the identified developments will relocate boiler plants in new annexes and elevate equipment to the proposed Design Flood Elevation (DFE). Dry flood proofing measures can include: emergency generators, backflow preventers; flood barrier/doors; extending areaway retaining walls; new areaways; extending ventilation pipes; elevating weep holes; and sealing wall penetrations; Some of the identified developments will relocate electrical room equipment to new pre-fabricated annexes attached to existing buildings and elevate to proposed DFE.

The Applicant intends to repair their Housing Facilities back to pre-disaster condition with minor changes to the footprint.

This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in Presidential Executive Order (EO) 11988 (Floodplain Management),



EO 11990 (Protection of Wetlands), and the implementing regulation found at 44 Code of Federal Regulations (CFR) Part 9, *Floodplain Management and Protection of Wetland*. These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains or wetlands.

Additionally, all Public Assistance grant-funded projects carried out in the floodplain or affecting the floodplain must be coordinated with the local floodplain administrator for floodplain development permit and the action must be undertaken in compliance with all relevant, applicable, and required local codes and standards and thereby will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by EO 11988.

Restoration projects conducted with Public Assistance grant funds must be carried out in accordance with the local floodplain management plan and ordinance and shall utilize the current Preliminary Flood Insurance Rate Maps (FIRM) Community 360497, dated 12/05/2013 “as best available data” as a minimum standard. Exceptions to this requirement shall be reported to the New York State Division of Homeland Security and Emergency Management (NYS DHSES), FEMA Environmental, and the local floodplain administrator before undertaking the action.

**STEP 1 - Determine whether the proposed actions are located in a wetland and or the 100-year floodplain (500-year floodplain for critical action [44 CFR 9.4]) or whether they have the potential to affect or be affected by a floodplain or a wetland (44 CFR 9.7).**

  X   The project site is located in relation to the floodplains as mapped by:

**Site 1) Facility:** < The New York Housing Authority, Gerald J. Cary Gardens, 2955 W. 24<sup>th</sup> Street, Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum >  
Latitude 40.574250 / Longitude -73.990827

**Site 2) Facility:** < The New York Housing Authority, Coney Island Houses, 2410 Surf Ave., Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum >  
Latitude 40.572514 / Longitude -73.996350

**Site 3) Facility:** < The New York Housing Authority, Redfern, 1456 Beach Channel Drive, Queens, Queens County, New York >  
Preliminary FIRM map: 3604970382 G and 3604970401 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (9 feet) NAVD88 datum>  
Latitude 40.610264 / Longitude -73.751786

**Site 4) Facility:** < The New York Housing Authority, Redhook II (West), 55 Dwight Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970192 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>  
Latitude 40.675874 / Longitude -74.007450

**Site 5) Facility:** < The New York Housing Authority, Redhook I (East), 62 Mill Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970192 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>  
Latitude 40.674782 / Longitude -74.003160

**Site 6) Facility:** < The New York Housing Authority, Hammel Houses, 85-10 Rockaway Beach Blvd., Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970383 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (10 feet) NAVD88 datum>  
Latitude 40.588877 / Longitude -73.809489

**Site 7) Facility:** < The New York Housing Authority, Coney Island Site 4 and 5, 2925 W. 28<sup>th</sup> Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970353 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>  
Latitude 40.575106 / Longitude -73.993472

**Site 8) Facility:** < The New York Housing Authority, Coney Island Site 8, 2950 W. 35<sup>th</sup> Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970334 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (12 feet) NAVD88 datum>  
Latitude 40.573649 / Longitude -74.000831

**Site 9) Facility:** < The New York Housing Authority, Ocean Bay (Bayside), 434 Beach 54th Street, Queens, Queens County, New York >

Preliminary FIRM map: 3604970381 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (9 and 10 feet) NAVD88 datum>  
Latitude 40.596446 / Longitude -73.785067

**Site 10) Facility:** < The New York Housing Authority, Gravesend Houses, 2793 W. 33<sup>rd</sup> Street, Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970334 G and 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12feet) NAVD88 datum>  
Latitude 40.79094 / Longitude -73.999326

**Site 11) Facility:** < The New York Housing Authority, O'Dwyer Gardens, 2975 W.33<sup>rd</sup> Street, Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970334 G and 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12feet) NAVD88 datum>  
Latitude 40.573388 / Longitude -73.999226

**Site 12) Facility:** < The New York Housing Authority, Carleton Manor, 71-15 Beach Channel Drive, Queens, Queens County, New York >  
Preliminary FIRM map: 3604970383 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (9 feet) NAVD88 datum>  
Latitude 40.588877 / Longitude -73.809489

**Site 13) Facility:** < The New York Housing Authority, Surfside Gardens, 2940 W. 31<sup>st</sup> Street, Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12 feet) NAVD88 datum>  
Latitude 40.576303 / Longitude -73.999329

**Site 14) Facility:** < The New York Housing Authority, Benard Haber Houses , 2410 Surf Ave., Brooklyn, Kings County, New York >  
Preliminary FIRM map: 3604970353 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>  
Latitude 40.572672 / Longitude -73.991272

**Site 15) Facility:** < The New York Housing Authority, Lavanburg Homes, 126, 128, 130, 132, 140, and 142 Baruch Place, Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970201 G and 3604970203 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>  
Latitude 40.718490 / Longitude -73.976387

**Site 16) Facility:** < The New York Housing Authority, Astoria, 4-20 Astoria Blvd., Queens, Queens County, New York>  
Preliminary FIRM map: 3604970089 G and 3604970093 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (12feet) NAVD88 datum>

Latitude 40.773483 / Longitude -73.934979

**Site 17) Facility:** < The New York Housing Authority, LaGuardia, 250 Madison Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970203 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.71678 / Longitude -73.988637

**Site 18) Facility:** < The New York Housing Authority, Rangel Houses, 159-16 Harlem River Drive, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970079 G and 3604970083 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (10 feet) NAVD88 datum>

Latitude 40.833190 / Longitude -73.936567

**Site 19) Facility:** < The New York Housing Authority, Two Bridges (Site 7), 286 South Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970203 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.710676 / Longitude -73.986209

**Site 20) Facility:** < The New York Housing Authority, Beach 41<sup>st</sup> Street, 38-20 Beach Channel Drive, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970382 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (9, 10, and 11 feet) NAVD88 datum>

Latitude 40.596621 / Longitude -73.772576

**Site 21) Facility:** < The New York Housing Authority, Campos Plaza I, 633 East 13<sup>th</sup> Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970201 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.727506 / Longitude -73.977192

**Site 22) Facility:** < The New York Housing Authority, Campos Plaza II, East 11<sup>th</sup> Street / between Ave, A and 1<sup>st</sup> Ave, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970201 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.728602 / Longitude -73.977648

**Site 23) Facility:** < The New York Housing Authority, Coney Island 1B, 2007 Surf Avenue, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970353 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.57498/ Longitude -73.98673

**Site 24) Facility:** < The New York Housing Authority, East River Houses, 418 East 105<sup>th</sup> Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970087 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (12 and 13 feet) NAVD88 datum>

Latitude 40.787378 / Longitude -73.940098

**Site 25) Facility:** < The New York Housing Authority, Gowanus Houses, 201 Hoyt Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970211 G, 12/05/2013

Flood Hazard Area: < Shaded Zone X and Zone X >

Latitude 40.683322 / Longitude -73.988539

**Site 26) Facility:** < The New York Housing Authority, Isaacs Houses, 403 East 93rd Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970087 G and 360490089 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (12 and 13 feet) NAVD88 datum>

Latitude 40.781538 / Longitude -73.945396

**Site 27) Facility:** < The New York Housing Authority, Lower East 5, 89 and 97 Avenue C, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970201 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 feet) NAVD88 datum>

Latitude 40.723933 / Longitude -73.979246

**Site 28) Facility:** < The New York Housing Authority, Metro North Plaza, 302 E. 102<sup>nd</sup> Street, Manhattan, New York County, New York >

Preliminary FIRM map: 3604970087 G and 360490087 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (12) NAVD88 datum>

Latitude 40.787240 / Longitude -73.943771

**Site 29) Facility:** < The New York Housing Authority, Ocean Bay (Oceanside), 306 Beach 56<sup>th</sup> Street, Brooklyn, Kings County, New York >

Preliminary FIRM map: 3604970381 G and 360490383 G, 12/05/2013

Special Flood Hazard Area: < Zone AE Base Flood Elevation (10) NAVD88 datum>

Latitude 40.593916 / Longitude -73.785404

**Site 30) Facility:** < The New York Housing Authority, Jacob Riis I, 454 East 10<sup>th</sup> Street (between East 8<sup>th</sup> Ave. and East 13<sup>th</sup> Ave.), Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970201 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12) NAVD88 datum >  
Latitude 40.723760 / Longitude -73.974696

**Site 31) Facility:** < The New York Housing Authority, Jacob Riis II, 454 East 10<sup>th</sup> Street (between East 8<sup>th</sup> Ave. and East 13<sup>th</sup> Ave.), Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970201 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12) NAVD88 datum >  
Latitude 40.723760 / Longitude -73.974696

**Site 32) Facility:** < The New York Housing Authority, Smith Houses, 21 Street James Place, Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970184 G and 3604970203 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11, 12, and 13) NAVD88 datum;  
Zone VE Base Flood Elevation (13 and 14) NAVD88 datum >  
Latitude 40.710464 / Longitude -73.999311

**Site 33) Facility:** < The New York Housing Authority, Wald Houses, 54 Avenue D, Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970201 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11) NAVD88 datum >  
Latitude 40.720774 / Longitude -73.976237

**Site 34) Facility:** < The New York Housing Authority, Baruch Houses, 100 Columbia Street, Manhattan, New York County, New York >  
Preliminary FIRM map: 3604970201 G and 360497023 G, 12/05/2013  
Special Flood Hazard Area: < Zone AE Base Flood Elevation (11 and 12) NAVD88 datum >  
Latitude 40.716893 / Longitude -73.979006

N/A The Project is located in the wetland as identified by:

A review of the U.S. Fish and Wildlife National Wetland Inventory mapper on < 07/22/2015 > indicated that the proposed project locations are not located in a mapped wetland or in waters of the U.S. and will not likely adversely affect wetlands.

**STEP 2 - Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process (see 44 CFR 9.8).**

Not applicable - Project is not located in a floodplain or wetland.

Applicable - Notice will be or has been provided by:

A Cumulative Initial Public Notice was published in the New York Post 12/14/2012. An additional public notice may be provided upon finalization of the preliminary work plans.

**STEP 3 - Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions, and the “No Action” option) [see 44 CFR 9.9]. If a practicable alternative exists outside of the floodplain or wetland, FEMA must locate the action at the alternative site.**

Not applicable – Project is not located in a floodplain or in a wetland.

Applicable – Alternative identified in the EA Document or as described below:

**Alternative 1: No Action** - No action would leave the community without the function of the damaged facilities. Additionally, this would leave the damaged facilities and their environs in an unsafe condition, which would represent a safety hazard to the public and nearby properties.

**Alternative 2: Relocation outside of the Special Flood Hazard Area** – Relocating the facility requires the abandonment of the provision of residential housing services in the proximity to the communities served (i.e., the local “neighborhood”) which does not meet the purpose of the action. As some of the facilities have a historical / health and safety significance, an acceptable practicable alternative outside the floodplain has not been identified by the Applicant that allows the selection of the relocation alternative.

This option would abandon a special flooded hazard area site location and eliminate the hazards of unrepaired damaged facilities. This alternative eliminates investment at risk in the floodplain, reduces the vulnerabilities to human safety, and reduces the chance for property loss from floods. Selection of this alternative would have no substantial negative/adverse impacts, upstream or downstream, in the floodplain and would likely restore some lost benefits of floodplains.

**Alternative 3: Proposed Action** - The proposed project is for restoration of a facility, including applicable codes and standards and conditions to comply with requirements of EO 11988 and the implementing regulations at 44 CFR Part 9.

The EO allows for locating these actions in the floodplain because the impacts of the action can be minimized and the importance of the action clearly outweighs other EO requirements.

Restoration of the damaged facilities at the currently proposed location is a practicable option because it has been selected by the New York Housing Authority as a viable alternative that is economically feasible, socially acceptable, and has been determined by the community leaders to serve the best interests of the entire community.

**STEP 4 - Identify the full range or potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).**

Not applicable – Project is not located in a floodplain or in a wetland.

Applicable – Alternative identified in the EA document or as described below:

**Alternative 3: Proposed Action** – Restoration at the current location results in the restoration of the damaged buildings and eliminates the hazards of unrepaired facilities. The action requires significantly less resource and initiative than relocation outside the special flood hazard area and has been selected as a practicable alternative by those representing the community served.

A review of the natural environment, social concerns, and the economic aspects of the proposed project indicates that replacement of the facilities in their proposed and desired location is a practicable alternative and that no practicable alternative has been identified outside of the special flood hazard area.

**STEP 5 - Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).**

Not applicable – Project is not located in a floodplain or in a wetland.

Applicable – Mitigation measures identified in the EA document or as described below:

**Alternative 3:** Replacement/repairs shall be in accordance with local floodplain ordinances with applicable codes and standards applied to mitigate and minimize adverse effects. Specific mitigation measures include: Some of the identified developments will relocate boiler plants in new annexes located next to existing buildings and elevate equipment to the proposed Design Flood Elevation (DFE). Dry flood proofing measures include: emergency



generators, backflow preventers; flood barrier/doors; extending areaway retaining walls; new areaways; extending ventilation pipes; elevating weep holes; and sealing wall penetrations; some of the identified developments will relocate electrical room equipment to new pre-fabricated annexes attached to existing buildings and elevate to proposed DFE.

**STEP 6 - Re-evaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values, and second, if alternatives preliminarily rejected at Step #3 are practicable in light of the information gained in Steps #4 and #5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.**

Not applicable – Project is not located in a floodplain or in a wetland.

Applicable – Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain and community/socioeconomic expectations.

**STEP 7 - Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).**

Not applicable – Project is not located in a floodplain or in a wetland.

Applicable – Finding is or will be prepared as described below:

An initial Cumulative Public Notice was published on 12/14/2012. For routine activities, this will be the only public notice provided. Other activities and those involving facilities that do not meet the four criteria are required to undergo more detailed review, including study of alternate locations. Subsequent public notices regarding such projects will be published, if necessary, as more specific information becomes available.

**STEP 8 - Review the implementation and post-implementation phases of the proposed action to ensure the requirements of the Order are fully implemented. Oversight responsibility shall be integrated into the existing process.**

Not applicable – Project is not located in a floodplain or in a wetland.

  **X**   Applicable – Approval is conditioned on review of implementation and post-implementation phases to ensure compliance with the order(s).

Review the implementation and post-implementation phase of the proposed action to ensure that the requirement(s) stated in 44 CFR 9.11 are fully implemented.

  **X**   Applicable – Oversight responsibility shall be integrated into existing processes and project completion in accordance with all applicable floodplain ordinances and codes and standards shall be verified at project completion.

*Programmatic Environmental Assessment  
New York City Housing Authority Public Housing Resiliency*

**Document D:  
Proposed NYCHA Development Project**

## **Proposed NYCHA Development Flood Protection and Storm Water Management HMGP**

All 33 of NYCHA's flooded developments lost power during Sandy and the damaged buildings continued to be without electricity for days or weeks until crews could install temporary systems. Residents were left without access to critical services like lighting, hot water, heat, elevators and trash compactors. Contaminated saltwater inundated the 33 sites, contaminating over 350 acres of land. Surge water was just as destructive to the elements outside of the buildings as it was to the buildings themselves. Site-wide water inundation caused support walls to collapse, sink holes to form and destroyed everything in its path including residents' personal vehicles, maintenance equipment, playground sets, site lighting, conduit and forced sediment and debris into all of the electrical and sewer spaces.

The New York City Housing Authority (NYCHA) is proposing a scalable, phased approach for funding through the FEMA 404 Hazard Mitigation Grant Program (HMGP) in order to effectively identify the appropriate mitigation solutions for each development that was affected by Sandy. A comprehensive plan was produced by NYCHA for each of the 33 damaged developments that are designed to achieve effective mitigation through a risk-based, scientific analysis. The following (8) developments have been selected by NYCHA:

- Beach 41st Street
- Coney Island
- Coney Island 8
- Gravesend
- Ocean Bay Oceanside
- O'Dwyer
- Redfern
- Surfside

Elements of this proposed HMGP project may include the following conceptual measures identified across NYCHA developments:

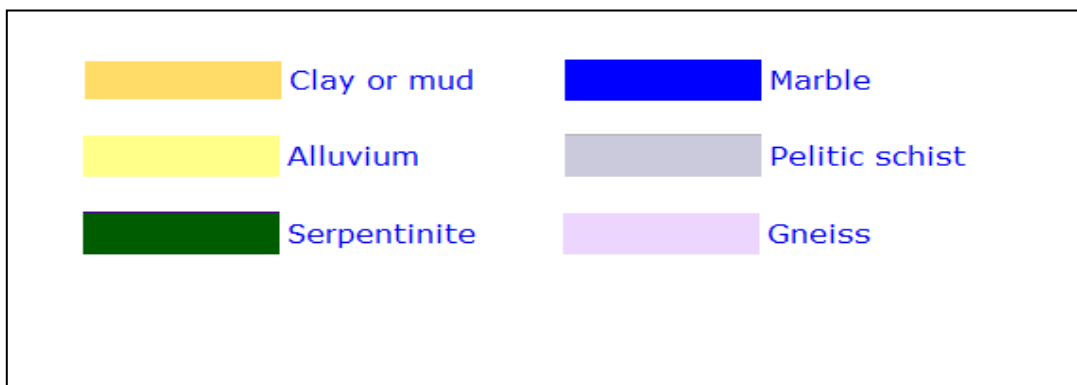
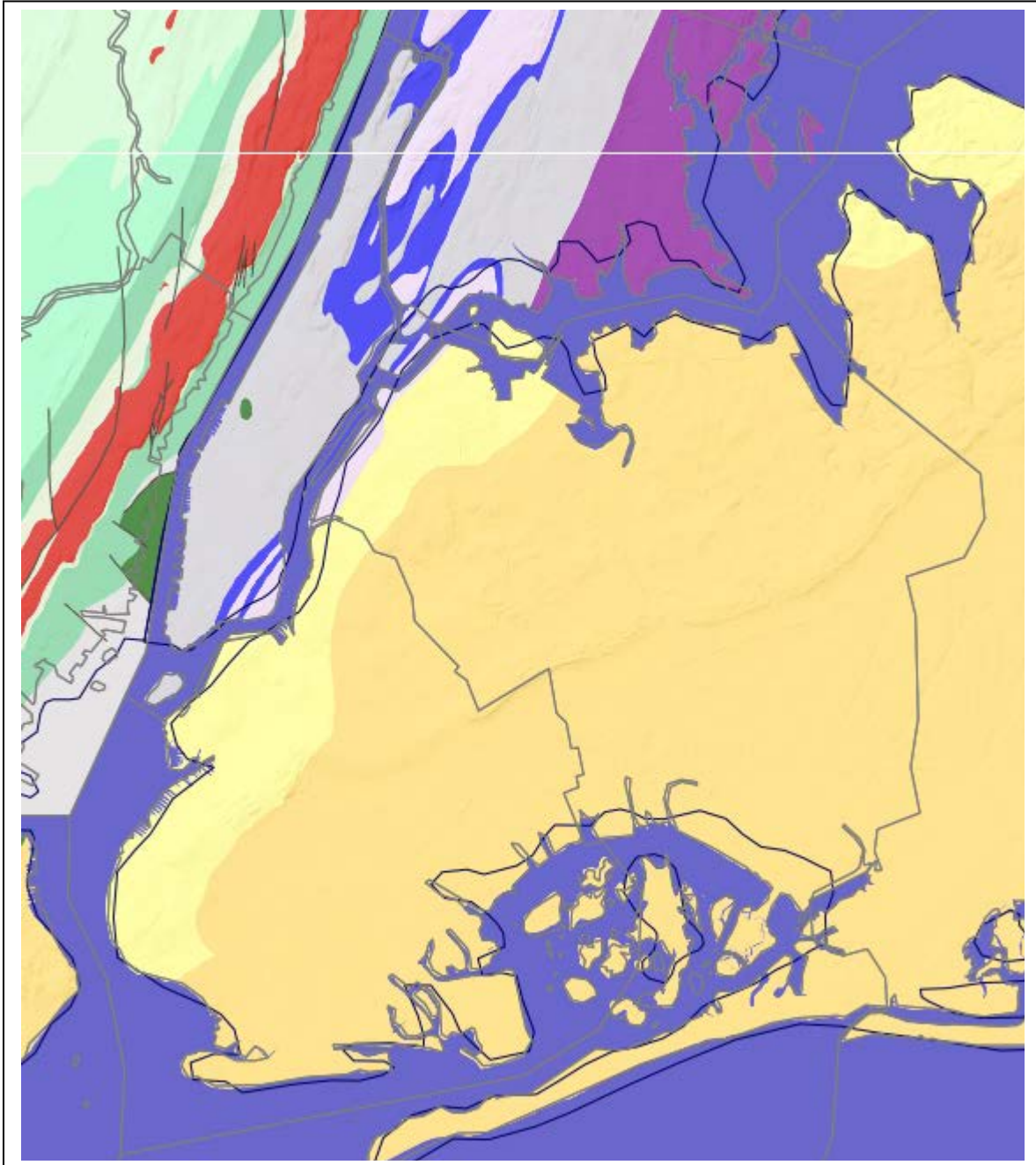
- Depressed Water Storage Areas (Water Squares) - A water square is a public amenity space centered around one or more paved, depressed rainwater storage areas. Water squares also double as recreational and public space. The water squares at NYCHA are being created to hold between 200,000 and 500,000 gallons of water each, making a significant contribution towards keeping the buildings safe from localized flooding, as well as contributing each site to have a zero stormwater footprint
- Blue Roofs - Controlled-flow rooftop detention systems, also known as "blue roofs" are non-vegetated systems detain stormwater. Blue roofs are less costly and heavy than their green counterparts. Weirs at the roof drain inlets and along the roof create damming and temporary ponding on a small scale, with a gradual release of stormwater..

- Downspout disconnection - This is part of the water flow control system re-routes rooftop drainage pipes to rain cisterns, underground storage tanks, and bioswales that allow the rain to be reused or soak into the soil rather than being sent to the municipal sewer system.
- Bioswales, raingardens or vegetated channels - Move large volumes of stormwater from paved surfaces and rooftops to other water management features such as water parks and other forms of storage.
- Permeable pavement - Designed for NYCHA properties to include pervious concrete and pavers on pedestrian passageways and porous asphalt on parking areas. As part of an engineered system, the porous surfaces infiltrate, treat and store rainwater where it falls in under-surface aggregate beds.
- Grading of surfaces - Directs water towards the water management features to increase the volume of water treated and managed by green infrastructure features, rather than the municipal sewer system.
- Underground stormwater retention /detention chambers - Chambers for storage of stormwater collected from surrounding impervious areas and are located underground, including under the parking lots and recreational areas.
- Soil amendments - Organic bio-solids that get mixed in with existing soils to increase the absorption capacity and health of the soil. They will allow the sites to absorb more water and will mitigate soil toxicity and improve nutrient deficiencies.
- Perimeter Surge Protection - NYCHA understands that while the City is working on large-scale coastal protection, these solutions could take decades to construct, and NYCHA must ensure the protection of its residents as quickly as possible. NYCHA's surge protection solutions will be determined during Phase 1 design. NYCHA is looking at creating surge protection through the construction of features that build up the edges of the site through the use of sod. Creating elevated edges will prevent storm surge damage by creating a barrier that can withstand and absorb the impacts of storm surge. These elevated edges are multi-purpose and become community amenities that are usable passive recreation spaces and enhance a site's visual appeal, not achievable with traditional walls. When the construction of a soft elevated edge is not feasible, because of the height of protection needed coupled with the urban nature of NYCHA's developments, NYCHA will supplement the use of rapidly deployable elements to complete the permanent protections of its developments. Components include permanent perimeter anchor points embedded in the sidewalks and soil to which rapidly deployable components will attach to prevent surge inundations.

**Appendix B:  
Figures**

**Figure A:**  
**Geologic Map of the Project Area**

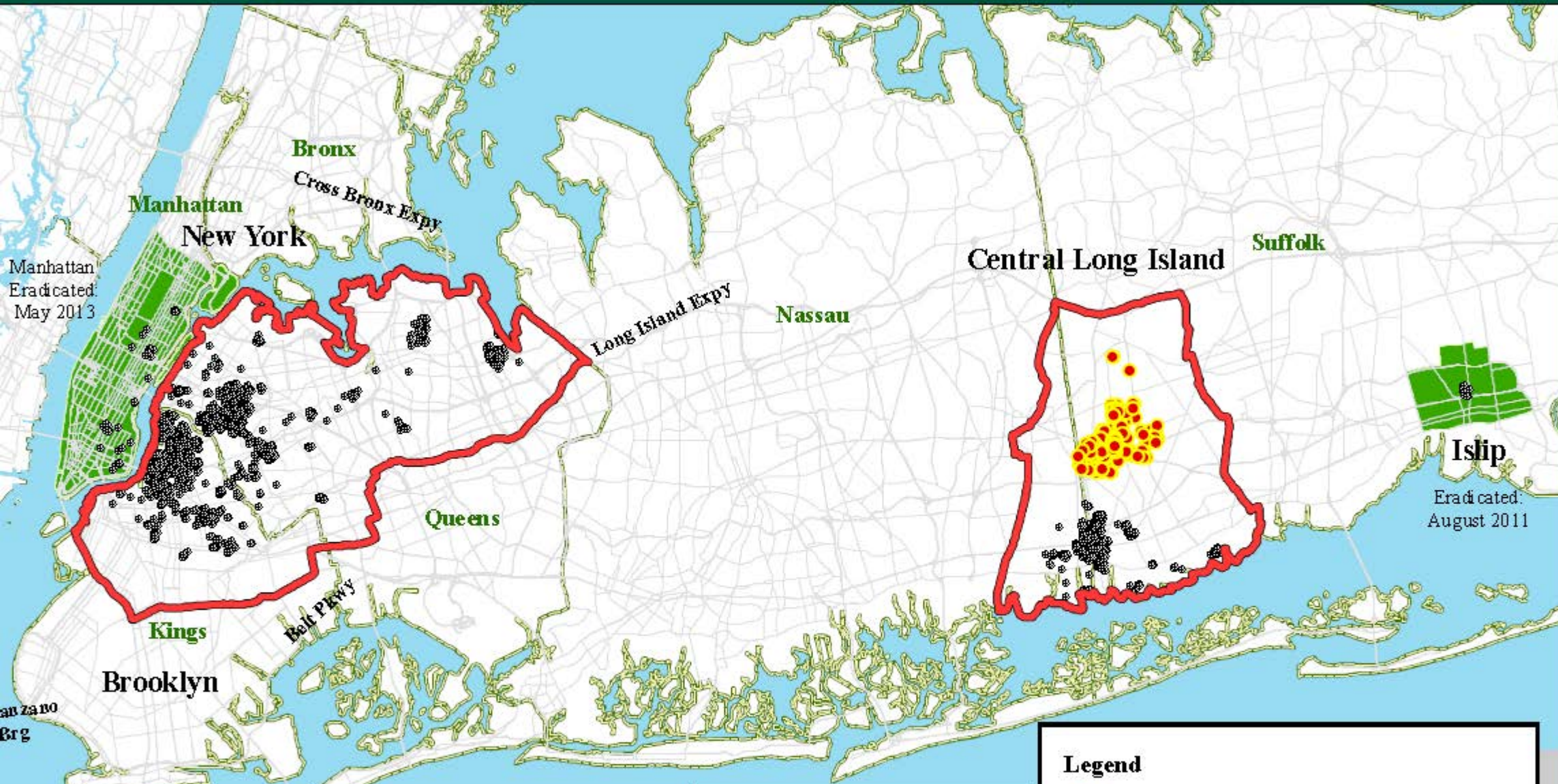
*Programmatic Environmental Assessment  
New York City Housing Authority Public Housing Resiliency*





**Figure B:**  
**Asian Longhorn Beetle Quarantine Zone**

# Asian Longhorned Beetle Eradication Program New York Overview 2014



Manhattan  
Eradicated:  
May 2013

Islip  
Eradicated:  
August 2011

**Legend**

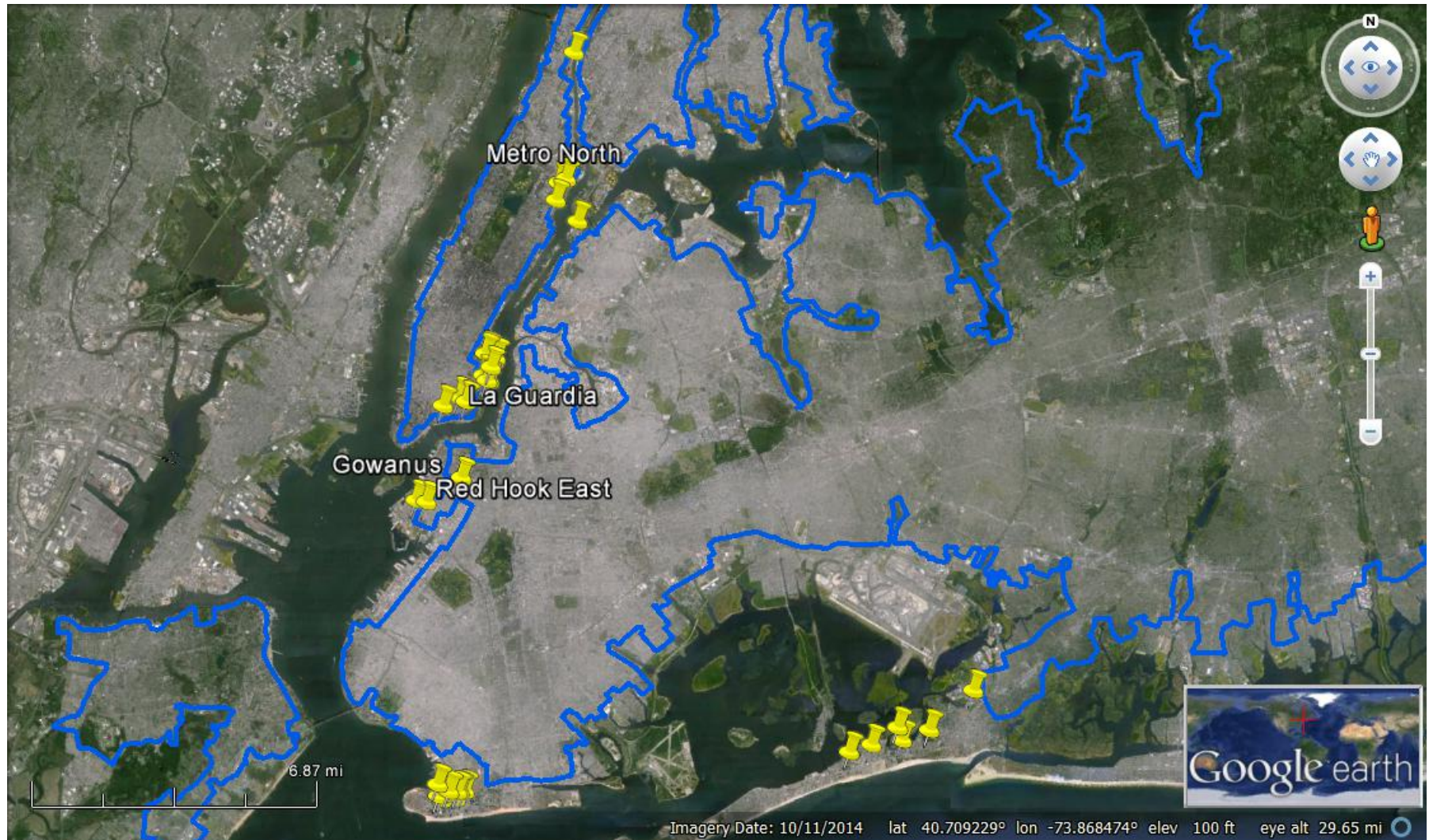
- **Infested Trees (2013-2014)**
- **Infested Trees (historical)**
- Regulated Boundaries (Active)**
- Previously Regulated Area**
- Major Roads**
- NYC Boroughs or County Boundaries**



DISCLAIMER: These data, and all the information contained therein, have been collected by the U.S. Department of Agriculture Animal and Plant Health Inspection Service (APHIS), or by its contractors or APHIS' third parties, and provided to you as a public service and is the sole property of APHIS. Data may be used as a read-to-know basis only and must be used for their intended government purpose(s). All information contained within this data are subject to required Federal safeguards and shall only be shared and for use consistent with the Trade Secret Act (18 U.S.C. 1905), the Privacy Act of 1974, as amended (5 U.S.C. 552a), the Freedom of Information Act (5 U.S.C. 552), the confidentiality provisions of the Food Security Act of 1985 (7 U.S.C. 2276), Section 1619 of the Food, Conservation, and Energy Act of 2008 (7 U.S.C. 2291), and other applicable Federal laws and implementing regulations, as well as with the confidentiality or other data provisions of any other applicable laws or regulations between APHIS and a contractor. Source data provided by: NYC DOITT Office of GIS, & Technical Assistance; The New York State Department of Agriculture & Markets; The New York State Department of Environmental Conservation; and The New York City Department of Parks & Recreation.



**Figure C:  
Coastal Zone**

*Programmatic Environmental Assessment*  
*New York City Housing Authority Public Housing Resiliency*



-  NYCHA Developments
-  Coastal Zone Boundary

**Appendix C:  
Tables**

**Table A:  
Thresholds that Would Trigger a  
Site Specific EA**

**Table A. Thresholds for Preparing Tiered Site-Specific Environmental Assessments for NYCHA Utility Resiliency**

Area of Evaluation	Action Covered by this PEA	Tiered Site-Specific Environmental Assessment Required
<p><b>Geology, Topography, and Soils</b></p>	<p>The proposed action would have no, negligible, or minor impacts to geology and soils. Projects proposed in areas characterized by susceptibility to structural instability, excessive erodibility, or steep slopes would be implemented in accordance with local building codes and appropriate seismic design and construction standards.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Impacts on geology, topography, and soils, as a result of the proposed action has major negative impact and go beyond the perimeter of the project site.</p>
<p><b>Land Use</b></p>	<p>No impacts to land use.</p> <p>or</p> <p>The proposed action would have negligible or minor impacts to land use and would be consistent with surrounding or planned land uses. The proposed action would be consistent with NYC zoning regulations.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of major.</p>	<p>Any proposed action will significantly change the surrounding land uses in the short- and long-term.</p> <p>and</p> <p>Any proposed action is in violation of NYC zoning regulations where the action could not be mitigated or changed to come within compliance of zoning regulations.</p>

## Affected Environment and Impact Evaluation

Area of Evaluation	Action Covered by this PEA	Tiered Site-Specific Environmental Assessment Required
<b>Air Quality</b>	<p>Emissions from the proposed action for NAAQS in nonattainment and maintenance areas would be less than exceedance levels as defined Section 5.3. Emissions in attainment areas would not cause air quality to go out of attainment for any NAAQS.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Tiered SEA unlikely, if emissions are projected to exceed NAAQS levels, subgrantee will be required to obtain permits from USEPA before work can begin.</p>
<b>Climate change</b>	<p>Emissions from the proposed action for GHG would be less than exceedance levels as defined in Section 5.3.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Tiered SEA unlikely, if emissions are projected to exceed NAAQS levels, subgrantee will be required to obtain permits from USEPA before work can begin. NYCHA sites sited within the 100 year floodplain will require flood impact minimization measures. No SEA will be required.</p>
<b>Biological Resources</b>	<p>The proposed action would have no, negligible, minor, or moderate impacts to native species, their habitats, or the natural processes sustaining them. Population levels of native species would not be affected. Sufficient habitat would remain functional to maintain viability of all species.</p> <p>and</p> <p>In regard to federally listed species and critical habitat, FEMA can make a “No Effect” determination.</p> <p>or</p> <p>FEMA can make a “Not Likely to Adversely Affect” determination along with concurrence from USFWS.</p> <p>And</p> <p>USFWS Mitigation measures are used to reduce the level of impacts to Migratory Birds below the level of significance.</p>	<p>The proposed action may have significant impact on native species, their habitats, or the natural processes sustaining them. Population numbers, population structure, genetic variability, and other demographic factors for species might have large, short-term declines, with long-term population numbers significantly depressed. Loss of habitat would affect the long-term viability of native species.</p> <p>or</p> <p>FEMA determines that the proposed action is likely to adversely affect a listed species or will adversely modify critical habitat.</p>



<b>Area of Evaluation</b>	<b>Action Covered by this PEA</b>	<b>Tiered Site-Specific Environmental Assessment Required</b>
<b>Water Quality and Resources</b>	<p>The proposed action would have no, negligible or minor impacts to water quality and would be at or below water quality standards or criteria. Localized and short-term alterations in water quality and hydrologic conditions relative to historical baseline may occur.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p> <p>or</p> <p>Project has obtained and complied with all applicable 401 and 404 permits.</p> <p>or</p> <p>Will have no negative impact to wetlands or floodplains.</p>	<p>The proposed action would cause or contribute to existing exceedances of water quality standards on a prolonged basis.</p>
<b>Coastal Resources</b>	<p>Project is not located in or near a CZMA zone</p> <p>or</p> <p>Project will comply with the 44 New York State Coastal Policies.</p>	<p>Project does not comply with the 44 New York State Coastal Policies.</p> <p>and</p> <p>Project cannot be mitigated to ensure compliance with Coastal Policies.</p>
<b>Cultural Resources</b>	<p>Project is not located near structures 50 years or older and is not located near sites listed on the National Register.</p> <p>or</p> <p>FEMA can make a determination of “No Adverse Effect” with concurrence from SHPO/THPO.</p>	<p>FEMA makes an “Adverse Effect” determination with concurrence from SHPO/THPO and the parties involved cannot resolve issue.</p>
<b>Environmental Justice</b>	<p>There would be no disproportionately high and adverse environmental or health effects to low-income and/or minority populations.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Tiered SEA will be unlikely, subgrantee will work with USEPA to mitigate any impacts to low-income and /or minority populations.</p>

## Affected Environment and Impact Evaluation

Area of Evaluation	Action Covered by this PEA	Tiered Site-Specific Environmental Assessment Required
<b>Infrastructure</b>	<p>Temporary delays and interruptions in public services, utilities, and transportation.</p> <p>or</p> <p>Utility connection performed in accordance with public service companies and applicable codes and standards.</p>	<p>Unlikely to require and SEA, agreement between subgrantee and local municipalities will be agreed upon for any changes in public services, utilities, and transportation.</p>
<b>Public Health and Safety</b>	<p>There would be no short- or long-term adverse impacts to public safety.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Tiered SEA will be unlikely; subgrantee will work with local public health and safety agencies on any potential adverse impacts solutions.</p>
<b>Hazardous Materials</b>	<p>Hazardous or toxic materials and/or wastes resulting from the proposed action would be safely and adequately managed in accordance with all applicable regulations and policies, with limited exposures or risks.</p>	<p>The proposed action would result in a net increase in the amount of hazardous or toxic materials and/or wastes to be handled, stored, used, or disposed of, resulting in unacceptable risk, exceedance of available waste disposal capacity, or probable regulatory violation(s).</p>
<b>Noise</b>	<p>Noise levels resulting from the proposed action would not exceed typical noise levels expected from construction equipment or generators. Noise generated by construction and operation of the facility would be temporary or short-term in nature.</p> <p>or</p> <p>Mitigation measures are used to reduce the level of impacts below the level of significance.</p>	<p>Tiered SEA unlikely, subgrantee will reach out to USEPA and/or OSHA to assess permanent exceeded noise limits.</p>

**Table B:  
NYCHA Developments**

<b>NYCHA Development Name</b>	<b>Administration Office Address</b>	<b>Borough</b>	<b>Funding Source*</b>
Mayor Fiorello H. La Guardia	45 Rutgers Street Manhattan, NY 10002	Manhattan	PA
Mayor William O'Dwyer Gardens	2975 West 33rd Street Brooklyn, NY 11224	Brooklyn	PA
Metro North Plaza	307 East 101st Street Manhattan, NY 10029	Manhattan	PA
Ocean Bay Apartments (Bayside)	54-81 Almeda Avenue Queens, NY 11692	Queens	PA and HMGP
Ocean Bay Apartments (Oceanside)	306 Beach 56th Street Queens, NY 11692	Queens	PA
Pedro Albizu Campos Plaza I	635 East 12th Street Manhattan, NY 10009	Manhattan	PA
Pedro Albizu Campos Plaza II	643 East 13th Street Manhattan, NY 10009	Manhattan	PA
Ralph J. Rangel Houses	159-14 Harlem River Drive Manhattan, NY 10039	Manhattan	PA
Redfern	14-60 Beach Channel Drive Queens, NY 11691	Queens	PA and HMGP
Red Hook (East)	62 Mill Street Brooklyn, NY 11231	Brooklyn	PA and HMGP
Red Hook (West)	80 Dwight Street Brooklyn, NY 11231	Brooklyn	PA
Stanley M. Isaacs Houses	419 East 93rd Street Manhattan, NY 10128	Manhattan	PA
Surfside Gardens	2960 West 31st Street Brooklyn, NY 11224	Brooklyn	PA
Two Bridges Urban Renewal Area (Site 7)	286 South Street Manhattan, NY 10002	Manhattan	PA and HMGP

\*PA=Public Assistance and HMGP=Hazard Mitigation Grant Program

**Table B: NYCHA Developments Considered in this PEA**

<b>NYCHA Development Name</b>	<b>Administration Office Address</b>	<b>Borough</b>	<b>Funding Source*</b>
Astoria	4-21 Astoria Blvd. Queens, NY 11102	Queens	PA
Beach 41st Street-Beach Channel Drive	40-20 Beach Channel Drive Queens, NY 11691	Queens	PA and HMGP
Bernard Haber Houses	3058 West 24th Street Brooklyn, NY 11224	Brooklyn	PA
Bernard M. Baruch	605 FDR Drive Manhattan, NY 10002	Manhattan	PA
Campos Plaza	635 E 12th St Manhattan, NY 10009	Manhattan	HMGP
Carleton Manor	71-15 Beach Channel Drive Queens, NY 11692	Queens	PA
Coney Island Houses	3025 West 32nd Street Brooklyn, NY 11224	Brooklyn	PA
Coney Island I (Site 1B)	2007 Surf Avenue Brooklyn, NY 11224	Brooklyn	PA
Coney Island I (Site 8)	2950 West 35th Street Brooklyn, NY 11224	Brooklyn	PA
Coney Island I (Sites 4 & 5)	2925 West 28th Street Brooklyn, NY 11224	Brooklyn	PA and HMGP
East River Houses	410 East 105th Street Manhattan, NY 10029	Manhattan	PA
Gerald J. Carey Gardens	2946 West 23rd Street Brooklyn NY 11224	Brooklyn	PA
Governor Alfred E. Smith Houses	20 Catherine Slip Manhattan, NY 10038	Manhattan	PA
Gowanus Houses	175 Hoyt Street Brooklyn, NY 11217	Brooklyn	PA
Gravesend Houses	3225 Neptune Avenue Brooklyn, NY 11224	Brooklyn	PA and HMGP
Hammel Houses	85-02 Rockaway Beach Blvd Queens, NY 11693	Queens	PA and HMGP
Jacob Riis Houses I	152 Avenue D Manhattan, NY 10009	Manhattan	PA and HMGP
Jacob Riis Houses II	765 FDR Drive Manhattan, NY 10009	Manhattan	PA
Lavanburg Homes	126 Baruch Place Manhattan, NY 10002	Manhattan	PA
Lillian Wald Houses	10 Avenue D Manhattan, NY 10009	Manhattan	PA

<b>NYCHA Development Name</b>	<b>Administration Office Address</b>	<b>Borough</b>	<b>Funding Source*</b>
Mayor Fiorello H. La Guardia	45 Rutgers Street Manhattan, NY 10002	Manhattan	PA
Mayor William O'Dwyer Gardens	2975 West 33rd Street Brooklyn, NY 11224	Brooklyn	PA
Metro North Plaza	307 East 101st Street Manhattan, NY 10029	Manhattan	PA
Ocean Bay Apartments (Bayside)	54-81 Almeda Avenue Queens, NY 11692	Queens	PA and HMGP
Ocean Bay Apartments (Oceanside)	306 Beach 56th Street Queens, NY 11692	Queens	PA
Pedro Albizu Campos Plaza I	635 East 12th Street Manhattan, NY 10009	Manhattan	PA
Pedro Albizu Campos Plaza II	643 East 13th Street Manhattan, NY 10009	Manhattan	PA
Ralph J. Rangel Houses	159-14 Harlem River Drive Manhattan, NY 10039	Manhattan	PA
Redfern	14-60 Beach Channel Drive Queens, NY 11691	Queens	PA and HMGP
Red Hook (East)	62 Mill Street Brooklyn, NY 11231	Brooklyn	PA and HMGP
Red Hook (West)	80 Dwight Street Brooklyn, NY 11231	Brooklyn	PA
Stanley M. Isaacs Houses	419 East 93rd Street Manhattan, NY 10128	Manhattan	PA
Surfside Gardens	2960 West 31st Street Brooklyn, NY 11224	Brooklyn	PA
Two Bridges Urban Renewal Area (Site 7)	286 South Street Manhattan, NY 10002	Manhattan	PA and HMGP

\*PA=Public Assistance and HMGP=Hazard Mitigation Grant Program

**Table C:**  
**New York State NAAQS Levels**

## National Ambient Air Quality Standards (NAAQS)

Pollutant	Primary		Secondary	
	ppm	µg/m <sup>3</sup>	ppm	µg/m <sup>3</sup>
<b>Carbon Monoxide (CO)</b>				
8-Hour Average <sup>(1)</sup>	9	10,000	None	
1-Hour Average <sup>(1)</sup>	35	40,000		
<b>Lead</b>				
Rolling 3-Month Average <sup>(2)</sup>	NA	0.15	NA	0.15
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>				
1-Hour Average <sup>(3)</sup>	0.100	189	None	
Annual Average	0.053	100	0.053	100
<b>Ozone (O<sub>3</sub>)</b>				
8-Hour Average <sup>(4,5)</sup>	0.075	150	0.075	150
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>				
24-Hour Average <sup>(1)</sup>	NA	150	NA	150
<b>Fine Respirable Particulate Matter (PM<sub>2.5</sub>)</b>				
Annual Mean <sup>(6)</sup>	NA	12	NA	15
24-Hour Average <sup>(7)</sup>	NA	35	NA	35
<b>Sulfur Dioxide (SO<sub>2</sub>) <sup>(8)</sup></b>				
1-Hour Average <sup>(9)</sup>	0.075	196	NA	NA
Maximum 3-Hour Average <sup>(1)</sup>	NA	NA	0.50	1,300
<p><b>Notes:</b></p> <p>ppm – parts per million (unit of measure for gases only)</p> <p>µg/m<sup>3</sup> – micrograms per cubic meter (unit of measure for gases and particles, including lead)</p> <p>NA – not applicable</p> <p>All annual periods refer to calendar year.</p> <p>Standards are defined in ppm. Approximately equivalent concentrations in µg/m<sup>3</sup> are presented.</p> <p><sup>(1)</sup> Not to be exceeded more than once a year.</p> <p><sup>(2)</sup> EPA has lowered the NAAQS down from 1.5 µg/m<sup>3</sup>, effective January 12, 2009.</p> <p><sup>(3)</sup> 3-year average of the annual 98th percentile daily maximum 1-hr average concentration. Effective April 12, 2010.</p> <p><sup>(4)</sup> 3-year average of the annual fourth highest daily maximum 8-hr average concentration.</p> <p><sup>(5)</sup> EPA has proposed lowering the primary standard further to within the range 0.060-0.070 ppm, and adding a secondary standard measured as a cumulative concentration within the range of 7 to 15 ppm-hours aimed mainly at protecting sensitive vegetation. A final decision on these standards has been postponed and is currently in review.</p> <p><sup>(6)</sup> 3-year average of annual mean. EPA has lowered the primary standard from 15 µg/m<sup>3</sup>, effective March 2013.</p> <p><sup>(7)</sup> Not to be exceeded by the annual 98th percentile when averaged over 3 years.</p> <p><sup>(8)</sup> EPA revoked the 24-hour and annual primary standards, replacing them with a 1-hour average standard. Effective August 23, 2010.</p> <p><sup>(9)</sup> 3-year average of the annual 99th percentile daily maximum 1-hr average concentration.</p> <p><b>Source:</b> 40 CFR Part 50: National Primary and Secondary Ambient Air Quality Standards.</p>				



### Representative Monitored Ambient Air Quality Data

Pollutant	Location	Units	Averaging Period	Concentration	NAAQS
CO	Queens College 2, Queens	ppm	8-hour	1.0	9
	Queens College 2, Queens		1-hour	1.9	35
SO <sub>2</sub>	Queens College 2, Queens	µg/m <sup>3</sup>	3-hour	42.2	1,300
			1-hour	52.7	196
PM <sub>10</sub>	P.S. 19, Manhattan	µg/m <sup>3</sup>	24-hour	40	150
PM <sub>2.5</sub>	JHS 126, Brooklyn	µg/m <sup>3</sup>	Annual	9.8	12
			24-hour	23.4	35
NO <sub>2</sub>	Queens College 2, Queens	µg/m <sup>3</sup>	Annual	33	100
			1-hour	114	189
Lead	IS 52, Bronx	µg/m <sup>3</sup>	3-month	0.005	0.15
Ozone	Queens College 2, Queens	ppm	8-hour	0.079	0.075

**Notes:**

-Based on the NAAQS definitions, the CO and 3-hour SO<sub>2</sub> concentrations for short-term averages are the second-highest from the year; the 3-hour SO<sub>2</sub> concentration is based on 2012 data, which is the most recent available data from DEC.

-SO<sub>2</sub> 1-hour and NO<sub>2</sub> 1-hour concentrations are the average of the 99th percentile and 98th percentile, respectively, of the highest daily 1-hour maximum from 2011 to 2013.

-PM<sub>2.5</sub> annual concentrations are the average of 2011–2013, and the 24-hour concentration is the average of the annual 98th percentiles in 2011- 2013.

-8-Hour average ozone concentrations are the average of the 4th highest-daily values from 2011 to 2013.

**Source:** DEC, New York State Ambient Air Quality Data.

**Table D:  
Minority Population by Census Block**

**Table D: Minority and Low Income Population by Census Block**

<b>NYCHA Development Name</b>	<b>Minority Population</b>	<b>Low Income Population</b>	<b>Borough</b>
Astoria	98.00%	83.00%	Queens
Beach 41st Street-Beach Channel	100.00%	92.00%	Queens
Bernard Haber Houses	37.00%	89.00%	Brooklyn
Bernard M. Baruch	97.00%	71.00%	Manhattan
Carleton Manor	75.00%	29.00%	Queens
Coney Island Houses	83.00%	74.00%	Brooklyn
Coney Island I (Site 1B)	80.00%	72.00%	Brooklyn
Coney Island I (Site 8)	50.00%	86.00%	Brooklyn
Coney Island I (Sites 4 & 5)	87.00%	46.00%	Brooklyn
East River Houses	99.00%	66.00%	Manhattan
Gerald J. Carey Gardens	89.00%	61.00%	Brooklyn
Governor Alfred E. Smith Houses	89.00%	52.00%	Manhattan
Gowanus Houses	100.00%	67.00%	Brooklyn
Gravesend Houses	85.00%	68.00%	Brooklyn
Hammel Houses	93.00%	52.00%	Queens
Jacob Riis Houses I	100.00%	66.00%	Manhattan
Jacob Riis Houses II	91.00%	60.00%	Manhattan
Lavanburg Homes	98.00%	75.00%	Manhattan
Lillian Wald Houses	98.00%	81.00%	Manhattan
Mayor Fiorello H. LaGuardia	98.00%	72.00%	Manhattan
Mayor William O'Dwyer Gardens	61.00%	55.00%	Brooklyn
Metro North Plaza	91.00%	42.00%	Manhattan
Ocean Bay Apartments (Bayside)	100.00%	49.00%	Queens
Ocean Bay Apartments (Oceanside)	97.00%	70.00%	Queens
Pedro Albizu Campos Plaza I	66.00%	66.00%	Manhattan
Pedro Albizu Campos Plaza II	79.00%	47.00%	Manhattan
Ralph J. Rangel Houses	98.00%	77.00%	Manhattan
Redfern	99.00%	74.00%	Queens
Red Hook (East)	95.00%	62.00%	Brooklyn
Red Hook (West)	98.00%	84.00%	Brooklyn
Stanley M. Isaacs Houses	78.00%	47.00%	Manhattan
Surfside Gardens	95.00%	60.00%	Brooklyn
Two Bridges Urban Renewal Area (Site 7)	98.00%	72.00%	Manhattan

**Appendix D:  
Correspondence**

**Correspondence A:  
State of New York Department of State Coastal Zone Management Act  
Consultation and Correspondence**



FEMA

U.S. Department of Homeland Security  
FEMA-4085-DR-NY  
Sandy Recovery Field Office, Forest Hills Tower  
118-35 Queens Blvd., 6<sup>th</sup> Floor  
Forest Hills, NY 11375

August 12, 2015

Mr. Jeffrey Zappieri  
Consistency Review, New York Coastal Management Program  
New York Department of State  
One Commerce Place  
99 Washington Avenue, Suite 1010  
Albany, New York 12231-0001

Re: State's Coastal Management Program Consistency Review of FEMA-4085-DR-NY Super Storm Sandy: NYC Housing Authority – Public Housing Rehabilitation and Resiliency

Dear Mr. Zappieri:

The Federal Emergency Management Agency (FEMA) is proposing to provide federal funding from its Public Assistance (PA) Program to assist the NYC Housing Authority with the construction of new boiler plant buildings, new electrical annex buildings, the installation of power generators and the enhancement of associated utility corridors throughout 29 communities (Figure 1(a)-(k)) located in Manhattan (New York County), Brooklyn (Kings County), and Queens County (Table 1). All of the facilities will be equipped with a new energy-efficient natural gas power backup generator, ranging from 60 kW to 1,000 kW. These will be located on the rooftop of the buildings, or in a new boiler plant building (described below) if not on the rooftop. The new standby generators will require the construction of new electrical annexes to accommodate the required electrical systems and controls. These annexes will either be housed in another separate standalone building, or incorporated into already existing available space in individual residential buildings. The new electrical annex buildings will not exceed 6,000 SF and will be elevated to the minimum base flood elevation (BFE) plus one foot for the design flood elevation (DFE). A design criterion that considers sea level rise will further elevate the building up to 2.5 feet DFE. Trenches for the repair and replacement of, or installation of new, utility lines may be needed. If required, ground disturbance is not expected to exceed eight feet wide and 12 feet deep, and will occur in previously disturbed ground throughout NYCHA property. Additionally, the majority of the facilities will receive new boiler plant buildings, with the damaged oil-fired boilers being replaced with energy-efficient dual-fuel boilers operating primarily on natural gas. These new buildings will not exceed 10,000 SF, and the floor will be elevated to a minimum DFE, including the sea level rise criterion of an additional 2.5 feet. The new boiler plants will either be standalone buildings or attached to existing buildings, depending on individual site conditions.

New York State Coastal Policies 1 through 44 have been reviewed with their respect to the proposed project to be performed per FEMA's disaster recovery operations. Based on this review, FEMA has determined that the above referenced proposed activities are consistent with the policies of the New York State Coastal Management Program (CMP) and will not hinder the achievement of those policies. A summary of the proposed project's consistency with the State Coastal Policies is included as an attachment.

FEMA is seeking the New York Department of State's (NYDOS) concurrence with FEMA's Coastal Zone Consistency Determination, in accordance with the requirement of the Coastal Zone Management Act of 1972 (15 CFR Part 930), prior to the release of federal funding to the grant recipient.

FEMA Environmental and Historic Preservation (EHP) looks forward to your office's feedback within 60 days of receipt of this letter. If you have any questions, please contact me at (202) 286-1627 or at [john.dawson@fema.dhs.gov](mailto:john.dawson@fema.dhs.gov).

Sincerely,

John Dawson  
EHP, Branch Director  
New York Sandy Recovery Field Office/4085-DR-NY  
Desk (no voice mail): (718) 575-7289  
Cell: (202) 286-1627

JD/tf

Encl: Location Maps  
Communities Table  
Consistencies with Coastal Policies of New York Worksheet

# **ATTACHMENTS**



Figure 1. NYC Housing Authority communities (a).



Figure 1(b).

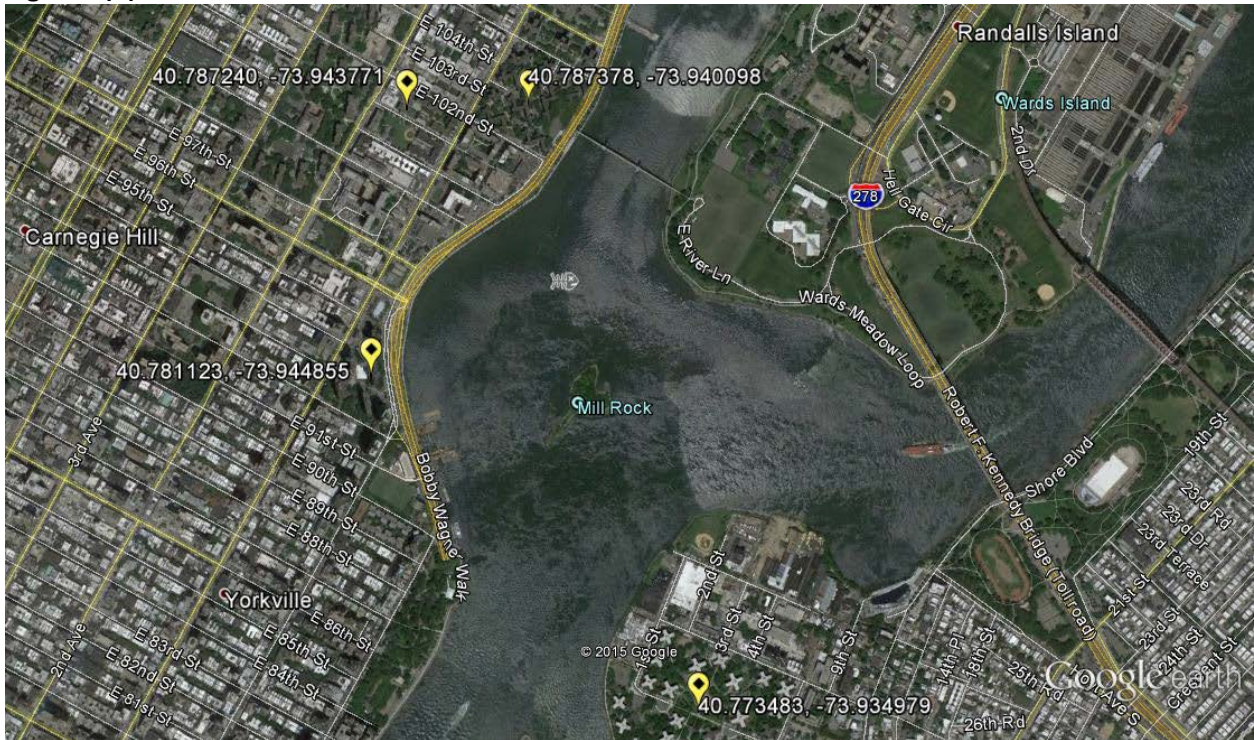


Figure 1(c).

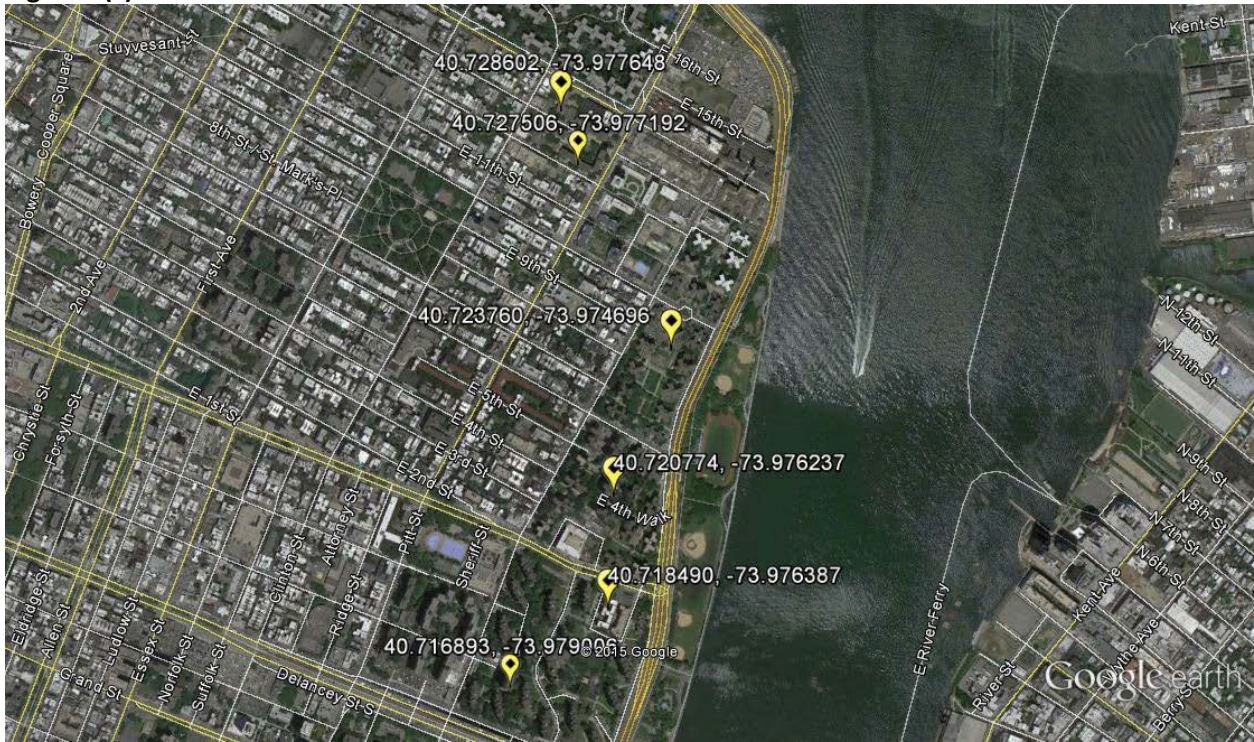


Figure 1(d).

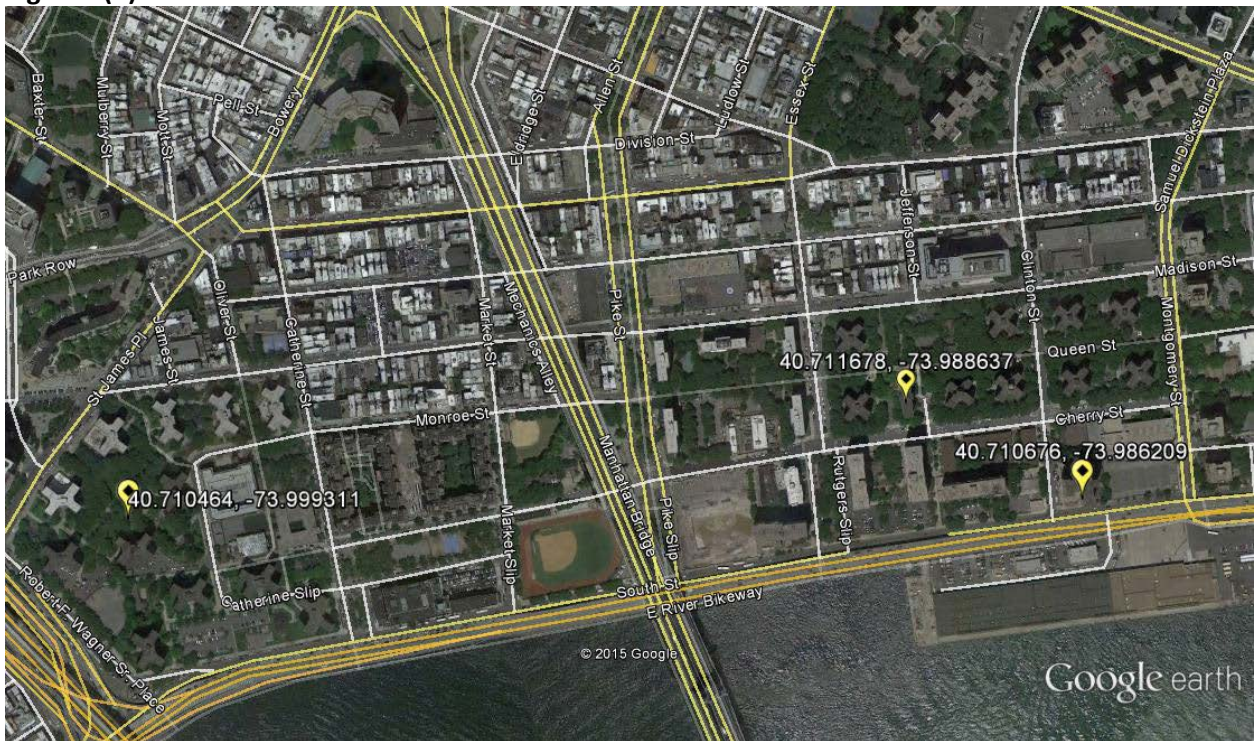


Figure 1(e).

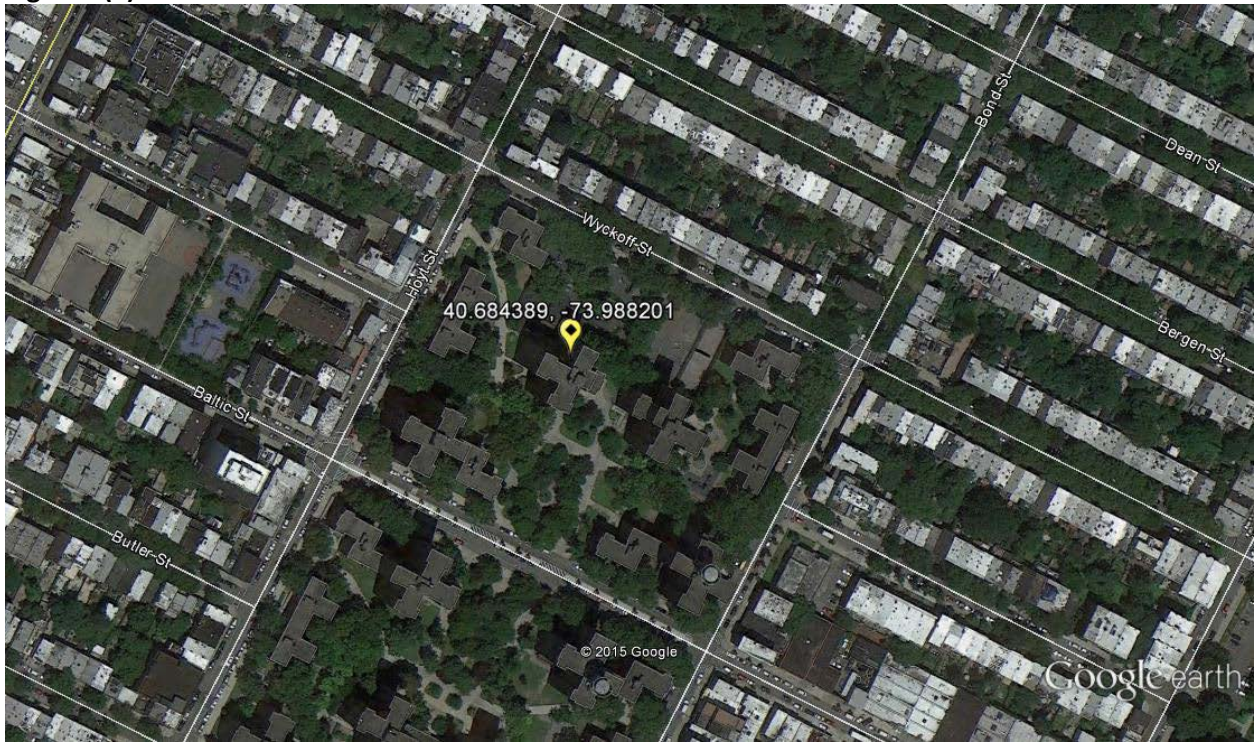


Figure 1(f).

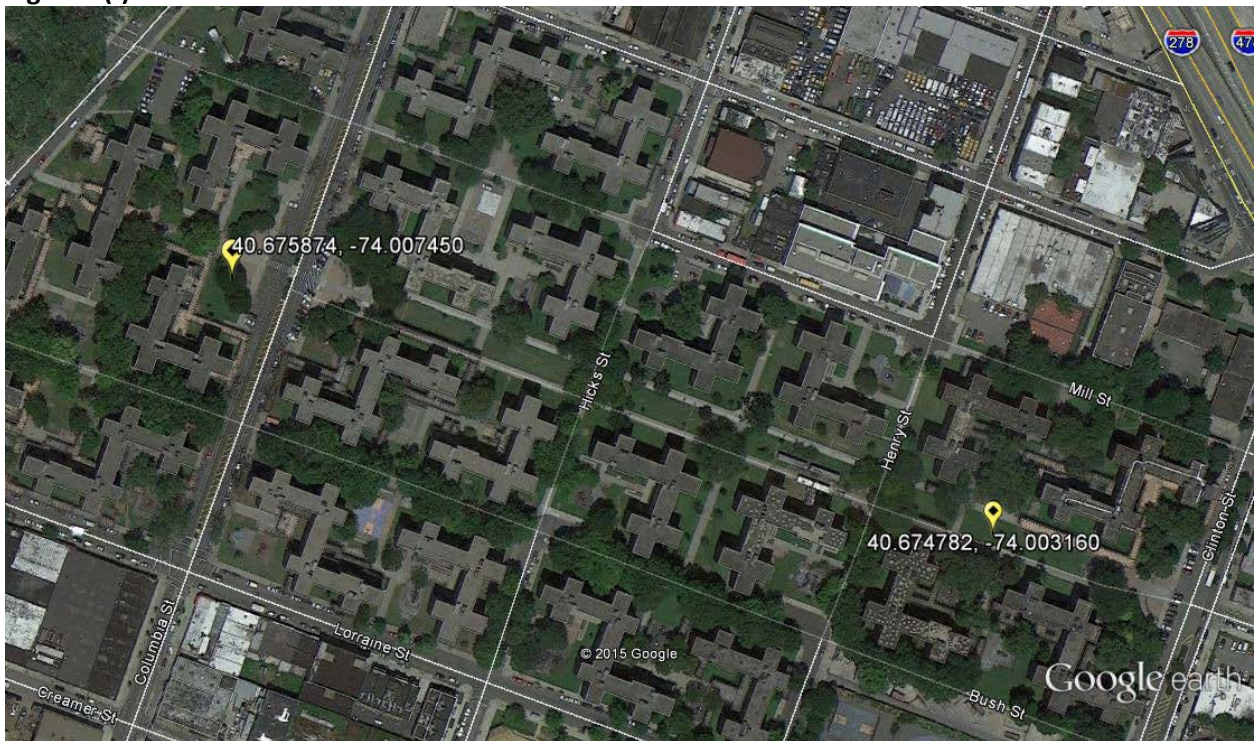


Figure 1(g).

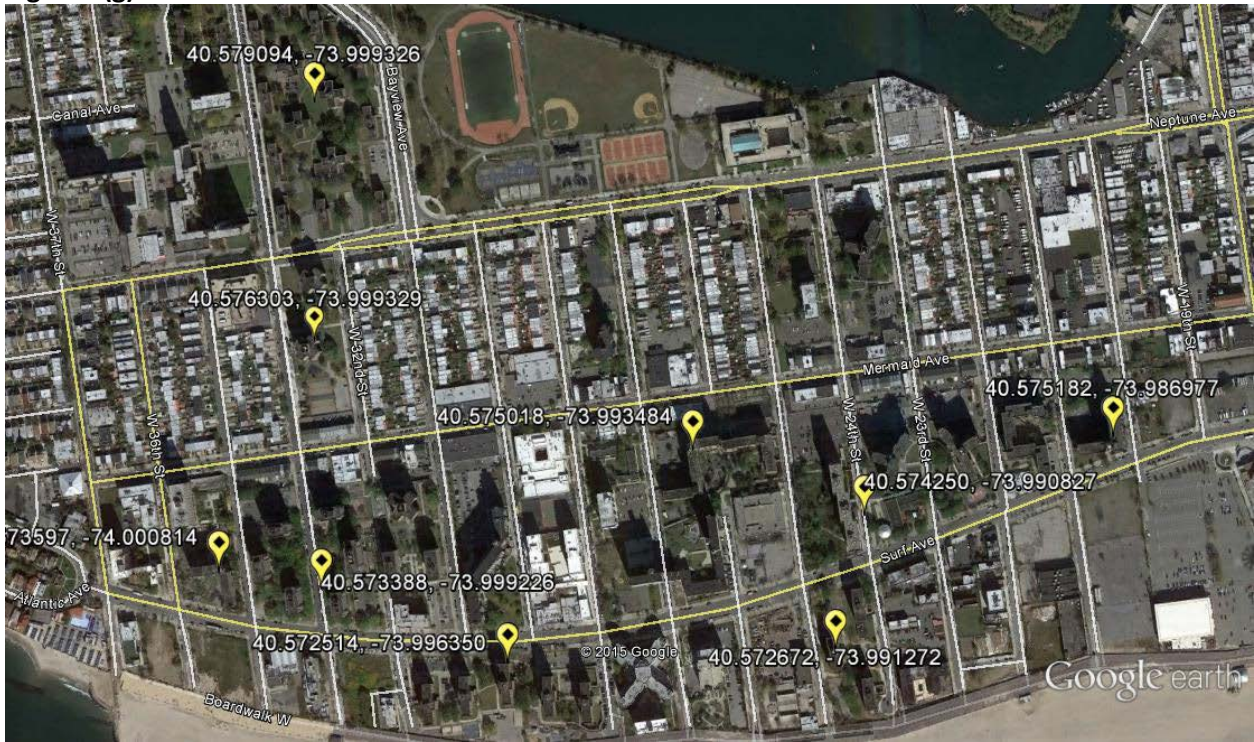


Figure 1(h).

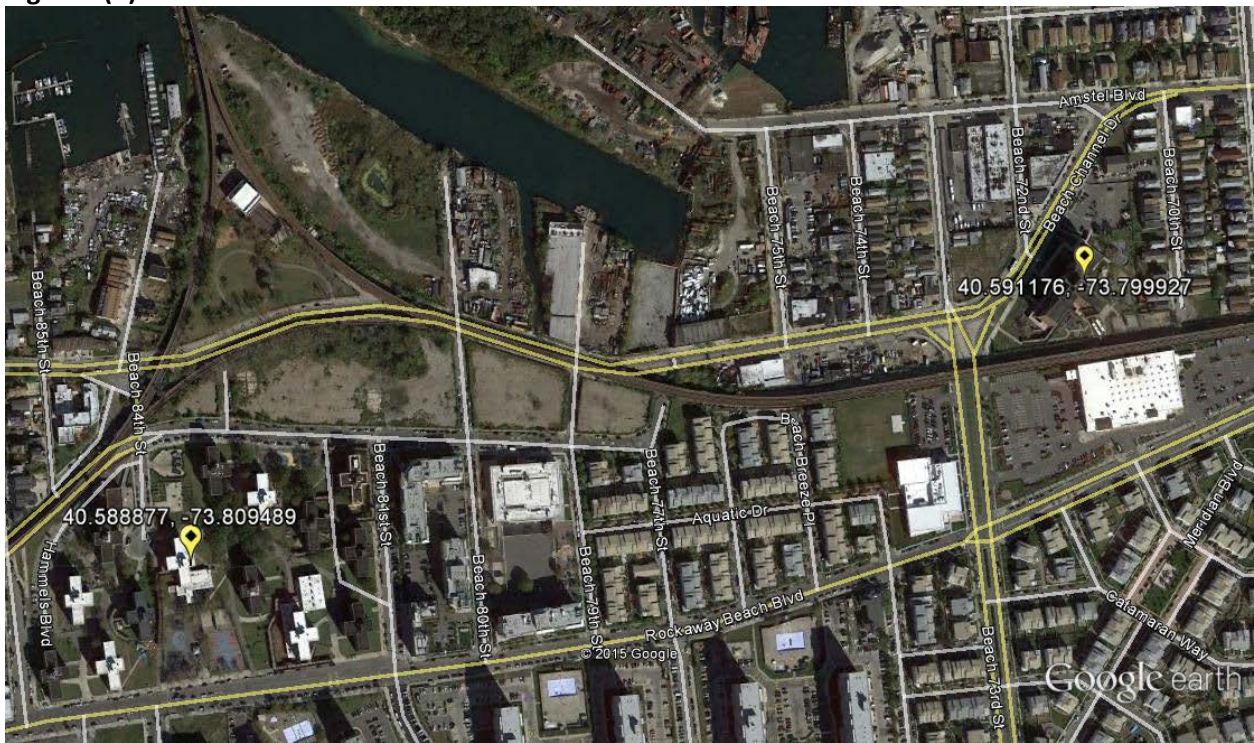


Figure 1(i).

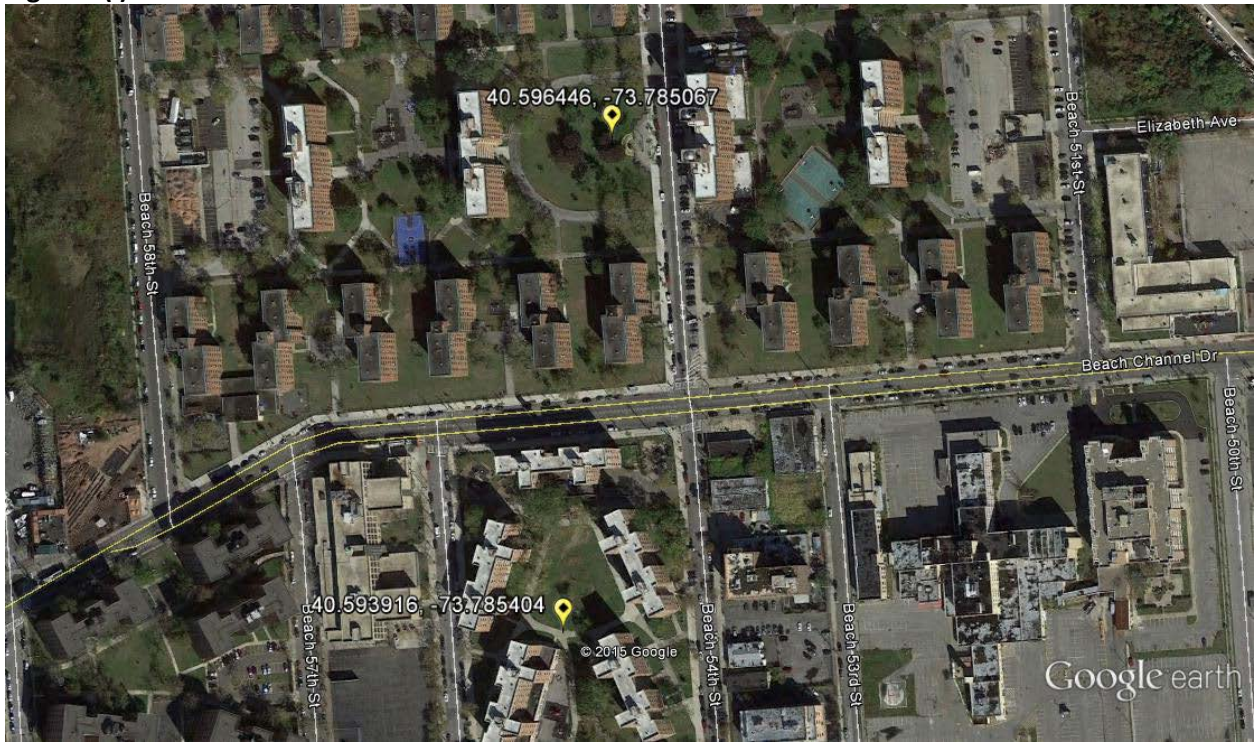


Figure 1(j)

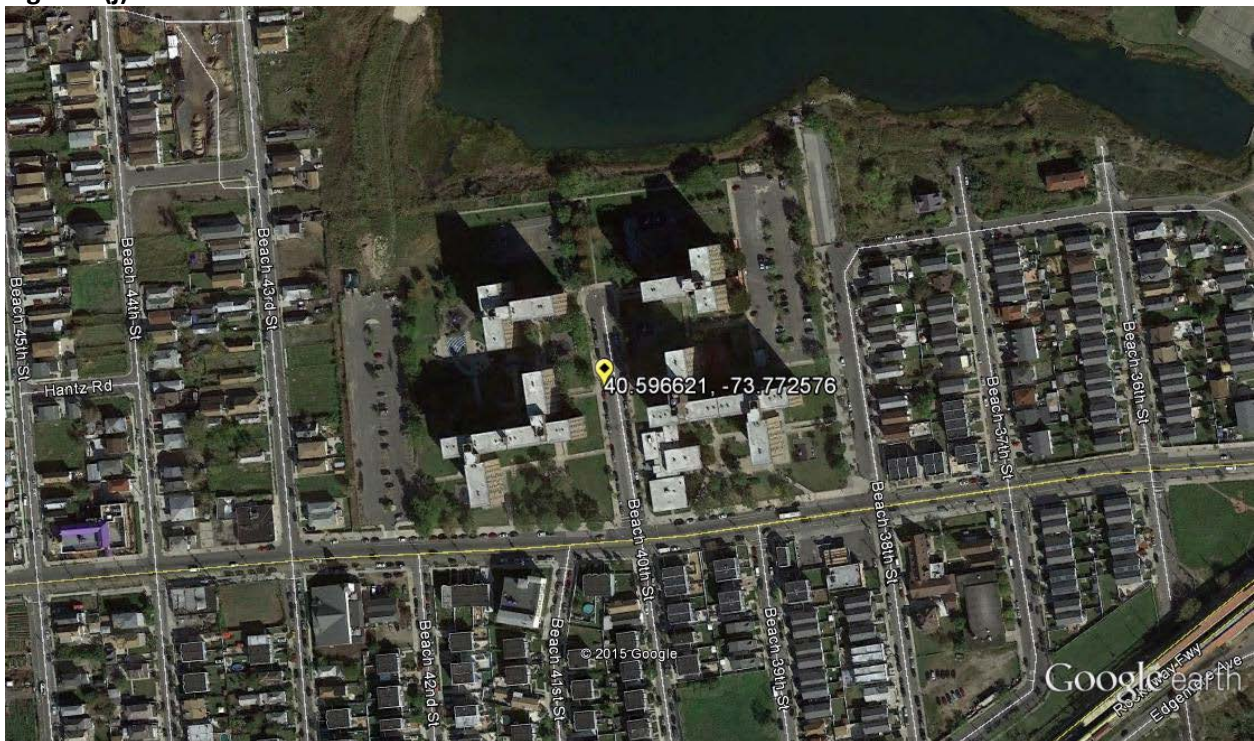
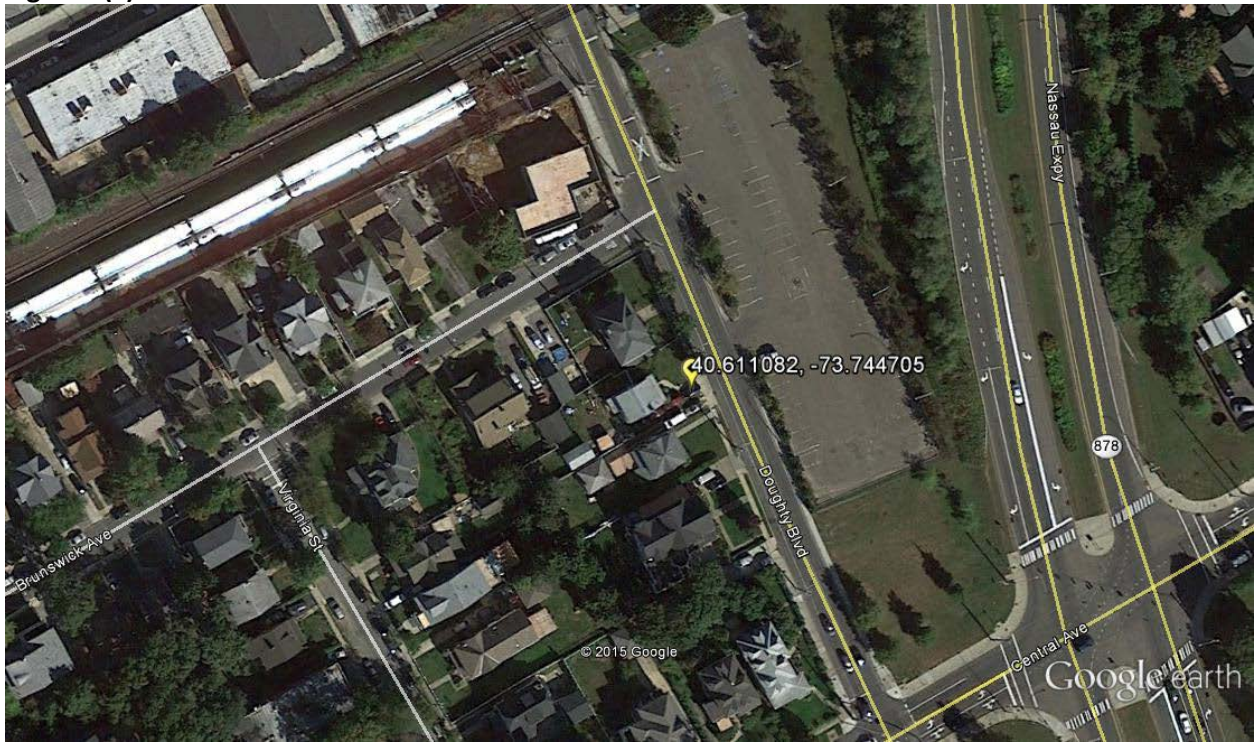


Figure 1(k).



**Table 1. Communities receiving new backup generators, annexes, and/or boiler plants**

Short Name	Development Name	Building Address	Zip Code	County	Coordinates
Astoria	Astoria	4-21 Astoria Blvd	11102	Queens	40.773483, -73.934979
Baruch	Bernard M. Baruch	605 FDR Drive	10002	New York	40.716893, -73.979006
Beach	Beach 41st Street-Beach Channel Drive	40-20 Beach Channel Drive	11691	Queens	40.596621, -73.772576
Campos I	Pedro Albizu Campos Plaza I	635 East 12th Street	10009	New York	40.727506, -73.977192
Campos II	Pedro Albizu Campos Plaza II	643 East 13th Street	10009	New York	40.728602, -73.977648
CareyGardens	Gerald J. Carey Gardens	2946 West 23rd Street	11224	Kings	40.574250, -73.990827
Carleton	Carleton Manor	71-15 Beach Channel Drive	11692	Queens	40.591176, -73.799927
Coney1B	Coney Island I (Site 1B)	2007 Surf Avenue	11224	Kings	40.575182, -73.986977
Coney4-5	Coney Island I (Sites 4 & 5)	2925 West 28th Street	11224	Kings	40.575018, -73.993484
Coney8	Coney Island I (Site 8)	2950 West 35th Street	11224	Kings	40.573597, -74.000814
ConeyIslHouses	Coney Island Houses	3025 West 32nd Street	11224	Kings	40.572514, -73.996350
EastRiver	East River Houses	410 East 105th Street	10029	New York	40.787378, -73.940098
Gowanus	Gowanus Houses	175 Hoyt Street	11217	Kings	40.684389, -73.988201
Gravesend	Gravesend Houses	3225 Neptune Avenue	11224	Kings	40.579094, -73.999326
Haber	Bernard Haber Houses	3058 West 24th Street	11224	Kings	40.572672, -73.991272
Hammel	Hammel Houses	85-02 Rockaway Beach Blvd	11693	Queens	40.588877, -73.809489
Isaacs	Stanley M. Isaacs Houses	419 East 93rd Street	10128	New York	40.781123, -73.944855
LaGuardia	Mayor Fiorello H. La Guardia	45 Rutgers Street	10002	New York	40.711678, -73.988637
Lavanburg	Lavanburg Homes	126 Baruch Place	10002	New York	40.718490, -73.976387
Metro	Metro North Plaza	307 East 101st Street	10029	New York	40.787240, -73.943771
OceanBay Bayside	Ocean Bay Apartments (Bayside)	54-81 Almeda Avenue	11692	Queens	40.596446, -73.785067

OceanBay Oceanside	Ocean Bay Apartments (Oceanside)	306 Beach 56th Street	11692	Queens	40.593916, -73.785404
Odwyer	Mayor William O'Dwyer Gardens	2975 West 33rd Street	11224	Kings	40.573388, -73.999226
Rangel	Ralph J. Rangel Houses	159-14 Harlem River Drive	10039	New York	40.833190, -73.936567
Redfern	Redfern	14-60 Beach Channel Drive	11691	Queens	40.611082, -73.744705
RedHookEast	Redhook (East)	62 Mill Street	11231	Kings	40.674782, -74.003160
RedHookWest	Redhook II (West)	80 Dwight Street	11231	Kings	40.675874, -74.007450
Riis I	Jacob Riis I	152 Avenue D	10009	New York	40.723760, -73.974696
RiisII	Jacob Riis II	765 FDR Drive	10009	New York	40.723760, -73.974696
Smith	Governor Alfred E. Smith Houses	20 Catherine Slip	10038	New York	40.710464, -73.999311
SurfsideGardens	Surfside Gardens	2960 West 31st Street	11224	Kings	40.576303, -73.999329
TwoBridges	Two Bridges Urban Renewal Area (Site 7)	286 South Street	10002	New York	40.710676, -73.986209
Wald	Lillian Wald Houses	10 Avenue D	10009	New York	40.720774, -73.976237



## Summary Table for Project's Consistency with Coastal Policies of New York State

### Policy 1

**Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.**

*Consistent. Proposal will restore the commercial waterfront areas by installing new backup generators, electrical annexes to accommodate the electrical controls and systems, and new boiler plant buildings containing new dual-fuel boilers, all of which will be elevated, to minimize significant damages from future storm events.*

### Policy 2

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

*N/A. Proposal does not affect positively or negatively the siting of water-dependent uses and facilities.*

### Policy 3

**Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.**

*N/A. Proposal is not under a port authority or interferes with port authority land uses.*

### Policy 4

**Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.**

*N/A. Proposal does not affect positively or negatively the economic base of surrounding water-dependent facilities since the adopted land use and/or zoning code dictates the degree of development that can occur within the area.*

### Policy 5

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

*Consistent. Proposal will increase the resiliency of the facility and maintain productivity of the existing provided services. The project facility currently functions as a public service and is within a densely populated residential area.*

### Policy 6

**Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.**

*FEMA will provide a 60-day consistency determination review period to the NYS DOS Coastal Management Program before processing the federal disaster relief grant specifically for declaration of NY-4085.*

### Policy 7

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

*Consistent. Proposal's construction impacts will be limited to the project site (i.e., within previously disturbed areas), which is not located in SCFWH; thus, no expected negative impacts to SCFWHs have been identified. Nearby viable SCFWHs will also be protected indirectly by complying with permit requirements prescribed for protecting the state's natural resources.*

### Policy 8

**Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub lethal or lethal effect on those resources.**

*Consistent. Proposal will not introduce hazardous wastes or other pollutants into the nearby aquatic ecosystem based on the lack of a connection between site location and the aquatic environ. Thus, it is anticipated that activities are not likely to adversely impact environmentally sensitive vegetation, soils, and/or animal resources.*

### Policy 9

**Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.**

*N/A. Proposal does not include expansion of recreational use of fish and wildlife resources in coastal areas since it is not located directly adjacent to the waterfront.*

### Policy 10

**Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood, maintaining adequate stocks, and expanding aquaculture facilities.**

*N/A. Policy is not applicable since the stated purpose of the facilities does not involve commercial fishing resources.*

### 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.**

*Consistent. Construction designs will be implemented per advisory base flood elevations and following floodplain administrator requirements.*

### 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.**

*Consistent. Proposal is sited to avoid encroaching upon any area of potential effect. Construction activities will occur within disturbed and/or improved properties and will follow best management practices listed in federal/NYSDEC permits for minimizing erosional/flooding damages to surrounding natural resources.*

### Policy 13

**The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.**

*N/A. Policy is not the proposal's purpose, since it does not include the construction or reconstruction of erosion protection structures.*

### Policy 14

**Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.**

*Consistent. Proposal is not anticipated to increase erosion/flooding since work activities will follow best management practices and are designed to lessen flood risks.*

### Policy 15

**Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.**

*N/A. No dredging and/or filling activities in coastal waters have been identified for this proposal.*

### Policy 16

**Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.**

*Consistent. FEMA's environmental analysis of disaster assistance grants will include these factors.*

### Policy 17

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

*Consistent. Erosion control measures will be used during construction to minimize run-off into local surface waters and/or nearby properties.*

### Policy 18

**To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.**

*Consistent. Proposal will protect the economic and social interests of the state and its citizens. All work will be done using construction best management practices per federal/state permit requirements.*

### Policy 19

**Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.**

*N/A. Project will have no influence on access to public water-related recreation resources and facilities since it is not located adjacent to the waterfront.*

### Policy 20

**Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.**

*N/A. Project does not have access to the foreshore nor to lands immediately adjacent to the water's edge.*

### Policy 21

**Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.**

*N/A. Policy is not the proposal's purpose since it does not affect positively or negatively the siting of water-dependent and water-enhanced uses and facilities.*

### Policy 22

**Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.**

*N/A. Proposal does not include development adjacent to the shore.*

### Policy 23

**Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation.**

*Consistent. FEMA will be consulting with the State Historic Preservation Office and Participating Tribes per Section 106 of the National Historic Preservation Act to address any proposed ground disturbing activities as identified in submitted project plans. Any identified adverse effect(s) for standing structures will be mitigated through the Abbreviated Consultation process outlined in the New York Programmatic Agreement.*

### Policy 24

**Prevent impairment of scenic resources of statewide significance.**

*Consistent. Proposal will not impact known scenic resources of statewide significance.*

### Policy 25

**Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.**

*Consistent. The purpose of the proposal is to protect improved public property and minimize damages to man-made coastal resources and/or beneficial uses.*

### Policy 26

**Conserve and protect agricultural lands in the state's coastal area.**

*N/A. No agricultural land is present in the vicinity of the proposal.*

### Policy 27

**Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.**

*N/A. Policy is not the proposal's purpose since it does not involve siting and construction of energy facilities.*

### Policy 28

**Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.**

*N/A. Policy is not the proposal's purpose since ice management practices are not involved in construction activities.*

### Policy 29

**Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.**

*N/A. Policy is not the proposal's purpose since project activities do not include development of energy resources.*

### Policy 30

**Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.**

*Consistent. The proposal does not include any changes to the nature, amount, or location of the discharge of stormwater from the project location. The proposal will continue to conform to all appropriate state and federal permit conditions.*

### Policy 31

**State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.**

*N/A. Policy is not the proposal's purpose since project does not involve review of or modification to the state's adopted coastal water classifications or water quality standards.*

### Policy 32

**Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.**

*N/A. This policy is not applicable to the project location, which is currently served by an existing public sewer system.*

### Policy 33

**Best management practices will be used to ensure the control of storm water runoff and combined sewer overflows draining into coastal waters.**

*Consistent. Best management practices, such as erosion control measures, will be used to control storm water runoff from entering into nearby/adjacent surface waters and abutting properties.*

### Policy 34

**Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.**

*N/A. Policy is not the proposal's purpose since this project will have no impact on vessel discharges.*

### Policy 35

**Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.**

*N/A. Policy is not the proposal's purpose since the project does not involve dredging and filling in coastal waters, nor disposal of dredged material.*

### Policy 36

**Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.**

*N/A. Policy is not the proposal's purpose since the project does not involve shipment and storage of petroleum and other hazardous materials.*

### Policy 37

**Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.**

*Consistent. Best management practices will be utilized during construction of the project to reduce the potential discharge of soils into coastal waters. When the project is completed, no changes to the nature, amount, or location of the discharge of stormwater from the project locations are anticipated.*

### Policy 38

**The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.**

*Consistent. The proposal will have no impact on the quality or quantity of surface or groundwater supplies.*

### Policy 39

**The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.**

*Consistent. Proposal will use best management practices listed in federal/NYSDEC permits for transport, storage, treatment and disposal of all C&D, hazardous waste, etc. during the installation of the generators, and construction and elevation of the annexes and boiler buildings. There will be no adverse impacts on fish and wildlife resources, groundwater supply, recreation areas, scenic resources or agricultural land.*

### Policy 40

**Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.**

*N/A. Policy is not the proposal's purpose or function since the facility is not a steam electric generating or industrial facility.*

#### **Policy 41**

**Land use or development in the coastal area will not cause national or state air quality standards to be violated.**

*Consistent. Proposal will not impact state or national air quality standards.*

#### **Policy 42**

**Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act.**

*N/A. Policy is not the proposal's purpose or function as it does not propose reclassifying land areas pursuant to the federal Clean Air Act.*

#### **Policy 43**

**Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.**

*Consistent. Proposal is not anticipated to cause acid rain precursors.*

#### **Policy 44**

**Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.**

*N/A. Policy is not the proposal's purpose or function since it is not located in or adjacent to a tidal or freshwater wetland.*





STATE OF NEW YORK  
**DEPARTMENT OF STATE**  
ONE COMMERCE PLAZA  
99 WASHINGTON AVENUE  
ALBANY, NY 12231-0001

ANDREW M. CUOMO  
GOVERNOR

CESAR A. PERALES  
SECRETARY OF STATE

September 30, 2015

Mr. John Dawson  
U.S. Dept. of Homeland Security  
FEMA-4085-DR-NY  
Sandy Recovery Office, Forest Hills Tower  
118-35 Queens Blvd., 5<sup>th</sup> Floor, EHP  
Forest Hills, NY 11375

**Re: F-2015-0629 (FA)**  
NYC Housing Authority –  
Public Housing Rehabilitation and Resiliency

*Federal funding – Construction of new boiler plant buildings, new electrical annex buildings, installation of power generators and the enhancement of associated utility corridors throughout 29 communities located in Manhattan, Brooklyn, and Queens counties*

**Concurrence - No Objection to Funding**

Dear Mr. Dawson:

The Department of State received the information you submitted regarding the above matter on August 12, 2015. The Department of State has no objection to the use of FEMA Public Assistance Program funds for this financial assistance activity to the New York City Housing Authority for the above-listed activities.

This concurrence pertains to the financial assistance for this project only. If a federal permit or other form of federal agency authorization is required for the above activities, the Department of State will conduct a separate review for those permit activities. In such a case, please forward a copy of the federal application for authorization, a completed Federal Consistency Assessment Form, and all supporting information to the Department at the same time it is submitted to the federal agency from which the necessary authorization is requested.

When communicating with us regarding this matter, please contact Jeffrey Zappieri at (518) 474-6000 and refer to our file #F-2015-0629 (FA).

Sincerely,

Jeffrey Zappieri  
Supervisor, Consistency Review Unit  
Office of Planning and Development

JZ/ts