

# REQUEST FOR QUALIFICATIONS

## NYC Houses Reconstruction

Issue Date: May 1, 2013

Pre-Submission Conference: May 14, 2013

Proposal Submission Deadline: June 5, 2013



**Michael R. Bloomberg, Mayor**

Robert K. Steel, Deputy Mayor for Economic Development



Department of  
Housing Preservation  
& Development

Mathew M. Wambua, Commissioner

[www.nyc.gov/hpd](http://www.nyc.gov/hpd)

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- B. Cluster Maps and Data Sheets
- C. Housing Typologies
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- E. Proposal Forms - Forms are available for download on the website in Word and Excel formats as part of this RFQ.

Form A-2: Applicant's Letter  
Form B-1: Development Team Information  
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Form G: Development Budget  
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\* Please note that information provided in this document may be subject to change. Development Team(s) are responsible for regularly checking the HPD RFQ website for updates as well as the sites listed in *Appendix A, Critical Resources for Development Teams*.

## **I. INTRODUCTION**

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Pursuant to this Request for Qualifications (“RFQ”), the City of New York (“City”), through its Department of Housing Preservation and Development (“HPD”), is seeking to identify qualified developers (“Applicants”) to submit applications (“Applications”) to participate in the rebuilding of 1-4 unit homes in New York City that were destroyed or substantially damaged by Sandy, as determined by the City’s Office of Housing Recovery Operations. In addition, the Homeowner must register for federal Community Development Block Grant Disaster Recovery (“CDGB-DR”) assistance and be deemed eligible under that program.

Sandy hit New York City on October 29-30, 2012. Over the course of 48 hours, wind, rain, and water destroyed homes and left many New Yorkers vulnerable with limited access to food, healthcare, and other critical lifesaving functions. The City’s immediate response was one of the largest mobilizations of services in the City’s history. The rebuilding of the homes that were severely impacted by Sandy is an essential next step.

The City has created the NYC Houses Reconstruction Program (the “Program”) in order to facilitate and fund the rebuilding of homes on Eligible Property. This RFQ has been issued to identify Applicants who have the expertise and capacity to rebuild homes on Eligible Property in a cost-efficient and timely manner, consistent with the neighborhood context. Financing for this effort will consist of CDBG-DR funds and all projects must meet the eligibility and other requirements of CDGB-DR.

The City utilized field inspections and a variety of data sources to identify the number and severity of damaged buildings across the five boroughs, including data obtained from DOB and HPD inspections, FEMA inspections, and inundation assessments. Eligible Properties have been grouped into development Clusters in this RFQ. Applicants will submit Applications that will identify the Cluster or Clusters that they are applying for. Since the recovery is an ongoing process, the Clusters may fluctuate as new information is received.

Applicants may be individuals and organizations, both not-for-profit and for-profit, who have the experience, financial resources, and capacity required to rebuild homes on Eligible Property. Responses to this RFQ are solely for the purpose of qualifying developers for the Program and are not applications to receive loans or any assistance from HPD under any other program.

Applicants are responsible for assembling a development team (“Development Team”) that includes members with expertise in single-family housing development, architecture and design, community outreach, and resiliency efforts. The Development Team will be responsible for undertaking the design and construction of the housing, working with a financial institution for loan servicing, and regular meetings with Homeowners.

A pre-submission conference will be held on Tuesday, May 14, 2013, 10:00 a.m. at HPD, 100 Gold Street, Room 1R, New York, New York 10038. Every Applicant wishing to submit an Application in response to this RFQ is encouraged to attend, as this will be the only opportunity to ask questions and receive answers in person regarding this RFQ. Applications are due by hand on June 8, 2013 no later than 4:00 p.m.

## **II. DEFINITIONS**

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### **Applicant**

An individual, partnership, limited liability company, corporation, joint venture, or other entity that submits an Application in response to this RFQ.

### **Area Median Income (AMI)**

Area Median Income shall mean the median income levels as modified by household size for the New York metropolitan statistical area as determined by the Department of Housing and Urban Development (HUD.) For 2013, 100% of the AMI is \$85,900 for a family of four in the New York Metropolitan Statistical Area and \$60,200 for a single person.

### **CDBG-DR**

Community Development Block Grant – Disaster Recovery

### **Cluster(s)**

A group of Eligible Properties to be developed, as described in this RFQ.

### **DOB**

The New York City Department of Buildings

### **DCP**

The New York City Department of City Planning

### **Development Team**

The Developer and the professional, technical, and construction entities (e.g. general contractor, architect, engineer) that will participate in the design, development, construction, and outreach for the Project.

### **Eligible Property**

Property in New York City that contained a 1-4 unit home that was destroyed by or demolished in the aftermath of Sandy or now contains a home substantially damaged by Sandy where the cost of restoring the condition of the home to its condition as of October 28, 2012 would cost at least 50% of the market value of the home as of such date.

### **FEMA**

The United States Federal Emergency Management Agency

### **Homeowner**

The owner of property that is or may be (as the context requires) an Eligible Property.

### **HRO**

New York City Housing Recovery Operations

### **HUD**

The United States Department of Housing and Urban Development

### **Participating Homeowner**

A Homeowner who is receiving assistance under the Program.

### **Principal**

An individual, partnership, limited liability company, corporation, or other not-for-profit or for-profit entity that will act as the general partner, officer, or managing member of the Applicant, or any entity, known limited partner, or other member that has at least a 10% ownership interest in the Applicant.

**Project**

The rebuilding of a home on Eligible Property.

**Program**

The NYC Houses Reconstruction Program.

**Qualified Developer(s), Developer(s)**

The entity or entities determined to be qualified by the City to develop the Cluster(s) offered through this RFQ.

**Sandy**

A severe storm that hit New York City on October 29, 2012 and October 30, 2012, causing flooding, property damage, power outages, and disruption of public transportation and other vital services.

### **III. PROGRAM REQUIREMENTS, DESCRIPTION OF CLUSTERS, & GUIDELINES**

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#### **A. Context of RFQ**

In applying for CDBG-DR funding from HUD, the City prepared a Community Development Block Grant - Disaster Recovery Action Plan A (Action Plan) (See *Appendix A, Critical Resources for Development Teams*). In the Action Plan, the City proposed creating the Program, which is designed to help people affected by Sandy achieve permanent, sustainable housing solutions that allow them to remain in New York City and where possible, return to their neighborhoods.

The goals of the Action Plan include:

1. Help people affected by Sandy directly by replacing housing units, including the implementation of mitigation enhancement measures, where applicable;
2. Help people affected by Sandy by improving the resilience of their housing units while restoring their buildings/residences; and
3. Support resilience improvements to reduce risk and strengthen neighborhoods in flood zones.

To pursue these objectives, the Program incorporates lessons from past disasters, builds upon stakeholder input from agencies and relevant organizations across the city, state, and national levels, and leverages the experience of locally-based organizations to ensure the diverse needs and particular contexts of New York City's affected residents are addressed.

Current economic challenges have been taken into account and the City aims to leverage private sector and other funding where possible. The City's strategy will balance a speedy response with adequate planning, financial feasibility as well as the distinct needs of different communities. For Program operations, the City will maximize private and non-profit sector expertise in New York City while putting appropriate accountability and oversight mechanisms in place.

Many city, state, and federal programs have already funded some of the need for homeowners and landlords to undertake rebuilding and rehabilitation measures. The City will use CDBG-DR funding to complement and build upon such sources, such as insurance and FEMA funds. To address this unmet financial need, the City subtracted the estimated funds authorized or received thus far from these programs, as well as privately-funded programs, from demand estimates.

With the initial CDBG-DR funding allocation of \$350 million for 1-to-4 family homes, the City will prioritize assistance for those with the most severe damage and the highest level of financial need.

#### **B. Goals, Program Guidelines & Requirements**

The Program aims to bring residents back to their neighborhoods as quickly as possible by balancing a speedy response with adequate planning and financial feasibility while recognizing the distinct needs of different communities. The ultimate goal of the Program is to replace homes for eligible homeowners that have been destroyed or substantially damaged by Sandy in a cost-effective, timely, and contextually-sensitive manner.

Programmatic requirements include the following:

At the time of Application:

- Development Teams must apply for at least one cluster.
- Development Teams must prepare a development budget and design submission for each housing type within each cluster being applied for as described in *Section VII. Application Format*.
- Development Teams are expected to be able to develop the maximum number of houses for each cluster as identified in *Section III.C- Clusters* and should also indicate their ability to take on additional homes. Indicate any cost savings or means of leveraging scale you may be able to achieve as the size of a cluster expands.

Upon selection for a Cluster:

- Development Teams will be expected to immediately begin homeowner engagement upon selection. Basic contact data for prospective Participating Homeowners will be provided by HPD.
- In order to be eligible, a property, as of October 29, 2012, must have contained a home which (a) was either a 1-4 unit home that was owner-occupied or, in the case of a single family home, was occupied by a year-round tenant, and (b) was destroyed by or demolished in the aftermath of Sandy or, if still standing, where the cost of restoring the home to its condition as of October 29, 2012 is at least 50% of what the market value of the home was on such date. Eligibility will be determined centrally by HRO and the information will then be provided by HPD to the Developer.
- The City is setting up a centralized case management system which will verify what funding sources, such as insurance proceeds, the Homeowner will contribute to the project budget.
- Eligible pre-development work funded by the Developer such as design and engineering will be paid through the development budget as loan closings on individual homes occur. For additional information about loan servicing, please see *Section III.H - Financing*.
- Development Teams must engage with Homeowners in order to maximize participation in the Program. Homeowner engagement should result in designs that are responsive to Homeowners' needs and community context while being cost-effective and standardized to the maximum extent possible throughout the cluster. This process should be time-limited in order to meet funding deadlines, allow for timely construction commencement, and bring residents back to their homes.
- Development Teams will work with HPD to obtain approval for design plans and financing.
- Homeowners will not be required to participate or work with the Development Team selected to develop a Cluster in order to receive CDBG-DR financial assistance. These Homeowners may choose to build a house using their own contractor and design. HPD may work with the selected Developers to implement a program to provide services to these Homeowners.

## **C. Clusters**

Applicants will submit Applications that will identify the cluster(s) that they are applying for. See *Section VII – Application Format* for additional information. Since the recovery is an ongoing process, the exact number of homes in each development cluster may fluctuate as new information is received.

### **Overview of Clusters**

The development clusters are located primarily in coastal areas of the Bronx, Brooklyn, Queens, Manhattan and Staten Island. As shown in the table below, the clusters vary in total units and types of housing to be rebuilt. See *Appendix B* and *Appendix C* for a

detailed description of each cluster and housing type. This information is intended to guide Applicants in the preparation of the development budget and designs for response to this RFQ.

**Housing Typologies**

Detached homes include single family homes, duplexes and residential buildings containing one or two units that are physically unattached on both sides. Attached homes include single family homes, duplexes and residential buildings containing one or two units that are physically attached on one or both sides. The 3- or 4-unit buildings are residential buildings with 3 to 4 units and may be detached or attached. The mixed-use buildings contain up to 4 residential units with ground-floor retail space and may be detached or attached.

**Table 1. Clusters by Location, Buildings and Housing Type**

Cluster Name	Buildings in Cluster*	Housing Types**	Average Square footage
<b>Brooklyn</b>			
Brooklyn South	5 - 45	Detached Homes	1,500
		Attached Homes	1425
		3 or 4-unit Buildings	3,770
<b>Queens</b>			
Rockaway & Broad Channel	45 - 105	Detached Homes	1,760
		Attached Homes	1,470
		3 or 4-unit Buildings	2,570
Breezy Point	250 - 320	Detached Homes	1,610***
<b>Staten Island</b>			
Staten Island	100 - 215	Detached Homes	1,200
		Attached Homes	1,200
		3 or 4-unit Buildings	2,800
<b>Scattered Sites</b>			
Detached Homes in Bronx, Manhattan and Queens	5 - 15	Detached Homes	1,270
Mixed-Use Buildings in Brooklyn, Queens and Staten Island	5 - 15	Mixed-use Buildings	4,080

\* The lower end of the range indicates confirmed demolitions within the cluster area and the upper end of the range indicates buildings deemed as likely to be rebuilt, by HRO.

\*\*See Appendix C, Housing Typologies, for more details

\*\*\*Averages based on the buildings in each cluster. If data was unavailable, square footage was based on housing typologies provided by HRO.

**Brooklyn South Cluster**

The development clusters in Brooklyn South are concentrated on the Coney Island peninsula and include properties in Sea Gate, Brighton Beach, Manhattan Beach, and Gerritsen Beach.

In addition to Coney Island's entertainment district, the residential area of the neighborhood is comprised of one- and two-family homes and multi-family towers including NYCHA and senior homes. The beach communities of Manhattan Beach and Gerritsen Beach are comprised of single-family and multi-family buildings.

The Brooklyn South development cluster includes approximately 5 to 45 buildings and 3 housing types to be rebuilt.

#### **Queens Clusters**

The Rockaways and Broad Channel cluster includes properties in the neighborhoods of Far Rockaway, Arverne, Belle Harbor, and Broad Channel. The Rockaway and Broad Channel cluster includes approximately 40 to 130 buildings and 4 housing types to be rebuilt.

The Breezy Point cluster contains approximately 300 to 380 homes that are part of the Breezy Point Co-operative, which includes the Roxbury neighborhood. The land underlying these homes is owned by the Co-op. HRO has been coordinating on rebuilding issues with the Co-op Board and Breezy Point Co-operative Inc. (aka Breezy Point Co-operative Association), the management company for the Co-op. There may be special design considerations and regulatory controls that apply to this cluster.

#### **Staten Island Cluster**

The development cluster in Staten Island is located along the eastern shore of the island from Arrochar to Tottenville neighborhoods.

The cluster includes properties in the neighborhoods of Arrochar, Dongan Hills, Midland Beach, and New Dorp. These clusters are primarily comprised of detached one- and two-family homes. The remaining sites at the southern tip of the island include the properties in the neighborhoods Eltingville, Prince's Bay and Annadale, which are primarily comprised of detached one- and two-family homes.

The Staten Island development clusters include approximately 110 to 220 buildings and 4 housing types to be rebuilt.

#### **Scattered Sites in the Bronx, Brooklyn, Queens and Manhattan**

##### *Detached*

The buildings in Queens are located in Canarsie and Hamilton Beach, areas that are comprised of single-family and attached one- to three-family homes. The Bronx buildings are located on City Island and the neighborhoods of Castle Hill and Country Club.

##### *Mixed-use*

The mixed-use cluster buildings are located in the Red Hook neighborhood of Brooklyn and the neighborhood is primarily attached, multi-family buildings.

## **D. Design**

### **Regulations**

Proposals are expected to comply with latest regulations including zoning pursuant to the January 31 Executive Order, FEMA and HUD guidelines, and local New York City Building Codes.

Please note that information provided in this RFQ may be subject to change. Development Team(s) are responsible for regularly checking the sites listed in *Appendix A, Critical Resources for Development Teams* for updates.

### **Standards for Flood Resilient Buildings**

FEMA's flood maps<sup>1</sup> delineate which buildings should meet standards of flood resilience, as set by Appendix G of the NYC Building Code<sup>2</sup>.

Buildings fall into three zones: V, A, and the 500 year flood zone. The maps also indicate the base flood elevations for an area. The Base Flood Elevation (BFE) indicates the height above sea level to which a building must be either elevated or dry flood proofed, depending on use. Elevated buildings allow water to pass underneath the lowest finished floor in a flood without harming structure or contents, and space below can be used only for building access, parking, or storage. No space can be excavated below grade to prevent standing water. Dry flood proofing is a collection of methods for sealing a building to keep water out and is only allowed in non-residential or mixed use buildings.

Building code adds freeboard to the BFE, a factor of safety above the BFE which recommends that buildings be raised to a design flood elevation (DFE). The DFE for residential is two feet above the BFE, and for mixed use buildings, one foot above the BFE.

The extent of V and A zones is also known as the one hundred year flood plain.

The V zone is the area where waves can cause structural damage to buildings. V zone buildings are required to have open foundations (piers or piles). Only 300 SF of enclosed space for parking, building access, or storage is allowed below the design flood elevation. Dry flood proofing is not allowed

The A zone is subject to coastal still water flooding. Both elevation and dry flood proofing are permitted. Most of the 100-year flood zone in New York City is designated as A zone.<sup>3</sup>

The 500 year flood zone carries no requirements for residential buildings.

### **Urban Design Principles**

To survive future storms by meeting current best practices in flood protection, residential buildings must be elevated above projected flood levels. However, elevating buildings more than a few feet above the sidewalk can have negative effects on neighborhood character, streetscape, building access, ground floor use, and architectural quality. DCP has worked with representatives of the local design community to develop a set of urban design principles to consider while designing flood resilient buildings.

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<sup>1</sup> FEMA Map Service Center  
<https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1>  
FEMA Hurricane Sandy Advisory Base Flood Elevations (ABFEs)  
<http://www.region2coastal.com/sandy/abfe>

<sup>2</sup> New York City Department of Buildings. New York City Construction Code.  
[http://www.nyc.gov/html/dob/html/codes\\_and\\_reference\\_materials/construction\\_code.shtml](http://www.nyc.gov/html/dob/html/codes_and_reference_materials/construction_code.shtml)

<sup>3</sup> FEMA.2011. FEMA 55. Coastal Construction Manual: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Residential Buildings in Coastal Areas  
<http://www.fema.gov/library/viewRecord.do?id=1671>

- Visual connectivity: Having the windows and front door of a building face the public street can create a sense of security and comfort and provide visual interest for pedestrians on the sidewalk, promoting a walkable neighborhood. Elevating the first floor of a building can limit this visual connectivity. In residential neighborhoods, porches, stoops, and generous access elements can be designed in order to help to mitigate this disconnection. On commercial streets this visual connectivity is important to the viability of local retail. A common best practice is to dry flood proof the commercial space so that it can be closer to sidewalk level and therefore maximize visual and physical connectivity. Please identify added expense related to achieving this, should this design intervention be applicable in the cluster(s) you are applying for.

- Facade articulation: Buildings often contribute to streetscape by offering human-scale architectural elements, particularly at the lower one-to-two-floors. How a building is designed to meet the sidewalk is often most critical in determining the character of a street and neighborhood. Elevated buildings with crawl space, parking or storage can create blank walls at grade. Setting a building back from the property line slightly and using landscaping and/or other creative design solutions can help to buffer these voids in an active streetscape. If ground-level parking is the only feasible option, then garage doors and curb cuts should be designed to minimize their impact on the pedestrian realm.

- Neighborhood character: Some neighborhoods exhibit a relative uniformity of building form. Elevating buildings will necessarily produce variations in building height and, in some cases, placement on the lot. Designers should respect a neighborhood's character by taking cues from existing context in building massing, fenestration, rooflines, and other architectural elements.

- Inviting Access: Elevated buildings pose challenges for accessibility. Ramps can be difficult to accommodate, particularly on smaller lots. Some buildings may have the challenge of integrating longer runs of stairs into a building or landscape design. Introducing a switchback or landing, and paying careful attention to overall stair design can make a long run of stairs easier to climb and appear more inviting for people walking by.

Since every neighborhood in New York is unique, these principles are not intended to be prescriptive or comprehensive. They are written here to provide some urban design context for further design investigation suited to particular neighborhoods and sites. Adapting to higher standards of flood safety is both a challenge and an opportunity for architects to achieve higher standards of design. The opportunity exists now to innovate and produce architecture that contributes to the public realm and has a positive long-term effect on those neighborhoods recovering from Sandy.

Please also review *Appendix A* for several documents that provide guidance on design practices for rebuilding for flood and storm resiliency including FEMA Home Builder's Guide to Coastal Reconstruction, and Toolbox for Resiliency Strategies.

### **Green Building**

The goal of green building is to reduce the negative impact buildings have on the health of the environment and communities. HPD encourages the development of sustainable design.

Developments must achieve Certification through the Enterprise Green Communities Program, which is a comprehensive green building framework for housing that provides cost-effective standards for creating healthy and energy-efficient homes. Enterprise Green Communities offers an online certification process for affordable housing developments built using these criteria. The Enterprise Green Communities Checklist can

be found in *Appendix D*. For housing developments funded by the City of New York, instructions about the online certification process can be found at:  
[http://www.greencommunitiesonline.org/tools/certification/nyc\\_hpd\\_certification.asp](http://www.greencommunitiesonline.org/tools/certification/nyc_hpd_certification.asp)

### **Accessibility**

In accordance with Section 504 of the Rehabilitation Act of 1973 and 24 CFR Part 8, NONDISCRIMINATION BASED ON HANDICAP IN FEDERALLY ASSISTED PROGRAMS AND ACTIVITIES OF THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT, and specifically Section 8.29, Homeownership Programs, all housing units newly constructed or rehabilitated for purchase or single family (including semi-attached and attached) units to be constructed or rehabilitated through the CDBG-DR program or activity shall be made accessible upon request of the Homeowner. In such case, the Homeowner shall consult with the Developer regarding the specific design features to be provided. If accessibility features selected at the option of the homebuyer are ones covered by the standards prescribed by 24 CFR Section 8.32, those features shall comply with the standards prescribed in § 8.32. The Homeowner shall be permitted to depart from particular specifications of these standards in order to accommodate his or her specific disability.

## **E. Environmental**

HPD anticipates that the National Environmental Policy Act (NEPA) environmental planning reviews will be completed by the City. For sites which require additional testing such as soil borings, the Developer will be responsible for contracting those services.

## **F. Obligations of Selected Developer(s)**

### **Development Team**

The Developer will be responsible for assembling a Development Team, including at minimum a general contractor, architect, and engineer with expertise in storm and flood resilient building systems. The Development Team will design and construct the home(s). The team should also include a financial institution to service funds during construction, including conducting construction inspections and authorizing the disbursement of funds.

### **Design**

Within two (2) months of selection, the Developer must complete a set of schematic site plans, floor plans, and elevations that incorporate feedback from the homeowner engagement process, and submit them to HPD for review and approval for each model type within the selected cluster(s). The Developer must submit a complete set of final site plans, floor plans, elevations, samples of exterior building materials, and detailed specifications to HPD for review. Designs should be storm and flood-resilient and contextually sensitive.

### **Environmental Documents**

HPD anticipates that the NEPA environmental planning reviews will be completed by the City. For sites which require additional testing such as soil borings, the Developer will contract for those services.

### **Homeowner Engagement**

The Developer will be working closely with the City to conduct outreach to Homeowners and must be responsive and collaborative. The Developer should propose an intensive outreach process that may include weekly meetings with Homeowners during the planning and pre-development phases and continue regular communication during construction. Please identify any trainings you may feel are necessary for the Homeowners as they reoccupy their redesigned homes. Partnering with locally-based

community organizations is encouraged. The Homeowner engagement process to finalize the model designs will be time-limited as getting to construction is one of the primary goals of the Program.

#### **Taxes**

Homeowners will be responsible for paying property taxes during construction.

#### **G. Timeline**

The Developer will be responsible for arranging timely commencement and completion of the Projects, will be held accountable for the schedules outlined in their Application and agreed upon with HPD, and will be required to submit ongoing status reports regarding Project development, financing, and homeowner engagement. Due to the urgent nature of this RFQ, time saving measures in the Application are strongly encouraged

#### **H. Financing and Project Structure**

1. Funding sources for the construction of homes will include CDBG-DR, homeowners' insurance proceeds, and any other source of disaster related government or private funding received by homeowners and intended for this use. The City will conduct a Duplication of Benefits analysis to ensure that all sources are correctly applied. As currently envisioned, neither the homeowner nor the Developer will be required to make an equity contribution.
2. At the time of closing, Developers will enter into a Site Development Agreement (SDA) with each Participating Homeowner pursuant to which the Developer has agreed to build the home in accordance with approved plan and specifications. The SDA must be on terms and conditions satisfactory to HPD.
3. At the time of closing, each Participating Homeowner will sign a mortgage to HPD in the amount of the cost of construction for the Homeowners' home, which will be repayable if the Homeowner either sells the completed home or fails to owner-occupy the Home. The mortgage will be forgiven after five (5) years of owner-occupancy.
4. The CDBG-DR funds will be deposited with a financial institution, along with all other sources, which will service the grant. The financial institution will be responsible for all construction grant servicing functions including construction monitoring and disbursements.
5. HPD and the Developer will enter into an Agreement covering the terms of conditions of disbursements of CDGB-DR funds.
6. Developer will either act as its own general contractor and enter into contracts with subcontractors, or will enter into a construction contract with a general contractor that is part of the Development Team. The construction contract will cover an entire cluster.
7. Please see *Appendix E, Form G* for Development Budget template.

Soft costs including a developer fee will be included in the total development cost for each home and funded by the sources listed above. Full payment of the developer fee will be contingent on receiving a final Certificate of Occupancy.

**I. Section 3 Clause**

The project resulting from this RFQ may be subject to Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u) and the implementing regulations at 24 CFR part 135. If applicable to the project, (i) to the greatest extent feasible, opportunities for training and employment arising in connection with the planning and carrying out of the project must be given to "Section 3 Residents" as such term is defined in 24 CFR 135.5; and (ii) to the greatest extent feasible, contracts for work to be performed in connection with any such project must be awarded to "Section 3 Business Concerns" as such term is defined in 24 CFR part 135.5.

**J. Davis-Bacon**

CDBG-DR funds are subject to the Davis-Bacon Act (40 U.S.C. 3141 et seq.) and the implementing regulations at 29 CFR Part 5, which require all laborers and mechanics to be paid prevailing wages. Construction of multiple homes on co-operatively owned property, such as Breezy Point, may require the payment of prevailing wages. HPD will consult with HUD as to the applicability of the Davis-Bacon Act on the construction of 1-4 unit homes on individually owned Eligible Property. Note that the Development Budget template (*Appendix E, Form G*) requires that developers provide a budget estimate which assumes Davis Bacon compliance.

## IV. REQUEST FOR QUALIFICATIONS PROCESS

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### A. Inquiries

All communications and inquiries regarding this RFQ should be directed in writing to the following email address:

[NYCHousesRFQ@hpd.nyc.gov](mailto:NYCHousesRFQ@hpd.nyc.gov)

### B. Applications and Submission Requirements

This RFQ seeks Applicants who have the development experience, financial and organizational capacity to successfully rebuild 1-4 unit homes destroyed or substantially damaged by Sandy.

HPD will review applications and identify Qualified Developers. The Program seeks to include both not-for-profit and for-profit participants, all of whom must have the experience, financial resources and capacity required to rebuild 1-4 unit homes.

Applicants must submit their qualifications in accordance with the instructions and forms contained in *Section VII*. **All Applicants must submit a full response to this RFQ and meet the minimum criteria set forth in this RFQ.** In order to remain qualified, entities must continue to meet the minimum criteria set forth in this RFQ. Qualified Developers may be for-profit entities, joint ventures, individuals, sole proprietors, or not-for-profit organizations.

#### Pre-Submission Information

A pre-submission conference will be held on Tuesday, May 14, 2013, 10:00 a.m. at HPD, 100 Gold Street, Room 1R, New York, NY 10038. The date, time, and location of this pre-submission conference and any updates and/or additional communications regarding this RFP will also be posted on HPD's website at the following address:

<http://www.nyc.gov/html/hpd/html/developers/rfp.shtml>

HPD strongly recommends that interested Applicants attend this pre-submission conference, as this will be the only opportunity to ask questions and receive answers in person regarding the RFP. Responses to all inquiries will be collectively provided at the pre-submission conference and in an addendum, which will be posted on HPD's website and sent to all registered prospective Applicants after the pre-submission conference.

People with disabilities requiring special accommodations to pick up the RFP or to attend and/or participate in the pre-submission conference should contact HPD at the email address provided above.

#### Time and Place of Submission

On or before the submission deadline, the Applicant must submit the Application in accordance with the instructions and attachments contained in this RFQ. All submissions become the property of HPD.

Applications must be delivered by hand no later than 4:00 p.m. on **Wednesday, June 5, 2013**:

N.Y.C. Department of Housing Preservation and Development  
Office of Development  
100 Gold Street, Section 9G  
New York, NY 10038

Late submissions will not be accepted.

**C. Review and Evaluation**

HPD will determine if Applicants meet minimum qualification requirements based on the criteria specified in *Section V*. HPD may disapprove the inclusion of any or all members of the Applicant's team and may require Applicants to substitute other individuals or firms.

HPD will review Applications and match Qualified Developers with Cluster(s) for development, as detailed in *Section V. Minimum Qualification Requirements, and VI. Competitive Selection Criteria*. HPD will notify Qualified Developers and provide additional information to begin coordination with HRO to rebuild homes damaged by Sandy. HPD may, at its sole discretion, create a list of qualified Developers that may be offered redevelopment opportunities in Clusters that expand due to increased homeowner eligibility. HPD may designate one or more Developer(s) per Cluster.

## **V. MINIMUM QUALIFICATION REQUIREMENTS**

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### **A. Residential Development Experience**

At least one Principal of the Applicant must have had prior development experience, as Principal, by successfully completing at least one project of comparable size and scope to the one proposed in this RFQ. "Development Experience" is defined as the successful completion of the construction of at least one development project comparable to the size and scope of what is being proposed. Preference will be given to Applicants with an Architect who has New York City experience working with DOB.

### **B. Financial Capacity**

Applicants must demonstrate adequate financial resources to develop a project of the scope proposed in their submission. HPD will evaluate the Applicant's assets, bank or other lender references, and current commitments in order to assess the Applicant's capacity to fund predevelopment costs and commence and complete construction of Applicant's entire Project in a timely manner.

### **C. No Adverse Findings**

An Application will be rejected at any time during the evaluation process and thereafter if there are any adverse findings that would prevent HPD from selecting the Applicant or any person or entity associated with the Applicant. Such adverse findings include, but are not limited to:

- Negative findings from the Inspector General's Office
- Arson conviction or pending case;
- Harassment conviction or pending case;
- City, State, Federal or private mortgage arrears, default, or foreclosure proceedings;
- In rem foreclosure;
- Sale of tax lien or substantial tax arrears;
- Fair Housing violations or current litigation;
- Defaults under any Federal, State or City-sponsored program;
- A record of substantial building code violations or litigation against properties owned and/or managed by the Applicant or by any entity or individual that comprises the Applicant;
- Past or pending voluntary or involuntary bankruptcy proceeding; or
- Conviction for fraud, bribery or grand larceny.

## **VI. COMPETITIVE SELECTION CRITERIA**

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### **A. Approach and Timeline**

Applications will be evaluated on the quality of the proposed approach to meeting the goals of the NYC Houses Reconstruction program.

Applicants must provide a detailed narrative description outlining the proposed concept and methodology of the Project and include, among other things, the Applicant's:

- Approach to the Project and rebuild effort including phasing;
- Critical Project issues and problem solving techniques;
- Methods for leveraging scale and other methods of producing cost savings;
- Methods for producing the most cost-efficient, expeditious, and contextually-sensitive housing options for each cluster; and
- Ability to design models for each housing type that can be adapted to various unit configurations (1 BR, 2 BR, etc.).

Applicants must provide a development schedule and phasing plan (if applicable), including benchmarks for commencement and milestones related to homeowner engagement, commencement and completion of plans and drawings, New York City DOB plan approval, site preparation, construction commencement and completion, and occupancy of the Project. The timeline must account for the use of the CDBG-DR funds within 24 months of the grant award.

Due to the urgent nature of this RFQ, identify time saving measures in the Application, wherever applicable. Applications will be judged by their ability to produce results in a timely and realistic manner.

### **B. Development Experience and Capacity**

Previous development experience will be evaluated as it reflects the Applicant's demonstrated ability to successfully carry out a quality project of this type, size, and complexity in a timely manner. Among the factors that will be considered are:

- Quality of construction and design in projects completed or currently being built by the Applicant and/or its Principals;
- Extent of the Applicant's experience, in terms of number, size, type, and scale of projects completed within the last seven (7) years;
- History of delivering quality projects on time and within budget; and
- Experience with sustainable design practices consistent with Enterprise Green Communities requirements.

### **C. Design Experience and Quality of Design Submission**

#### Design Experience

Previous design experience will be evaluated as it reflects the Applicant's demonstrated ability to successfully carry out a well-designed and quality project of this type, size and complexity in a timely manner. Among the factors that will be considered are:

- Experience designing single-family homes, as defined in this RFQ; and
- Experience with sustainable design practices consistent with Enterprise Green Communities requirements.

Applicants must submit design team's resume, focused on single-family projects in the last ten (10) years, and qualifications detailing applicable residential development experience. Applicants should also describe their experience in building and designing resilient and sustainable developments, if applicable.

Quality of design submission

Schematic designs for each housing typology in each cluster for which you are applying must be provided and may include typical unit plans, elevations, other architectural drawings, and description of compliance with Enterprise Green Communities. Design submissions will be evaluated on their aesthetics, architectural merit and consideration the neighborhood context. Innovative design solutions for challenges related to the need to elevate structures should be proposed.

**D. Homeowner Engagement Plan**

The Developer will be working closely with the City to conduct outreach to homeowners and must be responsive and collaborative. The Developer should anticipate an intensive outreach process that may include weekly meetings with homeowners. Partnering with locally-based community organizations is encouraged.

Applicants must submit a narrative detailing a plan for engaging with eligible homeowners to encourage their participation in the Program. The goal of engagement is to gather input on general design guidelines for each cluster and have homeowners opt in to the program through providing the most time-efficient, cost-effective, and highest quality housing option. In addition, Applicants must submit a Homeowner Engagement Plan that outlines the capacity of current staff, or any additional staff that may be hired, and describe the approach for soliciting and gathering information from the homeowners that will be incorporated into the design. If you are partnering with a locally-based community organization, provide additional information about the organization in this section.

**E. Financial Submission**

Financial submissions will be evaluated based on the feasibility of cost estimates provided; methodology for leveraging scale; the efficient use of resources; as well as an evaluation of the following: total hard costs per square foot, total soft costs per square foot, total development cost per square foot, and the financing narrative's explanation of how site conditions and elevation requirements will impact costs.

## VIII. APPLICATION FORMAT

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### **Format of Application**

Each Application must include two (2) hard copies and one (1) USB drive with all components of the Application. All Financing Forms must be submitted as Excel files and in original formatting on the USB drive.

Each Application must be tabbed as indicated below in *Section VII.A - Contents of Application and Tabbing*. All forms associated with the Application must follow the format included in this RFQ. All Forms included in *Appendix E (Application Forms)* will be made available for download.

Please keep all aspects of your Application confidential to your team while the selection process is occurring.

### **A. Contents of Application and Tabbing**

Each Application must contain the forms and supporting documentation described below and each copy of the Application must be tabbed as indicated below. The tabs should run down the right hand side the Application document. All Application Forms can be found in *Appendix E*.

**COVER** – Identify cluster(s) that you're applying to on the cover of your Application.

#### **TAB A – Applicant's Letter and Applicant Description**

Each Applicant must submit the **Applicant's Letter** (Form A-2). The letter must be printed on the Applicant's letterhead and signed by an authorized representative of the Applicant. All Applicants must also complete the **Development Team Information** (Form B-1). Applicants that include a not-for-profit organization as a Principal of the Developer or a member of the Development Team must also complete the not-for-profit section of the **Applicant Description** (Form B-2).

If the Applicant is a joint venture, the Principals of each entity that comprises the joint venture must be identified, and a Principal of each entity must sign the Form.

Applicants must include a chart or diagram explaining the intended form and structure of any proposed partnership or joint venture. The structure and percentages of ownership and investment must be included.

#### **TAB B – Development Experience and Current Workload**

Each Principal of the Applicant must complete Form C-1. If an individual has no experience, this shall be indicated by including a form marked "None". These forms should be submitted as Excel files in original formatting on disc.

Applicants are encouraged to provide resumes describing key members of the Development Team and/or brochures describing the Applicant and any similar projects in which the Applicant has been involved. This information may include information regarding projects that the Applicant has developed in the vicinity of the Development Sites or clarification of information provided in the forms included in the Application.

#### **Tab C – Homeowner Engagement Plan**

Applicants must submit a narrative outlining prior community outreach experience. In addition, Applicants must submit a Homeowner Engagement Plan that outlines the capacity of current staff, or any additional staff that may be hired, and describe the

approach for soliciting and gathering information from the homeowners that will be incorporated into the design the homes. If you are partnering with a locally-based community organization, provide additional information about the organization in this section.

#### **TAB D – Design Team Experience & Narrative**

Applicants must submit design team’s resume, focused on single-family projects in the last ten (10) years, and qualifications detailing applicable residential development experience. Applicants should also describe their experience in building and designing resilient and sustainable developments, if applicable.

#### **TAB E – NYC Houses Reconstruction Development Narrative**

Applicants must provide a detailed narrative description outlining the proposed concept and methodology of the Project and include, among other things, the Applicant’s:

- Approach to the Project and rebuild effort including phasing,
- Critical Project issues and problem solving techniques,
- Methods for leveraging scale and other methods of producing cost savings
- Methods for producing the most cost-efficient, expeditious, and contextually-sensitive housing options for each cluster.

#### **TAB F – Design Submission**

Schematic designs for each housing typology in each cluster for which you are applying must be provided. See *Appendix B* for details about each Cluster and *Appendix C* for a detailed description of the Housing Typologies.

Design submissions should include:

- Typical Unit Plans: It is not required that design and architectural documents submitted include full unit layouts for the floor plans. Submissions, however, must show blocked out rooms and clearly indicate all dimensions and total square footages. Plans must be 1/8”=1’0”.
- Elevations: All elevations of the buildings at the same scale as the plans. Finishes, construction materials, ceiling heights, and floor elevations (level) must be shown and labeled on drawings. Perspective drawings/renderings are optional; however, they must not replace required elevations. Color renderings and/or elevations are appreciated but not required.
- Any other architectural drawings such as axonometric, street frontage elevations, perspective or sectional drawings or computer generated modeling, if they provide a better understanding of the development concept.
- Provide explanation of how your proposal will meet the requirements of Enterprise Green Communities. You may use the Enterprise Green Communities Checklist in *Appendix D*.

#### **TAB G – Financing Proposal**

Applicants must submit a completed **Development Budget** (Form G) in both hard copy and Excel format. Electronic copies of the forms can be downloaded from the HPD website. See *Appendix B and Appendix C* for details about each cluster that are relevant to the financial proposal.

Applicants must submit the following:

- One Development Budget for each of the housing typologies in the cluster
- If the cluster includes properties in the V Zone, an additional Development Budget is required for such properties.

- A financing narrative describing the impact that site conditions and elevation requirements may have on project costs and how this is reflected in the hard and soft cost contingency line items.

Applicants must also submit sample pro formas of past projects similar to the scope of the RFQ.

**Financing Letters of Interest**

**Construction servicer** – Provide a letter from a financial institution which will service funds during construction, including conducting construction inspections and authorizing the disbursement of funds.

**TAB H – Assets Statement**

Each Principal of the Applicant must submit audited or reviewed financial statements describing in detail the Principal's financial status in the two (2) most recent fiscal years preceding the deadline for the submission of Applications in response to this RFQ. Publicly-owned companies must submit the latest annual report and Form 10K as well as any Form 10Q submitted after such Form 10K. As an alternative, the **Assets Statement** in Form H may be used.

**TAB I – Development Schedule**

Applicants must provide a development schedule and phasing plan (if applicable), including benchmarks for commencement and milestones related to homeowner engagement, commencement and completion of plans and drawings, DOB plan approval, site preparation, construction commencement and completion, and occupancy of the Project.

In order to complete the timeline, assume at least three (3) weeks for HPD design approval. You may also assume an expedited process for filing applications and plans and review of said applications and plans at the DOB. Eligible Properties will be identified in the Building Identification System (BIS), thus allowing for Plan Examiners to recognize their status. All applications and plans filed with DOB must be filed electronically. See *Appendix A* for legislation about Special Inspections for buildings affected by Sandy.

Due to the urgent nature of this RFQ, identify time saving measures in the Application, if applicable.

**TAB J - References**

Applicants must provide a minimum of three (3) references that can speak to the Applicant's experience with community involvement, ability to finance projects, execution of plans in a timely manner, quality of construction, etc. Care should be taken to provide accurate information about references.

## **VIII. CONDITIONS, TERMS, AND LIMITATIONS**

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This RFQ is subject to the specific conditions, terms, and limitations stated below:

- A. HPD is not obligated to pay, nor shall HPD in fact pay, any costs or losses incurred by Applicants at any time, including the cost of responding to the RFQ.
- B. HPD reserves the right to reject, at any time, any or all submissions and/or cancel this RFQ in whole or in part. HPD also reserves the right, at any time, to waive compliance with, or change any of the terms and conditions of, this RFQ and to entertain modifications and additions to Applicants' submissions.
- C. HPD's qualification of an Applicant does not guarantee that any Applicant will be selected for any Cluster.
- D. HPD's qualification of an Applicant will not create any rights on the Applicants' part.
- E. HPD is not legally obligated to issue this RFQ.
- F. This RFQ and any resulting agreement are subject to all applicable laws, rules and regulations promulgated by any federal, state, or local authority having jurisdiction over the subject matter thereof, as the same may be amended from time to time.
- G. HPD reserves the right to cancel this RFQ at any time.
- H. If HPD qualifies an Applicant under this RFQ and subsequently selects the Applicant for the development of a Cluster, such selection of the Applicant will mean only that HPD may commence negotiations with that Applicant regarding the development of the Cluster. HPD will send the Negotiation Letter to the selected Applicant. The selected Applicant must begin pre-development work within thirty (30) days of the date of the Negotiation Letter. The selected Applicant will be expected to start construction on the date specified in their development schedule set forth in the Negotiation Letter. Form A-2 is an Applicant's Letter that describes this process. Each proposal must include this letter signed on behalf of the Applicant by a principal of the applicant. HPD reserves the right to terminate negotiations with or without cause after the issuance of such Negotiation Letter.
- I. Any material misrepresentation made by an Applicant or any failure by an Applicant to disclose any material information in connection with its response to this RFQ may result in the Applicant's disqualification from consideration under this RFQ or the if Applicant was already qualified, on the List, the revocation of such qualification.
- J. Each Applicant has a continuing obligation, prior to and after being qualified, to update HPD regarding any material changes to information that such Applicant has provided to HPD within 30 days of any such material changes, including, but not limited to material changes to information regarding investigations, subpoenas, and changes of principals. Failure of any Applicant to update HPD on such material changes may result in the Applicant's disqualification from consideration for under this RFQ or, if the Applicant was already found qualified by HPD, the revocation of such qualification.
- K. Each Applicant has a continuing obligation, prior to and after placement on the List, to provide any documentation and/or information requested by the City. Failure of any Applicant to provide such documentation and/or information when requested by the City changes may result in the Applicant's disqualification from consideration for under this RFQ or, if the Applicant was already found qualified by HPD, the revocation of such qualification.

## **IX. CONFLICTS OF INTEREST**

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Current and former employees of the City of New York may respond to this RFQ only in accordance with Chapter 68 of the New York City Charter governing ethics and conflicts of interest affecting City personnel. Section 2604(b)(7) of the City Charter contains specific prohibitions that exclude enumerated groups of employees from participating in the sales process. In addition, current HPD employees may not respond to this RFQ.

Persons in the employ of the City considering the submission of an Application are advised that opinions regarding the propriety of their purchase of City-owned property may be requested from the New York City Conflicts of Interest Board. This body is empowered, under Section 2602 of the City Charter, to issue advisory opinions on conflict of interest questions and other matters of ethical considerations. It is not necessary, however, that such an opinion be obtained prior to responding to this RF.

Former employees of the City of New York are also advised that the City Charter imposes certain restrictions on post-employment and business relationships with the City. Such individuals should consult the specific provisions on this issue contained in the City Charter.

## Appendix A. Critical Resources for Development Team(s)\*

\* Please note that information provided in this document may be subject to change. Development Team(s) are responsible for regularly checking the HPD RFQ website for updates as well as the sites listed here.



THE CITY OF NEW YORK  
OFFICE OF THE MAYOR  
NEW YORK, N. Y. 10007

EXECUTIVE ORDER NO. 230

EMERGENCY ORDER TO SUSPEND ZONING PROVISIONS TO FACILITATE  
RECONSTRUCTION IN ACCORDANCE WITH ENHANCED FLOOD RESISTANT  
CONSTRUCTION STANDARDS

January 31, 2013

WHEREAS, Executive Order 225, issued January 26, 2013, contains a proclamation extending a state of emergency in the City of New York, and such proclamation remains in effect for a period not to exceed thirty days or until rescinded, whichever occurs first; and

WHEREAS, on October 26, 2012, the Governor issued a declaration of emergency for all counties in the State of New York, including the City of New York, and such declaration remains in effect for a period not to exceed six months or until rescinded, whichever occurs first; and

WHEREAS, a severe storm ("Hurricane Sandy") hit New York City recently, causing heavy flooding, power outages, property damage, and disruption of public transportation and other vital services; and

WHEREAS, the effects of Hurricane Sandy have significantly damaged or destroyed many one- and two-family homes, as well as a number of multiple dwellings and other buildings, resulting in the displacement of residents, businesses and community facilities; and

WHEREAS, the reconstruction and reoccupancy of such buildings is critical to disaster recovery and it is essential that reconstruction proceed in a manner that incorporates enhanced flood risk prevention standards reflective of best practices; and

WHEREAS, on January 28, 2013, the Federal Emergency Management Agency (“FEMA”) published Advisory Base Flood Elevation Maps for portions of New York City, and FEMA will shortly publish Advisory Base Flood Elevation Maps for the remainder of New York City, providing more up to date information on safe elevations for flood resistant construction; and

WHEREAS, pursuant to the emergency rulemaking procedures of the City Administrative Procedure Act, New York City Charter Section 1043(i)(1), the Department of Buildings promulgated an emergency rule, 1 RCNY 3606-04, to amend reference standard American Society of Civil Engineers (“ASCE”) 24 as incorporated into Appendix G ( “Flood Resistant Construction”) of the New York City Building Code (hereinafter “Appendix G”) and relating to the level above the base flood elevation to which new, substantially damaged or substantially improved buildings must be designed and constructed, and such rule is effective as of such date; and

WHEREAS, current zoning height restrictions and other limitations pose significant practical difficulties for the reconstruction of affected buildings in consistent with elevations shown on the Advisory Base Flood Elevation Maps and the timeframe required for adoption of amendments to the New York City Zoning Resolution (“Zoning Resolution”) and would substantially impede rapid reconstruction in accordance with such Maps ; and

WHEREAS, current zoning limits the reconstruction and continuation in use of retail businesses located in residential districts, as well as the reconstruction of other non-conforming and non-complying buildings; and

WHEREAS, the above-described provisions of the Zoning Resolution will prevent, hinder or delay disaster recovery, requiring the adoption of emergency measures; and

WHEREAS, the Department of City Planning will proceed forthwith to prepare and forward into the public review process proposed amendments to the Zoning Resolution that will make permanent the provisions of this Executive Order;

NOW, THEREFORE, it is hereby ordered:

§1. The provisions of this Order shall apply only with respect to buildings:

- a. that are located within the Advisory Limit of the 1% Annual Chance Flood Hazard Area as delineated on FEMA Advisory Base Flood Elevation Maps;
- b. for which construction must be, or is otherwise proposed to be, performed fully in accordance with the flood resistant construction provisions of Appendix G that would apply if such building were hereafter erected; and
- c. for which construction utilizes as the Design Flood Elevation for the purposes of the Tables in Appendix G, the Zoning Design Flood Elevation in Section two of this Order; provided, further, that:
  - i. such construction shall be made under the provisions governing the more restrictive of the area of special flood

hazard applicable to the building location shown on the FEMA Advisory Base Flood Elevation Map and the FEMA FIRMs 360497/FEMA FIS 360497;

- ii. in V-Zones, the minimum elevation below which flood-damage-resistant materials must be used shall be the sum of:  
(A) the Zoning Design Flood Elevation and (B) the difference between the Design Flood Elevation for flood-damage-resistant materials in Table 5-1, and the Design Flood Elevation for V Zones shown in Table 4-1, for the applicable structural occupancy category of ASCE 24, as amended by 1 RCNY 3606-04;
- iii. in V Zones, the minimum elevation of utilities and attendant equipment shall be the sum of: (A) the Zoning Design Flood Elevation and (B) the difference between the Design Flood Elevation for utilities and attendant equipment in Table 7-1, and the Design Flood Elevation for V Zones shown in Table 4-1, for the applicable structural occupancy category of ASCE 24, as amended by 1 RCNY 3606-04; and
- iv. for all one- or two-family residences located in A Zones, all enclosures below the Zoning Design Flood Elevation with a vertical clearance of five feet or greater, except for wet-flood proofed enclosures for stairs and vestibules, shall be of an open lattice type construction.

- d. Notwithstanding the foregoing, the provisions of this Order shall apply where the building location is located within an area of special flood hazard as established by Section G102.2 of Appendix G, but is not located within advisory limit of the 1% Annual Chance Flood Hazard Area as delineated on the FEMA Advisory Base Flood Elevation Maps, in which case this Order shall apply where construction is consistent with flood-resistant construction provisions of Appendix G, including the requirements therein governing the Base Flood Elevation and Design Flood Elevation that would apply if such building were hereafter erected.

§2. The “Zoning Design Flood Elevation” is defined for purposes of this Order as an elevation that is the higher of:

- a. Any applicable Design Flood Elevation in accordance with FEMA FIRMs 360497/FEMA FIS 360497 and Appendix G, including ASCE 24 as amended by 1 RCNY 3606-; and
- b. An elevation selected by the applicant that is:
  - i. no less than the 1% Advisory Base Flood Elevation for the building location shown on the FEMA Advisory Base Flood Elevation Maps; and
  - ii. no higher than the elevation which is the sum of: (A) the 1% Advisory Base Flood Elevation for the building location shown on the FEMA Advisory Base Flood Elevation Maps; and (B) the difference between the Design Flood Elevation

and the Base Flood Elevation for the applicable structural occupancy category as shown in Tables 2-1 (A-Zones) or 4-1 (V-Zones) of ASCE 24, as amended by 1 RCNY 3606-04.

Notwithstanding the foregoing, the Zoning Design Flood Elevation may be an elevation that is less than the 1% Advisory Base Flood Elevation for the building location shown on the FEMA Advisory Base Flood Elevation Maps, where the Department of Buildings has determined that a reduction is warranted based on more recent, detailed information provided to the City by FEMA.

§3. Pursuant to the powers vested in me by Paragraph g of Subdivision 1 of Section 24 of the New York Executive Law to suspend any local laws, ordinances, or regulations, or parts thereof, which may prevent, hinder, or delay necessary action in coping with a disaster or recovery therefrom whenever the Governor has declared a State Disaster Emergency, I hereby suspend, subject to the provisions of sections one and two of this order, provisions of the Zoning Resolution as described in this Section and set forth in the attached list:

- a. The following shall apply to single-family and two-family residences existing on October 28, 2012:
  - i. All provisions of the Zoning Resolution establishing building height limitations, minimum distance requirements between legally required windows and walls or lot lines, yard requirements, and, for buildings that were non-complying buildings as of October 28, 2012, the provisions prohibiting new non-compliances, or prohibiting an increase in the

degree of existing non-compliances, are suspended in all cases insofar as and to the extent required to:

A. vertically elevate such a residence, or vertically elevate a reconstruction of such a residence, in order to raise the lowest floor level containing lawful habitable space located at or above the adjoining grade as of October 28, 2012, such that (1) for residences in A zones, such lowest floor may be elevated to the Zoning Design Flood Elevation, as defined in Section two of this Order, and (2) for residences in V Zones, the lowest horizontal structural member supporting such lowest floor may be elevated to the Zoning Design Flood Elevation, as defined in Section two of this Order; and

B. reposition a residence elevated pursuant to Subparagraph (A) of this Paragraph under the conditions set forth in Subparagraph (B) of Paragraph (ii) of this Subdivision.

ii. The suspensions of the Zoning Resolution pursuant to Paragraph (i) of this Subdivision are subject to the following conditions:

- A. the building footprint shall have dimensions no greater than the footprint that existed on October 28, 2012;
  - B. where a building is repositioned to reduce an encroachment into a front yard by up to three feet in depth in order to accommodate stair access, such building may also be repositioned to newly encroach or further encroach into required yards at the rear of the building by up to an equivalent depth, provided that a distance of eight feet or more, measured perpendicular to the rear wall of the building, shall be maintained between such new encroachment and all other residences on the same or adjoining zoning lots; and
  - C. elevating or repositioning such building shall not result in a new floor area non-compliance, nor increase the degree of any pre-existing floor area non-compliance.
- b. The following provisions shall apply for all buildings, whether existing, new, altered, or enlarged:
- i. All provisions of the Zoning Resolution establishing building height limitations (including height limits for building features such as ground floor transparencies and accessory

signs) based on measurement from a datum are suspended, insofar and to the extent that such limitations may be exceeded by the difference between the applicable datum and the Zoning Design Flood Elevation. Such data include, without limitation: front yard line level, base plane, base flood elevation, street wall line level, curb level, street line, and adjacent grade, as such terms are defined or used by the Zoning Resolution. *[For non-complying buildings or portions thereof see also Paragraph (i) of Subdivision (c) of this Section.]*

- ii. For residential buildings located in districts governed by the bulk regulations of R1-2A, R2A, R2X, R3, R4 or R5 Districts, the provisions of Section 12-10 of the Zoning Resolution regulating the amounts of floor space for mechanical equipment that must be included in, or may be excluded from, floor area calculations are suspended insofar and to the extent that the Commissioner of Buildings issues a written determination that an amount of floor space for mechanical equipment need not be included in floor area calculations on the basis that such floor space is necessary for mechanical equipment and the mechanical equipment is to be located at or above the Zoning Design Flood Elevation.

- iii. For single-family and two-family residences, all provisions of the Zoning Resolution governing permitted obstructions in rear or side yards or open spaces are suspended, insofar as and to the extent that an accessory emergency generator shall be allowed in such a yard or open space, provided that such generator is in compliance with all other applicable codes, rules and regulations, is located at least five feet from a lot line, and is raised to the Zoning Design Flood Elevation.
- c. The following provisions shall apply to non-complying buildings, or portions thereof, existing on October 28, 2012, other than single-family and two-family residences:
  - i. All provisions of the Zoning Resolution that prohibit increases in the degree of non-compliance through reconstruction are suspended, insofar and to the extent that an increase in height equal to the difference between the applicable datum and the Zoning Design Flood Elevation would result in any non-compliance, provided that:
    - (A) such reconstruction on the zoning lot does not result in buildings that extend beyond the footprint of buildings existing on October 28, 2012; and
    - (B) elevating a building shall not result in a new floor area non-compliance, nor increase the degree of any pre-existing floor area non-compliance.

- ii. The provisions of Section 54-41 of the Zoning Resolution that require that reconstruction of non-complying buildings or other structures damaged or destroyed by any means to the extent of 75 percent or more of their total floor area, other than single-family and two-family residences, shall be made in accordance with the applicable bulk regulations, are suspended, insofar as and to the extent that reconstruction of buildings damaged to an extent of 75 percent or more of their floor area due to the effects of Hurricane Sandy may be reconstructed to the pre-existing degree of non-compliance and in addition, with an increase in height in accordance with the provisions of Paragraph (i) of this Subdivision.
- d. The following provisions shall apply to non-conforming uses existing on October 28, 2012:
  - i. The provisions of Sections 52-53 and 52-54 of the Zoning Resolution, and the provisions of Section 52-22 in connection therewith, that restrict reconstruction, structural alteration, and continuance in use of non-conforming uses damaged or destroyed due to the effects of Hurricane Sandy to the extent set forth in such Sections, are suspended, insofar as and to the extent that such non-conforming uses may be reconstructed, structurally altered, and continued in use, provided that this Paragraph shall not apply to:

- A. non-conforming residential uses located in C8 or manufacturing districts; and
  - B. non-conforming manufacturing uses located in residential or commercial districts other than C8 districts.
- e. The following provisions shall apply to buildings containing residences and structures accessory thereto in existence as of October 28, 2012 in the Special South Richmond District that were damaged due to the effects of Hurricane Sandy:
- i. The provisions of Section 107-22 *et seq.* of the Zoning Resolution are suspended, insofar and to the extent that, as determined in writing by the Commissioner of Buildings, a development:
    - A. does not result in buildings or other structures that extend beyond the footprint of buildings or other structures existing on October 28, 2012; and
    - B. would not result in an increase in impervious surfaces on the zoning lot,

In addition, the provisions of Section 107-22 *et seq.* of the Zoning Resolution are suspended, insofar and to the extent that the Commissioner of Buildings may approve a site alteration that such Commissioner determines in writing is

the minimum necessary to enable the reconstruction of the building.

- ii. The provisions of Section 107-23 of the Zoning Resolution are suspended, insofar and to the extent that, as determined in writing by the Commissioner of Buildings a development on the zoning lot does not result in buildings or other structures that extend beyond the footprint of buildings or other structures existing on October 28, 2012. Such suspension shall not affect the terms of a certification previously made by the City Planning Commission pursuant to Section 107-23.
  
- f. The following provisions apply to buildings existing as of October 28, 2012, located within waterfront blocks, that sustained substantial damage, as defined in Appendix G, due to the effects of Hurricane Sandy:
  - i. The provisions of 62-50 through 62-59 of the Zoning Resolution (General Requirements for Visual Corridors and Waterfront Public Access Areas) and implementing provisions related thereto are suspended for such buildings that did not exceed 20,000 square feet of floor area prior to Hurricane Sandy, provided that, as determined in writing by the Commissioner of Buildings:

- A. the dimensions of the building footprint are no greater than the footprint that existed on October 28, 2012;
- B. if such building is repositioned on the lot, such repositioning does not newly encroach, or further encroach into a required yard, visual corridor or existing public access area; and
- C. the reconstruction does not result in a change of use from that existing on October 28, 2012.

§4. All terms used in this Order that are defined in Section 12-10 or any other provisions of the Zoning Resolution affected by this Order shall have the meaning set forth in or as used in such provisions.

§5. This Order shall take effect immediately. It shall remain in effect for five (5) days unless it is terminated or modified at an earlier date.

  
Michael R. Bloomberg  
Mayor

## LIST OF SUSPENDED ZONING RESOLUTION PROVISIONS

The suspension of the sections of the Zoning Resolution or portions thereof listed below applies only to buildings that meet the conditions of Section 2 of this Executive Order.

### 1. Provisions Suspended by Subdivision (a) of Section 3 of this Executive Order

Zoning Resolution Section	Paragraph
23-45	
23-461	
23-47 et seq	
23-51	
23-53 et seq	
23-54 et seq	
23-631	a
23-631	b
23-631	c
23-631	d
23-631	e
23-631	f
23-631	g
23-631	h (4)
23-632	a
23-633	
23-64	
23-661	
23-663	
23-691	
23-692	
23-693	
23-711	
23-86	
34-24	a
35-24	
35-34	
35-61	a
35-61	b
54-41	
62-324	b
62-341	a(3)
62-351	b
62-411	

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
94-10	
111-20	(c)
112-103	
123-66	
128-30	
131-40	
131-421	a(2)
131-423	a
131-431	a(1)
131-432	a
131-441	a(1)
131-443	a
131-45	a

**2. Provisions Suspended by Paragraph (i) of Subdivision (b) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
23-44	b (5)
23-44	b (5)
23-44	b (5)
23-631	a
23-631	b
23-631	c
23-631	d
23-631	e
23-631	f
23-631	g
23-631	h (3)
23-631	h (4)
23-632	a
23-633	
23-634	
23-64	
23-651	b (2)
23-661	
23-662	
23-663	
23-691	
23-692	
23-693	

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
23-711	
23-86	
24-12	
24-164	a
24-33	b
24-521	
24-522	a
23-53	
24-551	
24-552	a
24-591	
33-23	
33-431	a
33-432	
33-441	
33-442	
33-491	
34-24	a
35-24	
35-34	
35-61	a
35-61	b
43-23	b
43-43	
43-44	
43-49	
43-61	c
62-324	b
62-341	a(3)
62-342	
62-351	b
62-411	
63-22	
63-23	
94-10	
111-20	(c)
112-103	
112-104	
116-13	
123-66	
125-12	
125-30	
128-30	

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
128-35	(e)
131-15	
131-40	
131-421	a(2)
131-423	a
131-431	a(1)
131-432	a
131-441	a(1)
131-443	a
131-45	a
131-47	b(2)

**3. Provisions Suspended by Paragraph (ii) of Subdivision (b) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
12-10	Definition of "floor area," paragraphs (m) and (8)

**4. Provisions Suspended by Paragraph (iii) of Subdivision (b) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
23-44	

**5. Provisions Suspended by Paragraph (i) of Subdivision (c) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
52-51	
52-55	
54-41	
54-42	

**6. Provisions Suspended by Paragraph (ii) of Subdivision (c) of Section 3 of this Executive Order**

<b>Zoning Resolution</b>	<b>Paragraph</b>
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<b>Section</b>	
54-41	
54-42	

**7. Provisions Suspended by Subdivision (d) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
52-22	
52-53	
52-54	

**8. Provisions Suspended by Subdivision (e) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
107-22 et seq	
107-23	

**9. Provisions Suspended by Subdivision (f) of Section 3 of this Executive Order**

<b>Zoning Resolution Section</b>	<b>Paragraph</b>
62-50	
62-51 et seq	
62-52	
62-53	
62-54	
62-55	
62-56 et seq	
62-57 et seq	
62-58	
62-59	

The Community Development Block Grant – Disaster Recovery Action Plan A is available at <http://www.nyc.gov/html/cdbg/html/home/home.shtml>, the NYC Recovery website.

FEMA's Home Builder's Guide to Coastal Construction is available for download at <http://www.fema.gov/library/viewRecord.do?id=2138>.

A Local Law to amend the administrative code of the city of New York and the New York City building code, in relation to the raising and moving of a building is available for download at

<http://www.nyc.gov/html/dob/downloads/pdf/ll29of2013.pdf>.

**APPENDIX G**  
**FLOOD-RESISTANT CONSTRUCTION**

**CHAPTER G1**  
**GENERAL PROVISIONS**

**SECTION BC G101**  
**PURPOSE AND OBJECTIVES**

**G101.1 Purpose.** The purpose of this appendix is to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific flood hazard areas through the establishment of comprehensive regulations for management of flood hazard areas designed to:

1. Prevent unnecessary disruption of commerce, access and public service during times of flooding;
2. Manage the alteration of natural flood plains, stream channels and shorelines;
3. Manage filling, grading, dredging and other development which may increase flood damage or erosion potential;
4. Prevent or regulate the construction of flood barriers which will divert floodwaters or which can increase flood hazards;
5. Contribute to improved construction techniques in the flood plain; and
6. Comply with and exceed the minimum standards of the National Flood Insurance Program as administered by the Federal Emergency Management Agency (FEMA).

**G101.2 Objectives.** The objectives of this appendix are to:

1. Protect human life;
2. Minimize the expenditure of public money for flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding;
4. Minimize prolonged business interruption;
5. Minimize damage to structures located in areas of special flood hazard;
6. Minimize damage to public facilities and utilities such as water, electricity, telephone and sewer lines, and streets and bridges located in areas of special flood hazard;

7. Help maintain a stable tax base by providing for the sound use and development of flood prone areas; and
8. Ensure that potential owners and occupants are notified that property is within areas of special flood hazard.

G101.3 Reserved.

G101.4 Reserved.

## **SECTION BC G102** **APPLICABILITY**

**G102.1 General.** This appendix, in conjunction with the *New York City Construction Codes*, provides minimum requirements for development located in areas of special flood hazard within the jurisdiction of New York City, including:

1. **Subdivisions.** This appendix shall apply to the subdivision of land;
2. **Utilities.** This appendix shall apply to the installation of utilities;
3. **Site improvements.** This appendix shall apply to site improvements, including but not limited to, temporary or permanent storage of materials, mining, dredging, filling, grading, paving, excavations, operations and other land disturbing activities;
4. **Prefabricated buildings and manufactured homes.** This appendix shall apply to placement and replacement of prefabricated buildings and manufactured homes;
5. **Post-FIRM construction.** This appendix shall apply to post-FIRM construction.;
6. **Alterations to Post-FIRM construction.** This appendix shall apply to repair, reconstruction, rehabilitation, or additions to post-FIRM construction;
7. **Substantial improvement of Pre-FIRM construction.** This appendix shall apply to substantial improvement of pre-FIRM buildings and structures, including restoration after damage, as if hereafter erected;
8. **Horizontal enlargements of pre-FIRM construction.** This appendix shall apply to horizontal enlargements of pre-FIRM buildings and structures to the extent of such horizontal enlargement, including but not limited to additions, decks, carports, or similar appendages. The existing portions of the structure shall not be required to comply, unless otherwise required because the

alteration is deemed a substantial improvement; and

**9. Other alterations to pre-FIRM construction.** This appendix shall apply to alterations or repairs to pre-FIRM buildings and structures, including installation of new components, materials, finishes and equipment, that increase the degree of noncompliance with this appendix. The following alterations or repairs, other than substantial improvements, shall not be deemed as an increase in the degree of noncompliance:

**9.1. Where the alteration or repair comprises the replacement of pre-FIRM components, materials, finishes or equipment;**

**9.2. Where the alteration or repair comprises the installation of new components, materials, finishes or equipment in a space within the structure where similar pre-FIRM components, materials, finishes or equipment already exist; and**

**9.3. Where such alteration is a change in use, occupancy or how such space is used, provided that such change would not increase the degree of noncompliance with requirements of this appendix. The conversion of any space below the design flood elevation from non-habitable space into habitable space shall be deemed an increase in the degree of noncompliance.**

**G102.2 Establishment of areas of special flood hazard.** The following flood hazard map and supporting data are adopted as referenced standards and declared to be a part of this appendix:

1. FEMA FIS 360497.
2. FEMA FIRMs 360497.

**G102.3 Letters of map change.** Map changes to FEMA FIRMs 360497 shall be administered in compliance with Sections G102.3.1 and G102.3.2.

**G102.3.1 Letters of map amendment (LOMA).** Where FEMA FIRMs 360497 indicates that a structure or tax lot is within a delineated area of special flood hazard, but the pre-FIRM ground elevations adjacent to the structure or throughout the tax lot are at or above the base flood elevation, the commissioner shall deem such structure or tax lot as being within the area of special flood hazard and shall not approve plans except in compliance with this appendix, unless a letter of map amendment (LOMA) is issued by FEMA removing such structure or tax lot from the area of special flood hazard.

**G102.3.2 Letter of map revision based on fill (LOMR-F).** Where FEMA FIRMs 360497 indicates that a structure or tax lot is within a delineated area of

special flood hazard, but post-FIRM compacted fill is proposed to be added adjacent to the structure or throughout the tax lot to an elevation at or above the base flood elevation, the commissioner shall deem such structure or tax lot as being within the area of special flood hazard and shall not approve plans except in compliance with this appendix, unless a conditional or final letter of map revision based on fill (LOMR-F) is issued by FEMA removing such structure or tax lot from the area of special flood hazard. The commissioner shall promulgate rules establishing procedures for processing letters of map revision based on fill (LOMR-F).

**G102.3.3 Certificates of occupancy.** Certificates of occupancy shall indicate that the structure or tax lot is subject to a letter of map amendment (LOMA) or letter of map revision based on fill (LOMR-F) as per Section G106.3.

## **SECTION BC G103** **ADMINISTRATION**

**G103.1 Permit applications.** The commissioner is hereby designated as the floodplain administrator for the City of New York and shall review permit applications to determine that:

1. Proposed development sites will be reasonably safe from flooding;
2. All site development activities, including grading, filling, utility installation and drainage modification, and all new construction and substantial improvements (including the placement of prefabricated buildings and manufactured homes) are designed and constructed with methods, practices and materials that minimize flood damage and that are in accordance with this code and ASCE 24; and
3. All other required state and federal permits have been obtained.

**G103.2 Reserved.**

**G103.3 Determination of base flood elevations.** Where the proposed development is within an area of special flood hazard but the base flood elevations are not specified in the FEMA FIRMs 360497, the commissioner shall require the applicant to request base flood elevation data from the New York State Department of Environmental Conservation (DEC); and

1. Submit to the commissioner either:
  - 1.1. A letter from DEC making such a determination of base flood elevation;  
or

- 1.2. A letter from the DEC indicating that the data are not available. When such a letter from DEC indicates that the data are not available, the base flood elevation shall be equal to 3 feet (914 mm) above the highest adjacent pre-FIRM grade.

**Exception:** Large lots. Where the base flood elevation is not specified, the applicant shall submit a detailed engineering study establishing the base flood elevation, performed by an engineer in accordance with accepted hydrologic and hydraulic engineering techniques, in sufficient detail to allow review by the commissioner for any of the following conditions:

1. For a development which is located on a tax lot greater than 5 acres (2.02 hectares), or is located on property that was part of a tax lot that was greater than 5 acres (2.02 hectares) at the time of the adoption of the FIRM (October 1, 1984), or at any subsequent applicable map change thereto; or
2. For subdivisions resulting in 50 or more tax lots, including all tax lots previously subdivided from the same tax lot since the adoption of the FIRM (October 1, 1984), or since any subsequent applicable map changes thereto.

#### **G103.4 Reserved.**

**G103.5 Floodway encroachment.** Prior to issuing a permit for any floodway encroachment, including fill, new construction, substantial improvements and other development or land-disturbing activity, the commissioner shall require submission of a certification, along with supporting technical data, demonstrating that such development will not cause any increase of the level of the base flood. However, a floodway encroachment that increases the level of the base flood may be authorized if the applicant has:

1. Applied for a conditional Letter of Map Revision; and
2. Received the approval of the Federal Emergency Management Agency (FEMA).

**G103.6 Watercourse alteration.** Prior to issuing a permit for any alteration or relocation of any watercourse within an area of special flood hazard, the commissioner shall require the applicant to:

1. Notify any affected adjacent municipalities or government jurisdictions;
2. Notify the DEC;

3. Submit evidence of such notifications to the commissioner and the Regional Director, Region II, the Federal Emergency Management Agency (FEMA);
4. Submit to the commissioner evidence of all such notifications;
5. Submit an engineering analysis demonstrating that the flood-carrying capacity of the altered or relocated portion of the watercourse will not be decreased; and
6. Submit evidence that such watercourses will be maintained in a manner which preserves the channel's flood-carrying capacity.

**G103.7 Sand dune alterations in V-Zones.** Prior to issuing a permit for any alteration of sand dunes in a V-Zone, the commissioner shall require submission of an engineering analysis demonstrating that the proposed alteration will not increase the potential for flood damage.

**G103.8 Records.** The commissioner shall maintain records of the following:

1. Applications and supporting documents for development in areas of special flood hazard;
2. Permits issued in areas of special flood hazard;
3. Inspection reports;
4. Certifications required in this appendix; and
5. Certificate of occupancy where applicable.

**G103.9 Violations.** See Chapter 2 of Title 28 of the *Administrative Code*.

## **SECTION BC G104** **PERMITS**

**G104.1 Permit required.** Any person, owner or authorized agent who intends to conduct any development, as applicable pursuant to Section G102.1, within an area of special flood hazard, shall first apply to the commissioner and shall obtain the required permit.

**G104.2 Permit application requirements.** The applicant shall file an application in writing on a form furnished by the commissioner. The commissioner shall not approve such application unless the applicant submits all plans, details, data and documents demonstrating that the development complies with Section G104 and all other provisions of this appendix.

**G104.3 Site plan.** The permit application shall include a site plan. The site plan shall include plans and drawings, shall be sealed by a registered design professional and shall include the following information and any other data as may be required by the department:

1. A delineation of the flood hazard areas, including identification of the base and design flood and elevations;
2. If applicable, the location of the regulatory floodway;
3. For all proposed structures, spot ground elevations at building corners and in 20-foot (6096 mm) or smaller intervals along the foundation footprint, or 1 foot (305 mm) contour elevations throughout the building site;
4. Proposed locations of water supply, sanitary sewer, and utilities;
5. Drainage patterns and facilities; and
6. Foundation design details, including but not limited to:
  - 6.1. Proposed elevation of the lowest floor including basement (for flood zone purposes) of all structures;
  - 6.2. For a crawl-space, parking, storage, building access and other wet floodproofed enclosures below the design flood elevation, location and total net area of foundation openings in accordance with ASCE 24;
  - 6.3. For dry floodproofed enclosures in buildings or structures that are nonresidential (for flood zone purposes), the proposed elevation to which the enclosure will be dry floodproofed in accordance with ASCE 24; and
  - 6.4. Any proposed fill and excavation details.

**Exception:** Applications for subdivisions shall comply with Section G302.

**G104.4 Water course alteration.** The permit application shall include, if applicable, a description of the extent to which any watercourse will be altered or relocated as a result of proposed development, and any documentation required by Section G103.6.

**G104.5 Certifications.** The permit application shall include the applicable certifications in accordance with Section G104.5.1 through G104.5.3.

**G104.5.1 A-Zones.** For construction in A-Zones, the permit application shall include the following certifications, as applicable:

1. **Wet floodproofing certification.** For wet floodproofed enclosures below the design flood elevation, construction documents shall include a certification by the applicant that the design provides for the automatic entry and exit of floodwaters for equalization of hydrostatic flood forces in accordance with Section 2.6.1.2, ASCE 24.
2. **Dry floodproofing certification for nonresidential buildings.** For dry floodproofed buildings and structures that are nonresidential (for flood zone purposes), construction documents shall include a certification by the applicant that the dry floodproofing is designed in accordance with ASCE 24.
3. **Utility certifications.** For all applications involving utility or mechanical work, including applications where such work is to be filed in a separate, related application, construction documents shall include a certification by the applicant that “all heating, ventilation, air conditioning, plumbing, electrical and other services facilities and equipment within the structure or site will be located or constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24.”

**G104.5.2 V-Zones.** For construction in V-Zones the permit application shall include the following certifications, as applicable:

1. **Structural design certification.** Construction documents shall include a certification by the applicant that the “entire structure is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16 of the *New York City Building Code*.”
2. **Breakaway wall certification.** Where breakaway walls are provided, construction documents shall include a certification by applicant that “the breakaway walls meet the load requirements of Section 5.3.2.3 of ASCE 7, are designed in accordance with ASCE 24, and are of an open lattice type construction only.”
3. **Utility certifications.** For all applications involving utility or mechanical work, including applications where such work it to be filed in a separate, related application, construction documents shall include a certification by the applicant that “all heating, ventilation, air conditioning, plumbing, electrical and other services facilities and equipment within the structure or site will be located or constructed so as to prevent water from entering

or accumulating within the components during conditions of flooding, in accordance with ASCE 24.”

**G104.5.3 Floodway encroachment certification.** For any floodway encroachment, including fill, new construction, substantial improvements and other development or land-disturbing activity, the applicant shall submit a certification, along with supporting technical data, demonstrating that such development will not cause any increase of the level of the base flood in accordance with the requirements of Section G103.5.

**G104.6 Validity of permit.** The issuance of a permit under this appendix shall not be construed to be a permit for, or approval of, any violation of this appendix or any other provision of this code. The issuance of a permit based on submitted documents and information shall not prevent the commissioner from requiring the correction of errors. The commissioner is authorized to prevent occupancy or use of a structure or site which is in violation of this appendix or other provisions of this code.

**G104.7 Permit expiration.** A permit shall become invalid if the proposed development:

1. Is not commenced within 180 days after its issuance; or
2. If the work authorized is suspended or abandoned for a period of 180 days after the work commences.

**G104.8 Permit reinstatement.** Permit reinstatements shall be requested in writing. The commissioner is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each subject to the limitations of Section 28-105.

**G104.9 Permit suspension or revocation.** The commissioner is authorized to suspend or revoke a permit issued under this appendix wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of this code, in accordance with Section 28-105.

## **SECTION BC G105**

### **SPECIAL INSPECTIONS REQUIREMENTS**

**G105.1 General.** Special inspections shall be performed in accordance with this section.

**G105.2 All work applications.** All work applications, regardless of the extent of the scope of work, shall be subject to the following special inspection:

1. **Flood zone compliance inspection.** Prior to sign off of work, a registered design professional shall certify that: “the structure was constructed” or “alterations were performed,” “with methods and practices that minimize

flood damage and that are in accordance with approved plans, and with any applicable provisions of Appendix G of the *New York City Building Code* and ASCE 24.”

**G105.3 New buildings and substantial improvements.** In addition to the flood zone compliance inspection required by Section G105.2, all applications for new buildings or substantial improvements shall be subject to the following special inspections:

1. **Elevation progress inspection.** Upon placement of the lowest floor, including the basement (for flood zone purposes), an engineer or licensed professional surveyor shall inspect the site and verify the elevation of such lowest floor. The inspection report verifying the elevation shall be submitted to the commissioner prior to further vertical construction. The commissioner shall be permitted to issue a stop work order if such inspection report is not submitted.
  
2. **Final elevation inspection.** The final elevations shall comprise either of the following, as applicable:
  - 2.1. **Elevation certificate.** Prior to sign off of work, an engineer or licensed professional surveyor shall submit to the commissioner a certification of the elevation of the lowest floor, including the basement (for flood zone purposes). Such certification shall be made utilizing FEMA Form 81-31 entitled, “Elevation Certificate.”
  
  - 2.2. **Dry floodproofing certificate.** Prior to sign off of work, an engineer or licensed professional surveyor shall submit to the commissioner a dry floodproofing certificate. Such certification shall be made utilizing FEMA Form 81-65 entitled, “Floodproofing Certification.”

**G105.3.1 Flood shield inspection.** Where floodshields or other flood control devices are installed as part of a dry floodproofing system in buildings and structures that are nonresidential (for flood zone purposes), a registered design professional shall inspect the shields or devices in their stored positions or locations, witness their activation or transportation to their installed positions, and witness their deactivation or transportation back to their stored locations. The registered design professional shall also confirm the installation of signage required by ASCE 24, Section 6.2.3, Item 3.

**G105.4 Reserved.**

**G105.5 Reserved.**

**G105.6 Reserved.**

**G105.7 Reserved.**

## **SECTION BC G106** **CERTIFICATES OF OCCUPANCY**

**G106.1 Applicability.** This section shall apply to post-FIRM construction and substantial improvements where the work results in the issuance of a new or amended certificate of occupancy.

**G106.2 Spaces subject to flooding in A-Zones.** The certificate of occupancy shall describe all non-dry-floodproofed spaces below the design flood elevation as “subject to flooding,” including but not limited to wet floodproofed spaces usable solely for parking, storage, building access or crawl spaces.

**G106.3 Spaces subject to flooding in V-Zones.** The certificate of occupancy shall describe all spaces below the design flood elevation as “subject to flooding,” including but not limited to spaces usable solely for parking, storage, building access or crawl spaces.

**G106.4 Dry floodproofed spaces.** The certificate of occupancy shall describe any dry floodproofed spaces as “dry floodproofed”. For such buildings containing dwelling units, the certificate of occupancy shall also provide notations as required by Section G304.1.2, Item 2.2.5. Where flood shields or other flood control devices are installed, the certificate of occupancy shall also provide notations describing these features.

**G106.5 Letters of map change.** Where applicable, the certificate of occupancy shall indicate that “the structure is exempted from the area of special flood hazard pursuant to FEMA Letter of Map Amendment (LOMA) # ( \_\_\_\_\_ ),” or that “the structure is exempted from the area of special flood hazard pursuant to FEMA Letter of Map Revision Based on Fill (LOMR-F) # ( \_\_\_\_\_ ).”

## **SECTION BC G107** **VARIANCES**

**G107.1 General.** The Board of Standards and Appeals shall hear and decide requests for variances from the requirements of this appendix. The Board of Standards and Appeals shall base its determination on technical justifications, and has the right to attach such conditions to variances as it deems necessary to further the purposes and objectives of this appendix.

### **G107.2 Conditions for variance.**

**G107.2.1 Historic structures.** The Board of Standards and Appeals is authorized to issue a variance for the repair or rehabilitation of a historic structure provided that:

1. The application has received approval from the Landmark Preservation Committee and/or the New York State Historical Preservation Office, as applicable;
2. The proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure; and
3. The variance is the minimum necessary to preserve the historic character and design of the structure.

**G107.2.2 Floodway restrictions.** The Board of Standards and Appeals shall not issue a variance for any proposed development in a floodway if any increase in flood levels would result during the base flood discharge.

**G107.2.3 General conditions for variance.** Except for historic structures as provided for in Section G107.2.1, the Board of Standards and Appeals is authorized to issue a variance only upon:

1. A determination that the new construction, substantial improvement, or other proposed development is located on a tax lot that, on November 18, 1983, was no more than ½ acre (0.2 hectare) in size. However, where the tax lot has been determined to be larger than ½ acre (0.2 hectare), the technical justification required for issuing the variance increases with the lot size;
2. Showing of good and sufficient cause;
3. Determination that failure to grant the variance would result in exceptional hardship to the applicant;
4. Determination that the granting of a variance will not result in:
  - a. Increased flood heights;
  - b. Additional threats to public safety, provided, however, that the variance is permitted to increase risks to life and property for the subject structure;
  - c. Extraordinary public expense;
  - d. Nuisances;
  - e. Fraud on or victimization of the public; or
  - f. Conflict with existing local laws or ordinances; and

5. Determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

**G107.2.4 Functionally dependent facilities.** The Board of Standards and Appeals is authorized to issue a variance for the construction or substantial improvement of a functionally dependent facility provided that:

1. The criteria for Sections G107.2.1 through G107.2.3 are met; and
2. All methods and materials utilized minimize flood damage during the base flood and create no additional threats to public safety.

**G107.3 Standards for variance.** In reviewing applications for variances, the Board of Standards and Appeals shall consider all technical evaluations, all relevant factors, all other portions of this appendix and the following:

1. The danger that materials and debris may be swept onto other lands resulting in injury or damage;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners;
4. The importance of the services provided by the proposed development to the community;
5. The availability of alternate locations for the proposed development that are not subject to flooding or erosion;
6. The relationship of the proposed development to the comprehensive plan and flood plain management program for that area;
7. The safety of access to the property in times of flood for ordinary and emergency vehicles;
8. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
9. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets and bridges.

**G107.4 Notification of risks.** Upon issuance of a variance, the Executive Director of the Boards of Standards and Appeals shall provide written notice to the owner and

the applicant that:

1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance; and
2. That such construction below the base flood level increases risks to life and property.

**G107.5 Records.** The Board of Standards and Appeals shall:

1. Maintain a record of all variance actions, including justification for their issuance; and
2. Report such variances issued in its biennial report submitted to the Federal Emergency Management Agency.

## **CHAPTER G2** **DEFINITIONS**

### **SECTION BC G201** **DEFINITIONS**

**G201.1 General.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein.

#### **G201.2 Definitions.**

**A-ZONE.** An area of special flood hazard without high velocity wave action. When not shown on the FIRMs, the water surface elevation may be determined from available data by the registered design professional of record in accordance with Section G103.3. See also “Area of special flood hazard.”

**AREA OF SPECIAL FLOOD HAZARD.** The land in the flood plain delineated as subject to a one percent or greater chance of flooding in any given year. Such areas are designated on the Flood Insurance Rate Map (FIRM) as A-Zones or V-Zones. Such areas are also known as the base flood plain or one hundred year flood plain. Areas designated as X-Zones shall not be deemed areas of special flood hazard for the purposes of this Appendix.

**BASE FLOOD.** The flood having a 1-percent chance of being equaled or exceeded in any given year.

**BASE FLOOD ELEVATION.** The elevation of the base flood, including wave height, as specified on FEMA FIRMs 360497 or as determined in accordance with Section G103.3, relative to the National Geodetic Vertical Datum (NGVD).

**BASEMENT (FOR FLOOD ZONE PURPOSES).** The portion of a building having its floor subgrade (below ground level) on all sides.

**BREAKAWAY WALL.** An open lattice wall that is not part of the structural support of the building to which it is attached and that is intended through its design and construction to collapse under specific later loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

**DESIGN FLOOD ELEVATION.** The applicable elevation specified in ASCE 24, Tables 2-1, 4-1, 5-1, 6-1, or 7-1, depending on the structure category designated in ASCE 24, Table 1-1

**DEVELOPMENT.** Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, temporary or permanent storage of materials, mining, dredging, filling, grading, paving, excavations, operations and other land disturbing activities.

**EXISTING CONSTRUCTION.** See “PRE-FIRM DEVELOPMENT.”

**EXISTING STRUCTURE.** See “PRE-FIRM DEVELOPMENT”.

**FLOOD or FLOODING.** A general and temporary condition of partial or complete inundation of normally dry land from:

1. The overflow of inland or tidal waters.
2. The unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD-DAMAGE-RESISTANT MATERIALS.** Any construction material, including finishes, capable of withstanding direct and prolonged contact with floodwaters without sustaining any damage that requires more than cosmetic repair.

**FLOOD INSURANCE RATE MAP (FIRM).** The official map on which the Federal Emergency Management Agency (FEMA) has delineated areas of special flood hazard, base flood elevations, and the flood boundary and floodways.

**FLOOD INSURANCE STUDY (FIS).** The official report provided by the Federal Emergency Management Agency (FEMA) containing the Flood Insurance Rate Map (FIRM), the water surface elevation of the base flood and supporting technical data.

**FLOODPROOFING, DRY.** For buildings and structures that are nonresidential (for flood zone purposes), a combination of design modifications that results in the building's or structure's being water tight to the design flood elevation, including the attendant utility and sanitary facilities, with walls substantially impermeable to the

passage of water and with structural components having the capacity to resist loads as identified in ASCE 7.

**FLOODPROOFING, WET.** A floodproofing method designed to permit parts of the structure below the design flood elevation that are used for parking, storage, building access, or crawl space to intentionally flood, by equalizing hydrostatic pressures and by relying on the use of flood-damage-resistant materials and construction techniques.

**FLOODWAY.** The channel of the river, creek or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Floodways are mapped only in the Boroughs of the Bronx and Staten Island.

**FUNCTIONALLY DEPENDENT FACILITY.** A facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading or unloading of cargo or passengers, shipbuilding or ship repair. The term does not include long-term storage, manufacture, sales or service facilities.

**HISTORIC STRUCTURE.** A pre-FIRM building or structure:

1. Designated as a landmark or located within an historic district designated by the New York City Landmarks Preservation Commission; or
2. Listed or preliminarily determined to be eligible for listing in the National or State Register of Historic Places; or
3. Determined by the Secretary of the U.S. Department of the Interior or the New York State Department of Parks and Recreation as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district.

**LETTER OF MAP AMENDMENT (LOMA).** An official amendment to the FIRM, issued and approved by the Federal Emergency Management Agency (FEMA), removing structures or tax lots from areas of special flood hazard, resulting from a demonstration that the Pre-FIRM ground elevations are at or above the base flood elevation.

**LETTER OF MAP REVISION BASED ON FILL (LOMR-F).** An official amendment to the FIRM, issued and approved by the Federal Emergency Management Agency (FEMA), removing structures or tax lots from areas of special flood hazard, resulting from the Post-FIRM placement of compacted fill, such that the new ground elevation is at or above the base flood elevation.

**LOWEST FLOOR.** The floor of the lowest enclosed area, including crawl spaces

and basements (for flood zone purposes).

**Exception:** The lowest floor shall not include any wet floodproofed spaces usable solely for vehicle parking, building access, storage or crawl space, provided that such enclosure is not built so as to render the structure in violation of this appendix, including that:

1. Such enclosure shall allow for the automatic entry and exit of floodwaters;
2. Such enclosure shall be constructed solely of flood resistant materials and finishes;
3. Such enclosure shall have a floor elevation equal to or higher than the outside adjacent grade on at least one side; and
4. Such outside adjacent grade shall slope down, towards the source of flooding, providing positive drainage by gravity, thus preventing accumulations of water under or in the structure after the floodwaters recede without the use of pumps, pipes or drains.

**MANUFACTURED HOME.** A structure that is transportable in one or more sections, built on a permanent chassis, designed for use with or without a permanent foundation when attached to the required utilities, and constructed to the Federal Mobile Home Construction and Safety Standards and rules and regulations promulgated by the U.S. Department of Housing and Urban Development. The term also includes mobile homes, park trailers, travel trailers and similar transportable structures that are placed on a site for 180 consecutive days or longer.

**MANUFACTURED HOME PARK OR SUBDIVISION.** A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**MARKET VALUE OF STRUCTURE.** The price that a buyer is willing, but is not under any duty, to pay for a particular structure to an owner who is willing, but not obligated, to sell, exclusive of the value of the land, or of other buildings or structures on the same tax lot. The market value of a structure shall be determined in accordance with rules promulgated by the commissioner.

**NATIONAL GEODETIC VERTICAL DATUM (NGVD).** The national vertical datum standard established in 1929, used as a reference for establishing elevations within a flood plain.

**NEW CONSTRUCTION.** See “POST-FIRM DEVELOPMENT.”

**NONRESIDENTIAL (FOR FLOOD ZONE PURPOSES).** A building or structure that either:

1. Contains no space classified in Groups I-1, R-1, R-2, or R-3, and contains no space that is accessory, as such term is defined in the New York City Zoning Resolution, to any I-1, R-1, R-2, or R-3 occupancy; or
2. Contains such space(s), but also contains space on the lowest floor that is not accessory, as such term is defined in the New York City Zoning Resolution, to an I-1, R-1, R-2, or R-3 occupancy.

**PRE-FIRM DEVELOPMENT.** Any development:

1. Completed prior to November 13, 1983;
2. Under construction on November 13, 1983 provided that the start of construction was prior to said date; or
3. Completed on or after November 13, 1983 but that:
  - 3.1. Was not located within an area of special flood hazard at the start of construction; and
  - 3.2. Is now located within an area of special flood hazard as a result of a subsequent change to the FIRM.

**PRE-FIRM STRUCTURE.** See “PRE-FIRM DEVELOPMENT.”

**POST-FIRM DEVELOPMENT.** Any development that is not pre-FIRM development.

**POST-FIRM STRUCTURE.** See “POST-FIRM DEVELOPMENT.”

**RECREATIONAL VEHICLE.** A vehicle that is built on a single chassis, 400 square feet (37.16 m<sup>2</sup>) or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light-duty truck, and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect-type utilities and security devices and has no permanently attached additions.

**RESIDENTIAL (FOR FLOOD ZONE PURPOSES).** A building or structure containing any space that is either:

1. Classified in Groups I-1, R-1, R-2, or R-3; or
2. Accessory, as such term is defined in the New York City Zoning Resolution, to any I-1, R-1, R-2, or R-3 occupancy.

**Exception:** Such a building or structure shall be considered nonresidential (for flood zone purposes) when also containing space on the lowest floor that is not accessory, as such term is defined in the New York City Zoning Resolution, to an I-1, R-1, R-2, or R-3 occupancy.

**SAND DUNES.** Naturally occurring accumulations of sand in ridges or mounds landward of a beach.

**SPECIAL FLOOD HAZARD AREA.** See “Area of Special Flood Hazard.”

**START OF CONSTRUCTION.** The date of permit issuance for: (i) post-FIRM developments; (ii) substantial improvements to pre-FIRM structures; and (iii) those pre-FIRM developments that, at the time of permit issuance, were not within an area of special flood hazard but that, prior to completion, were within an area of special flood hazard as a result of map change; provided the actual commencement of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of permit issuance and such construction activity is not thereafter suspended or abandoned for 180 days or more. For the purposes of this definition:

1. The actual commencement of construction means the first placement of permanent construction of a building (including a manufactured home or prefabricated building) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.
2. Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement (for flood zone purposes), footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building.
3. For a substantial improvement, the actual commencement of construction means the first alteration of any wall, ceiling, floor or other structural part of a building, regardless of whether that alteration affects the external dimensions of the building.

**SUBSTANTIAL DAMAGE.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT.** Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed.

The term does not, however, include either:

1. Any project for improvement of a building required to correct pre-FIRM health, sanitary or safety code violations identified by the commissioner, the Fire Commissioner, the Commissioner of Housing Preservation and Development, or the Commissioner of Health and Mental Hygiene, and that are the minimum necessary to assure safe living conditions; or
2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

V-ZONE. An area of special flood hazard subject to high velocity wave action.

### **CHAPTER G3** **CONSTRUCTION STANDARDS**

#### **SECTION BC G301** **GENERAL**

**G301.1 All Developments.** To the extent required by Section G102.1, all developments, including but not limited to utility installation, site improvements, placement of prefabricated buildings and manufactured homes, new building construction, alterations and repairs, shall be designed and constructed to resist the effects of flood hazards and flood loads in accordance with this appendix and ASCE 24.

**G301.1.1 Multiple flood zones.** For a structure that is located in more than one zone (for instance both an A-Zone and an X-Zone, or both an A-Zone and a V-Zone), the provisions associated with the most restrictive area of special flood hazard shall apply to the entire structure.

**G301.2 Reserved.**

#### **SECTION BC G302** **SUBDIVISIONS**

**G302.1 General.** Any subdivision proposal, including proposals for manufactured home parks and subdivisions, or other proposed new development within an area of special flood hazard shall demonstrate that:

1. All such proposals are consistent with the need to minimize flood damage;
2. All public utilities and facilities, such as sewer, gas, electric and water systems are located and constructed to minimize or eliminate flood damage;  
and

3. Adequate drainage is provided to reduce exposure to flood hazards.

**G302.2 Subdivision requirements.** The following requirements shall apply to any proposed subdivision, including proposals for manufactured home parks and subdivisions, any portion of which lies within an area of special flood hazard:

1. The area of special flood hazard, including floodways and V-Zones, as appropriate, shall be delineated on tentative and final subdivision plats;
2. Base flood elevations shall be shown on tentative and final subdivision plats;
3. Building lots shall be provided with adequate buildable area, in accordance with the New York City Zoning Resolution, outside the floodway; and
4. The design criteria for any utilities and facilities, as set forth in this appendix and appropriate *New York City Construction Codes*, shall be met.

## **SECTION BC G303** **SITE IMPROVEMENT**

**G303.1 Development in floodways.** Development or land disturbing activity is prohibited in floodways unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in the level of the base flood, in accordance with Section G103.5.

**G303.2 Sewer facilities.** All new and replaced sanitary sewer facilities, private sewage treatment plants (including all pumping stations and collector systems) and on-site waste disposal systems shall be designed in accordance with Chapter 8, ASCE 24, to minimize or eliminate infiltration of floodwaters into the facilities and discharge from the facilities into floodwaters, or impairment of the facilities and systems.

**G303.3 Water facilities.** All new and replacement water facilities shall be designed in accordance with the provisions of Chapter 8, ASCE 24, to minimize or eliminate infiltration of floodwaters into the systems.

**G303.4 Storm drainage.** Storm drainage shall be designed to convey the flow of surface waters to minimize or eliminate damage to persons or property and shall meet the requirements of ASCE 24.

**G303.5 Streets and sidewalks.** Streets and sidewalks shall be designed to minimize potential for increasing or aggravating flood levels and shall meet the requirements of Section G303.7.

**G303.6 Retaining walls and driveways.** Retaining walls and driveways shall meet the requirements of Section G303.7.

**G303.7 Grading and fill.** In areas of special flood hazard grading and/or fill shall not be approved:

1. Unless such fill is placed, compacted and sloped to minimize shifting, slumping and erosion during the rise and fall of flood water and, as applicable, wave action, in accordance with ASCE 24.
2. In floodways, unless it has been demonstrated through hydrologic and hydraulic analyses performed by an engineer in accordance with standard engineering practice that the proposed grading or fill, or both will not result in any increase in the flood levels during the occurrence of the design flood, in accordance with Section G103.5.
3. In V-Zones, unless such fill is conducted and or placed to avoid diversion of water and waves towards any building or structure.

## **SECTION BC G304**

### **POST-FIRM CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS**

**G304.1 A-Zone construction standards.** The following standards shall apply to post-FIRM construction and substantial improvements located within A-Zones.

**G304.1.1 Residential.** For buildings or structures that are residential (for flood zone purposes), all post-FIRM new buildings and substantial improvements shall comply with the applicable requirements in Chapter G3 and ASCE 24, and shall be elevated as follows:

1. **Lowest floor.** The lowest floor, including the basement (for flood zone purposes), shall be elevated to at or above the design flood elevation specified in ASCE 24, Table 2-1;
2. **Enclosures below the design flood elevation.** Enclosed spaces below the design flood elevation specified in ASCE 24, Table 2-1 shall be useable solely for parking of vehicles, building access, storage, or crawlspace, and shall be wet floodproofed in accordance with ASCE 24. Breakaway walls are not required in A-Zones.
3. **Materials.** Only flood-damage-resistant materials and finishes shall be utilized below the design flood elevation specified in ASCE 24, Table 5-1;
4. **Utilities and equipment.** Utilities and attendant equipment shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1, or shall be constructed so as to prevent water from entering or

accumulating within the components during conditions of flooding in accordance with ASCE 24;

5. **Certifications.** Applications shall contain applicable certifications in accordance with Section G104.5; and
6. **Special inspections.** Special inspections shall be as required by Section G105.

**G304.1.2 Nonresidential.** For buildings or structures that are nonresidential (for flood zone purposes), all post-FIRM new buildings and substantial improvements shall comply with the applicable requirements in Chapter G3 and ASCE 24, and shall comply with either of the following:

1. **Elevation option.** The structure shall comply with Items 1 through 6 of Section G304.1.1; or
2. **Dry floodproofing option.** The structure shall comply with the following:
  - 2.1. **Elevation of dry floodproofing.** The structure shall be dry floodproofed to at or above the design flood elevation specified in ASCE 24, Table 6-1;
  - 2.2. **Dwelling units.** Where dwelling units are located in a building utilizing the dry floodproofing option, the following additional requirements shall be met:
    - 2.2.1. All rooms and spaces within dwelling units shall be located at or above the design flood elevation;
    - 2.2.2. No more than one toilet and one sink shall be located below the design flood elevation. Any such toilet room shall not be located within a dwelling unit and shall be no larger than required by Chapter 11; and no roughing therein shall be permitted to accommodate additional fixtures;
    - 2.2.3. No more than one two-compartment laundry tray shall be permitted below the design flood elevation;
    - 2.2.4. No kitchens or kitchenettes shall be permitted below the design flood elevation;
    - 2.2.5. A restrictive declaration noting the above restrictions shall be filed with the City Register or County Clerk, and the page number and liber number shall be identified in the permit application and on the certificate of occupancy.

2.3. **Utilities and equipment.** Utilities and attendant equipment shall be located within the dry floodproofed enclosure, or may be located outside the dry floodproofed enclosure provided that they are located at or above the design flood elevation specified in ASCE 24, Table 7-1 or are constructed so as to prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24.

2.4. **Certifications.** Applications shall contain applicable certifications in accordance with Section G104.5; and

2.5. **Special inspections.** Special inspections shall be as required by Section G105.

**G304.2 V-Zone construction standards.** In addition to the requirements of ASCE 24, the following standards shall apply to post-FIRM construction and substantial improvements located within V-Zones.

1. **Foundation.** The lowest floor shall be elevated on adequately anchored pilings or columns and securely anchored to such piles or columns to prevent floatation, collapse and lateral movement resulting from wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16 and this appendix.

2. **Lowest horizontal member.** The lowest portion of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) shall be at or above the design flood elevation specified in ASCE 24, Table 4-1.

3. **Below the lowest horizontal member.** Spaces below the lowest horizontal member shall be either:

3.1. Free of obstructions; or

3.2. Enclosed with breakaway walls providing unconditioned space useable solely for parking of vehicles, building access, storage or crawl space. Such breakaway walls shall:

3.2.1. Be of an open lattice type construction only;

3.2.2. Meet the load requirements of Section 5.3.2.3 of ASCE 7; and

3.2.3. Meet the additional requirements of ASCE 24.

4. **Materials.** Only flood-damage-resistant materials and finishes shall be utilized below the design flood elevation specified in ASCE 24, Table 5-1;
5. **Utilities and equipment.** Utilities and attendant equipment shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1, or shall be constructed so as to both resist the wave action and prevent water from entering or accumulating within the components during conditions of flooding in accordance with ASCE 24;
6. **Prohibitions.** The following shall be prohibited in V-Zones:
  - 6.1. Development, including land disturbing activities, seaward of the reach of mean high tide;
  - 6.2. Use of fill for structural support of buildings; and
  - 6.3. Man-made alterations of sand dunes that would increase potential damage to buildings.
7. **Certifications.** Applications shall contain applicable certifications in accordance with Section G104.5; and
8. **Special inspections.** Special inspections shall be as required by Section G105.

## **SECTION BC G305** **MANUFACTURED HOMES.**

**G305.1 General.** Manufactured homes shall be prohibited in V-Zones. Within A-Zones, all new, replaced or substantially improved manufactured homes shall be:

1. Installed using methods and practices that minimize flood damage;
2. Elevated to or above the design flood elevation specified in ASCE 24, Table 2-1;
3. Placed on a permanent, reinforced foundation that is designed in accordance with ASCE 24;
4. Securely anchored to a foundation system designed to resist floatation, collapse and lateral movement. Methods of anchoring are authorized to include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

## **SECTION BC G306**

## **RECREATIONAL VEHICLES**

**G306.1 General.** The following shall apply to placement of all recreational vehicles within areas of special flood hazard:

- 1. Placement in V-Zones and floodways prohibited.** The placement of recreational vehicles is prohibited in V-Zones and floodways.
- 2. Temporary placement in A-Zones.** Within A-Zones, recreational vehicles shall be fully licensed and ready for highway use, and shall be placed on a site for less than 180 consecutive days.
- 3. Permanent placement in A-Zones.** Within A-Zones, recreational vehicles that are not fully licensed and ready for highway use, or that are to be placed on a site for 180 or more consecutive days, shall meet the requirements of Section G305 for manufactured homes.

## **SECTION BC G307**

### **TANKS**

**G307.1 Underground tanks.** Underground tanks in areas of special flood hazard shall be designed, constructed, installed, and anchored to prevent flotation, collapse and lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.

**G307.2 Above-ground tanks.** Above-ground tanks in areas of special flood hazard shall be:

- 1. Elevated to or above the design flood elevation specified in ASCE 24, Table 7-1; or**
- 2. Designed, constructed, installed, and anchored to prevent flotation, collapse and lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.**

**G307.3 Tank inlets and vents.** In areas of special flood hazard, tank inlets, fill openings, outlets and vents shall be:

- 1. Installed at or above the design flood elevation specified in ASCE 24, Table 7-1, or fitted with covers designed to prevent the inflow of floodwater and outflow of the contents of the tanks during conditions of flooding to the design flood elevation, in accordance with ASCE 24; and**

2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation, in accordance with ASCE 24.

## **SECTION BC G308** **OTHER DEVELOPMENT**

**G308.1 Accessory structures.** Accessory structures shall be anchored to prevent flotation, collapse and lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of flooding to the design flood elevation. Enclosed accessory structures usable solely for parking or storage shall be wet floodproofed and shall have flood openings to allow for the automatic entry and exit of flood waters designed in accordance with ASCE 24.

**G308.2 Fences in floodways.** Fences in floodways that may block the passage of floodwaters, such as stockade fences and wire mesh fences, shall meet the requirement of Section G103.5.

**G308.3 Oil derricks.** Oil derricks located in areas of special flood hazard shall be designed in conformance with ASCE 24.

**G308.4 Prefabricated swimming pools in floodways.** Prefabricated swimming pools in floodways shall meet the requirements of Section G103.5.

## **CHAPTER G4** **REFERENCED STANDARDS**

### **SECTION BC G401** **GENERAL**

**G401.1 General.** This chapter lists the standards that are referenced in various sections of this appendix. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title and the section or sections of this document that reference the standard.

**G401.2 Subsequent additions, modifications, or deletions.** Refer to the rules of the department for any subsequent additions, modifications or deletions that may have been made to these standards in accordance with Section 28-103.19 of the *Administrative Code*.

**G401.3 Applicability.** The application of the referenced standards shall be as specified in Section 102.4.

**G401.4 Reserved.**

**G401.5 Reserved.**

G401.6 Reserved.

**SECTION G402**  
**STANDARDS**

<u>ASCE 7-02</u>	<u>Minimum Design Loads for Buildings and Other Structures</u>	<u>G104.5.2, G201.2, G304.2</u>
<u>ASCE 24-05*</u>	<u>Flood Resistant Design and Construction</u>	<u>G103.1, G104.3, G104.5.1, G104.5.2, G105.2, G105.3.1, G201.2, G301.1, G303.2, G303.3, G303.4, G303.7, G304.1.1, G304.1.2, G304.2, G305.1, G307.1, G307.2, G307.3, G308.1, G308.3</u>
<u>FEMA 360497</u>	<u>FIS Flood Insurance Study, Community Number 360497, Revised May 21, 2001; Federal Emergency Management Agency</u>	<u>G102.2</u>
<u>FEMA 360497</u>	<u>FIRMS 1) Flood Insurance Rate Map, Community Number 360497, Panel Numbers 1 through 153, Revised May 21, 2001; Federal Emergency Management Agency</u> <u>2) Letter of Map Revision, revising FIRM Panel 149, FEMA Case #01-02-045P, effective July 3, 2002.</u>	<u>G102.2, G102.3, G102.3.1, G102.3.2, G103.3, G201.2</u>
<u>FEMA 81-31</u>	<u>FORM Elevation Certificate; Federal Emergency Management Agency</u>	<u>G105.3</u>
<u>FEMA 81-65</u>	<u>FORM Floodproofing Certification; Federal Emergency Management Agency</u>	<u>G105.3</u>
<u>HUD Part 3280-94</u>	<u>24 CFR Manufactured Home Construction and Safety Standards, 1994</u>	<u>G201.2</u>

\*As modified in Chapter G5.

**CHAPTER G5**  
**MODIFICATIONS TO REFERENCED STANDARDS**

## **SECTION BC G501** **MODIFICATIONS.**

The following amendments are hereby made to the Referenced Standards listed in Section G401.

**G501.1 Amendments to ASCE 24-05.** The following amendments are hereby made to the applicable sections of ASCE 24-05. Refer to the rules of the department for any subsequent additions, modifications or deletions that may have been made to this standard in accordance with Section 28-103.19 of the *Administrative Code*.

**Section 1.1.** Section 1.1 (Scope) is amended by deleting Items 1 through 4, and by adding the following paragraph to read as follows:

The scope of this standard is as provided for in Section G102.1 of the *New York City Building Code*, Appendix G.

**Section 1.1.1.** A new Section 1.1.1 is added to read as follows:

**1.1.1 A-Zones.** Notwithstanding any other provision in this standard, no special flood hazard area in New York City shall be classified as a Coastal A-Zone. All areas of special flood hazard that are identified on the FIRM as an A-Zone shall be classified as flood hazard areas that are “other than coastal high hazard area or coastal A-Zones”, and shall comply with the applicable items in Section 1.1 as such.

**Section 1.1.2.** A new Section 1.1.2 is added to read as follows:

**1.1.2 High Risk Flood Hazard Areas.** Notwithstanding any other provision in this standard, no special flood hazard in New York City shall be classified as alluvial fan area, flash flood area, mudslide area, ice jam and debris area, erosion-prone area, high velocity flow area. The only applicable High Risk Flood Hazard Areas in New York City are the Coastal High Hazard Areas (V-Zones).

**Section 1.2.** Section 1.2 (Definitions) is amended by modifying only the following definitions:

**Coastal A Zone**—Reserved.

**Design Flood Elevation**—The applicable elevation specified in Table 2-1, 4-1, 5-1, 6-1, or 7-1, depending on the structure category designated in Table 1-1.

**High Risk Flood Hazard Area**—An area designated as a *coastal high hazard area*, being those areas identified on the FIRM as a *V-Zone*.

**Nonresidential**—As defined in Section G201 of the *New York City Building Code*, Appendix G.

**Residential**—As defined in Section G201 of the *New York City Building Code*, Appendix G.

**Section 1.4.3.** Table 1-1 of Section 1.4.3 (Classification of Structures) is amended to read as follows:

Table 1-1. Classification of Structures for Flood-Resistant Design and Construction (Classification same as *New York City Building Code* Table 1604.5)

<u>Nature of Occupancy</u>	<u>Category</u>
<u>Buildings and other structures that represent a low hazard to human life in the event of failure including, but not limited to:</u> <ul style="list-style-type: none"><li><u>Agricultural facilities</u></li><li><u>Certain temporary facilities</u></li><li><u>Minor storage facilities</u></li></ul>	<u>I</u>
<u>Buildings and other structures except those listed in Categories I, III and IV</u>	<u>II</u>
<u>Buildings and other structures that represent a substantial hazard to human life in the event of failure including, but not limited to:</u> <ul style="list-style-type: none"><li><u>Buildings and other structures where more than 300 people congregate in one area</u></li><li><u>Buildings and other structures with elementary school, secondary school or day care facilities with an occupant load greater than 250</u></li><li><u>Buildings and other structures with an occupant load greater than 500 for colleges or adult education facilities</u></li><li><u>Health care facilities with an occupant load of 50 or more resident patients but not having surgery or emergency treatment facilities</u></li><li><u>Jails and detention facilities</u></li><li><u>Power-generating stations, water treatment for potable water, waste water treatment facilities and other public utility facilities not included in Category IV</u></li><li><u>Buildings and other structures not included in Category IV containing sufficient quantities of toxic or explosive substances to be dangerous to the public if released</u></li></ul>	<u>III</u>
<u>Buildings and other structures designed as essential facilities including, but not limited to:</u> <ul style="list-style-type: none"><li><u>Hospitals and other health care facilities having surgery or emergency treatment facilities</u></li><li><u>Fire, rescue and police stations and emergency vehicle garages</u></li><li><u>Designated earthquake, hurricane or other emergency shelters</u></li><li><u>Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response</u></li><li><u>Power-generating stations and other public utility facilities required as</u></li></ul>	<u>IV</u>

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emergency backup facilities for Category IV structures

- Structures containing highly toxic materials as defined by Section 307 where the quantity of the material exceeds the maximum allowable quantities of Table 307.7(2) of the *New York City Building Code*
- Aviation control towers, air traffic control centers and emergency aircraft hangars
- Buildings and other structures having critical national defense functions
- Water treatment facilities required to maintain water pressure for fire suppression

**Section 2.3.** Table 2-1 of Section 2.3 (Elevation Requirements) is amended to read as follows:

Table 2-1. Minimum Elevation of the Top of Lowest Floor Relative to Design Flood Elevation (DFE)—A-Zones<sup>a</sup>

<u>Structure Category<sup>b</sup></u>	<u>Minimum Elevation of Lowest Floor</u>
<u>I</u>	<u>DFE = BFE</u>
<u>II<sup>c</sup></u>	<u>DFE = BFE</u>
<u>III<sup>c</sup></u>	<u>DFE = BFE + 1 ft</u>
<u>IV<sup>c</sup></u>	<u>DFE = BFE + 2 ft</u>

<sup>a</sup>Minimum elevations shown in Table 2-1 do not apply to V Zones (see Table 4-1). Minimum elevations shown in Table 2-1 apply to A-Zones unless specific elevation requirements are given in Section 3 of this Standard.

<sup>b</sup>See Table 1-1, or Table 1604.5 of the *New York City Building Code*, for category descriptions.

<sup>c</sup>For nonresidential buildings and nonresidential portions of mixed-use buildings, the lowest floor shall be allowed below the minimum elevation if the structure meets the floodproofing requirements of Section 6.

**Section 4.1.1.** Section 4.1.1 (Identification of Coastal High Hazard Areas and Coastal A Zones) is amended to read as follows:

**4.1.1 Identification of Coastal High Hazard Areas and Coastal A Zones.** For the purposes of this standard, “Coastal High Hazard Areas” shall mean those locations where an area has been designated as subject to high velocity wave action on a community’s flood hazard map (V-Zones). No special flood hazard area in New York City shall be classified as a Coastal A-Zone.

**Section 4.4.** Table 4-1 of Section 4.4 (Elevation Requirements) is amended to read as follows:

Table 4-1. Minimum Elevation of Bottom of Lowest Supporting Horizontal Structural Member of Lowest Floor Relative to Design Flood Elevation (DFE)—V Zones

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Structure Category <sup>a</sup>	Member Orientation Relative to the Direction of Wave Approach	
	Parallel <sup>b</sup>	Perpendicular <sup>b</sup>
<u>I</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>II</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>III</u>	<u>DFE = BFE + 1 ft</u>	<u>DFE = BFE + 2 ft</u>
<u>IV</u>	<u>DFE = BFE + 1 ft</u>	<u>DFE = BFE + 2 ft</u>

<sup>a</sup> See Table 1-1, or Table 1604.5 of the *New York City Building Code*, for category descriptions.

<sup>b</sup> Orientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

**Section 4.6.1.** Section 4.6.1 (Breakaway Walls) is amended by adding the following sentence:

All breakaway walls enclosing spaces below the DFE in V-Zones shall be open lattice, and not solid, with such enclosed spaces constructed as unconditioned per the *New York State Energy Conservation Construction Code*.

**Section 5.1.** Table 5-1 of Section 5.1 (Materials, General) is amended to read as follows:

Table 5-1. Minimum Elevation, Relative to Design Flood Elevation (DFE), Below which Flood-Damage-Resistant Materials Shall Be Used

Structure Category <sup>a</sup>	A-Zone	V-Zones	
		Orientation Parallel <sup>b</sup>	Orientation Perpendicular <sup>b</sup>
<u>I</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>II</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>III</u>	<u>DFE = BFE + 1 ft</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 3 ft</u>
<u>IV</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 3 ft</u>

<sup>a</sup> See Table 1-1, or Table 1604.5 of the *New York City Building Code*, for category descriptions.

<sup>b</sup> Orientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

**Section 5.2.6.** Section 5.2.6 (Finishes) shall be amended to read as follows:

**5.2.6 Finishes and other materials.** Interior and exterior finishes, as well as any materials not otherwise provided for in Sections 5.2.1 through 5.2.5, shall be flood-damage-resistant materials in Accordance with FEMA Technical Bulletin 2-93, Flood resistant Materials Requirement for Buildings Located in Special Flood

Hazard Areas, or shall be required to be approved by the authority having jurisdiction.

**Section 6.2.** Table 6-1 of Section 6.2 (Dry Floodproofing) is amended to read as follows:

Table 6-1. Minimum Elevation of Floodproofing, Relative to Design Flood Elevation (DFE)—A-Zones

<u>Structure Category<sup>a</sup></u>	<u>Minimum Elevation of Floodproofing<sup>b</sup></u>
<u>I</u>	<u>DFE = BFE</u>
<u>II<sup>c</sup></u>	<u>DFE = BFE</u>
<u>III</u>	<u>DFE = BFE + 1 ft</u>
<u>IV</u>	<u>DFE = BFE + 2 ft</u>

<sup>a</sup>See Table 1-1, or Table 1604.5 of the *New York City Building Code*, for category descriptions.

<sup>b</sup>Wet or dry floodproofing shall extend to the same level.

<sup>c</sup>Dry floodproofing of residential buildings and residential portions of mixed use buildings shall not be permitted.

**Section 6.2.2.** Item 3 of Section 6.2.2 (Dry Floodproofing Requirements) is amended to read as follows:

3. Have either:

3.1 All required means of egress elevated to or above the applicable DFE specified in Table 6-1, capable of providing human ingress and egress during the design flood; or

3.2 At least one elevated door located in close proximity to each required means of egress to the exterior that is to be blocked by flood shields or flood control devices, such that the face of the elevated door itself, and not merely its directional signage, is clearly visible to a person approaching the blocked egress door(s). Such door(s) shall be elevated to at or above the applicable DFE specified in Table 6-1, capable of providing human ingress and egress during the design flood. Such door(s) shall meet all *New York City Building Code* requirements for a required means of egress to the exterior of the structure including hardware and signage, but shall not be required to comply with the occupant load calculations, unless the structure is intended for occupancy during the design flood. Such door may be accessed by open steps and shall not be required to comply with Chapter 11 of the *New York City Building Code* if its only purpose is to provide supplemental egress and ingress during conditions of flooding and to provide emergency egress at other times.

**Section 7.1.** Table 7-1 of Section 7.1 (General) is amended to read as follows:

Table 7-1. Minimum Elevation of Utilities and Attendant Equipment Relative to Design Flood Elevation (DFE)

<u>Structure Category<sup>a</sup></u>	<u>Locate Utilities and Attendant Equipment Above<sup>b</sup></u>		
	<u>A-Zones</u>	<u>V-Zones</u>	
		<u>Orientation Parallel<sup>c</sup></u>	<u>Orientation Perpendicular<sup>c</sup></u>
<u>I</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>II</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>	<u>DFE = BFE</u>
<u>III</u>	<u>DFE = BFE + 1 ft</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 3 ft</u>
<u>IV</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 2 ft</u>	<u>DFE = BFE + 3 ft</u>

<sup>a</sup> See Table 1-1, or Table 1604.5 of the *New York City Building Code*, for category descriptions.

<sup>b</sup> Locate utilities and attendant equipment above elevations shown unless otherwise provided in the text.

<sup>c</sup> Orientation of lowest horizontal structural member relative to the general direction of wave approach; parallel shall mean less than or equal to +20 degrees from the direction of approach; perpendicular shall mean greater than +20 degrees from the direction of approach.

**Section 7.5.1.** A new section 7.5.1 is added to read as follows:

**7.5.1 Elevator signage.** Where there is potential for an elevator cab to descend below the elevation specified in Table 7-1 into a wet floodproofed space, the elevator shall be equipped with controls that will prevent the cab from descending into floodwaters. Permanent, durable, and washable signage shall be placed in the elevator cab and in the elevator lobby on any story subject to flooding, stating that “In the event of flooding, water sensors in the elevator shaft will prevent the elevator from descending to [description of story, e.g. ground floor, first floor, parking level, etc.] and will automatically cause the elevator to rise to [description of story, e.g. second floor, mezzanine, etc.]”

**Section 9.3.1.** The second sentence of the first paragraph of Section 9.3.1 (Attached Garages and Carports) is amended to read as follows:

Wet floodproofed garages and carports are permitted below elevations specified in Table 2-1 provided the lowest level of the garage or carport is at or above grade on at least one side, the garage or carport walls meet the opening requirements of Section 2.6, and the lowest level of the garage or carport is not classified as a “lowest floor” pursuant to Appendix G of the *New York City Building Code*.

**Section 9.5.** Section 9.5 (Pools) is amended by adding a new paragraph to read as follows:

Mechanical equipment for pools such as pumps and water heaters, and associated electrical wiring, shall comply with Section 7.2 and 7.4.

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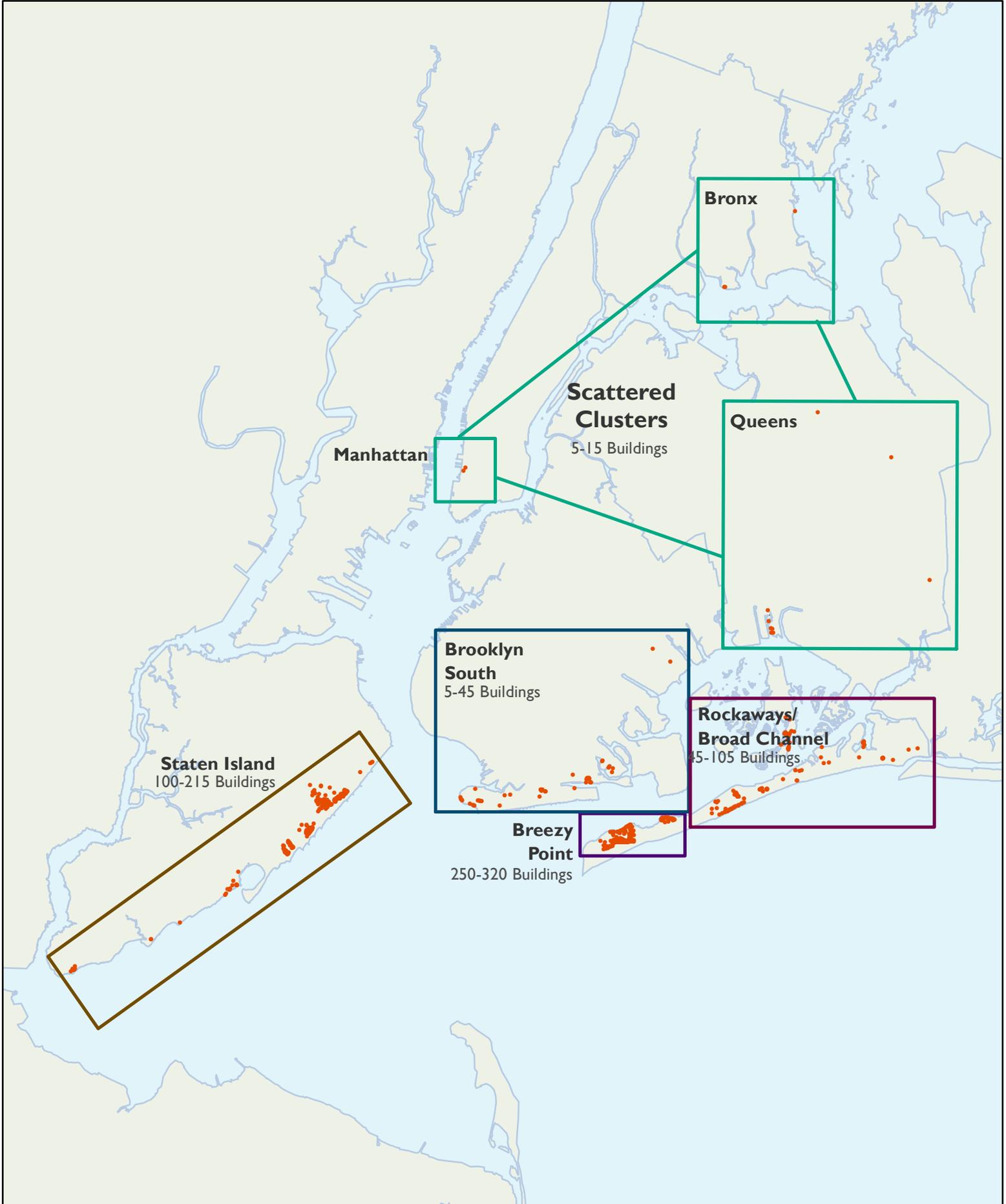
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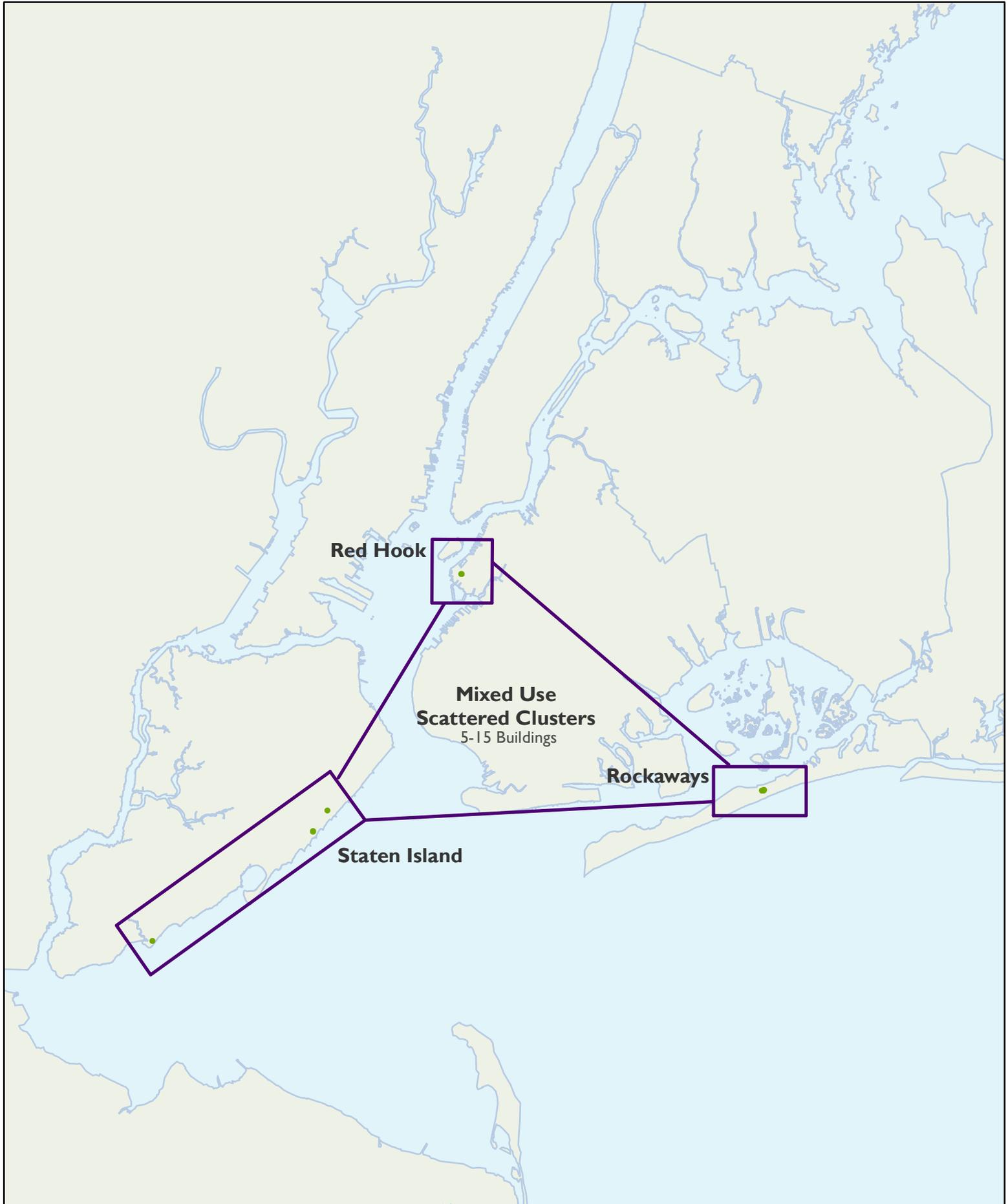
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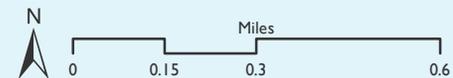
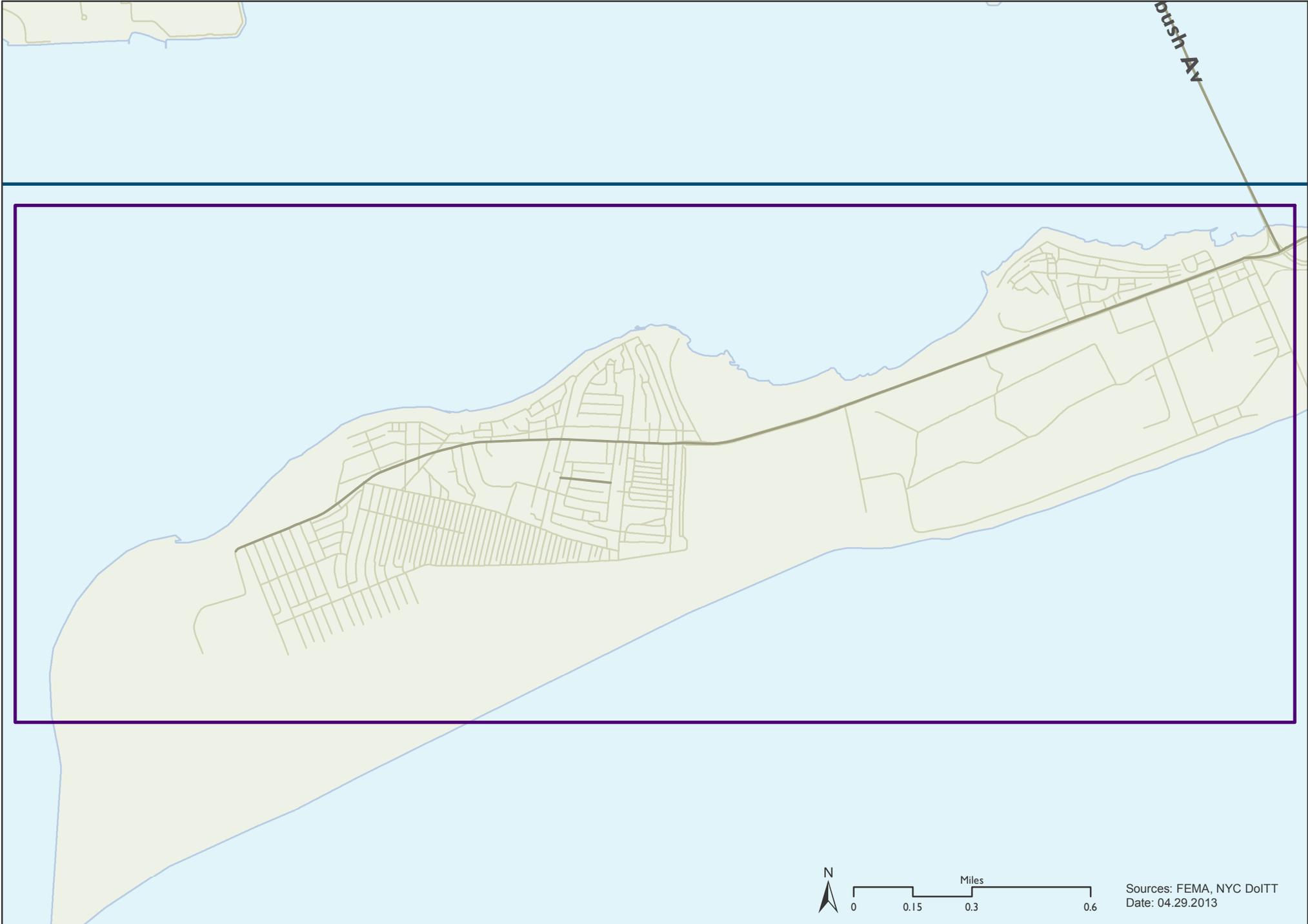
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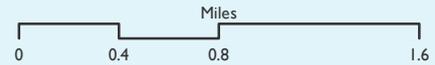
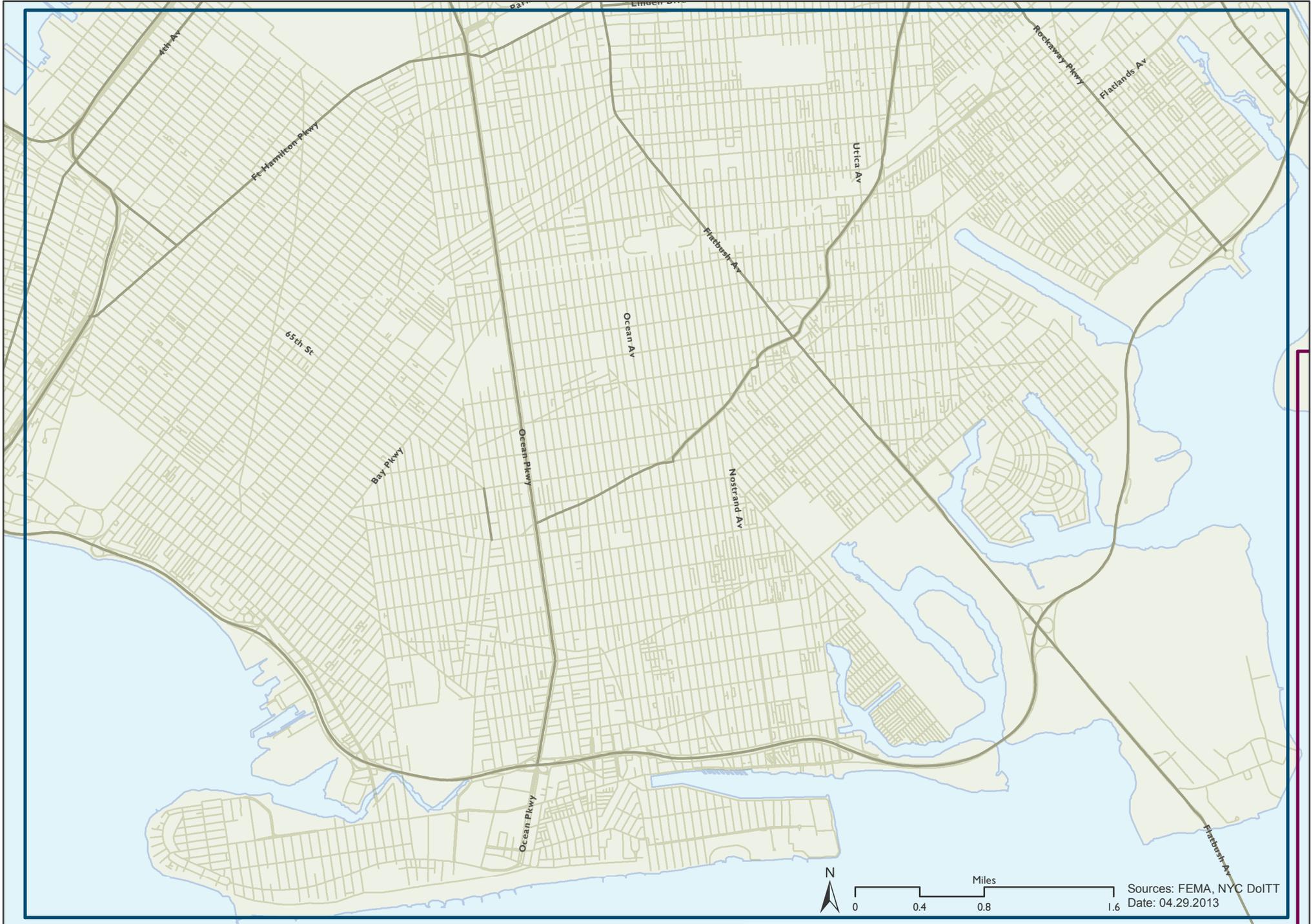
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## Appendix B. Cluster Maps and Data Sheets

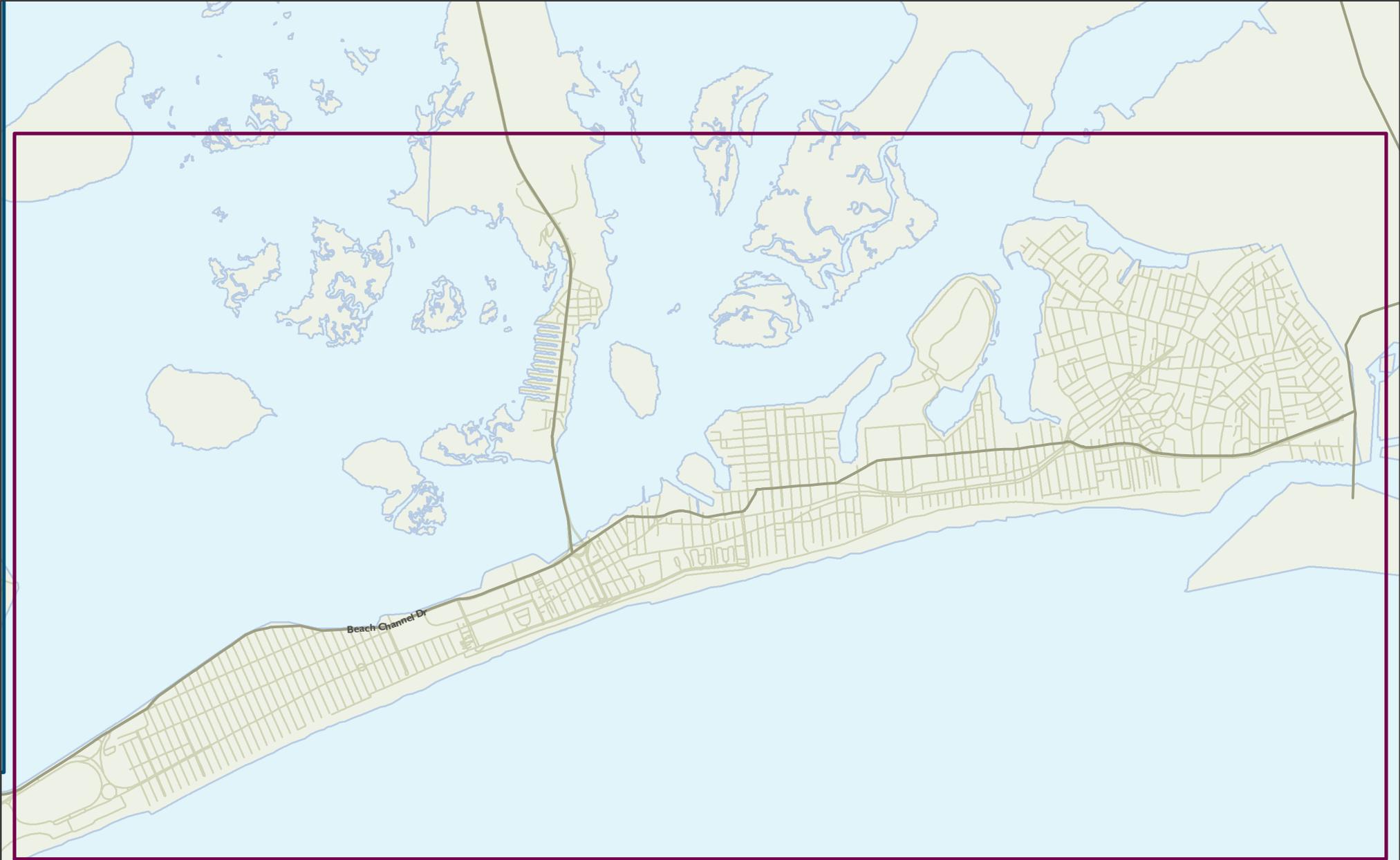




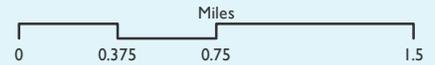




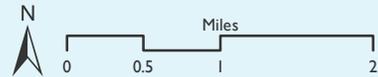
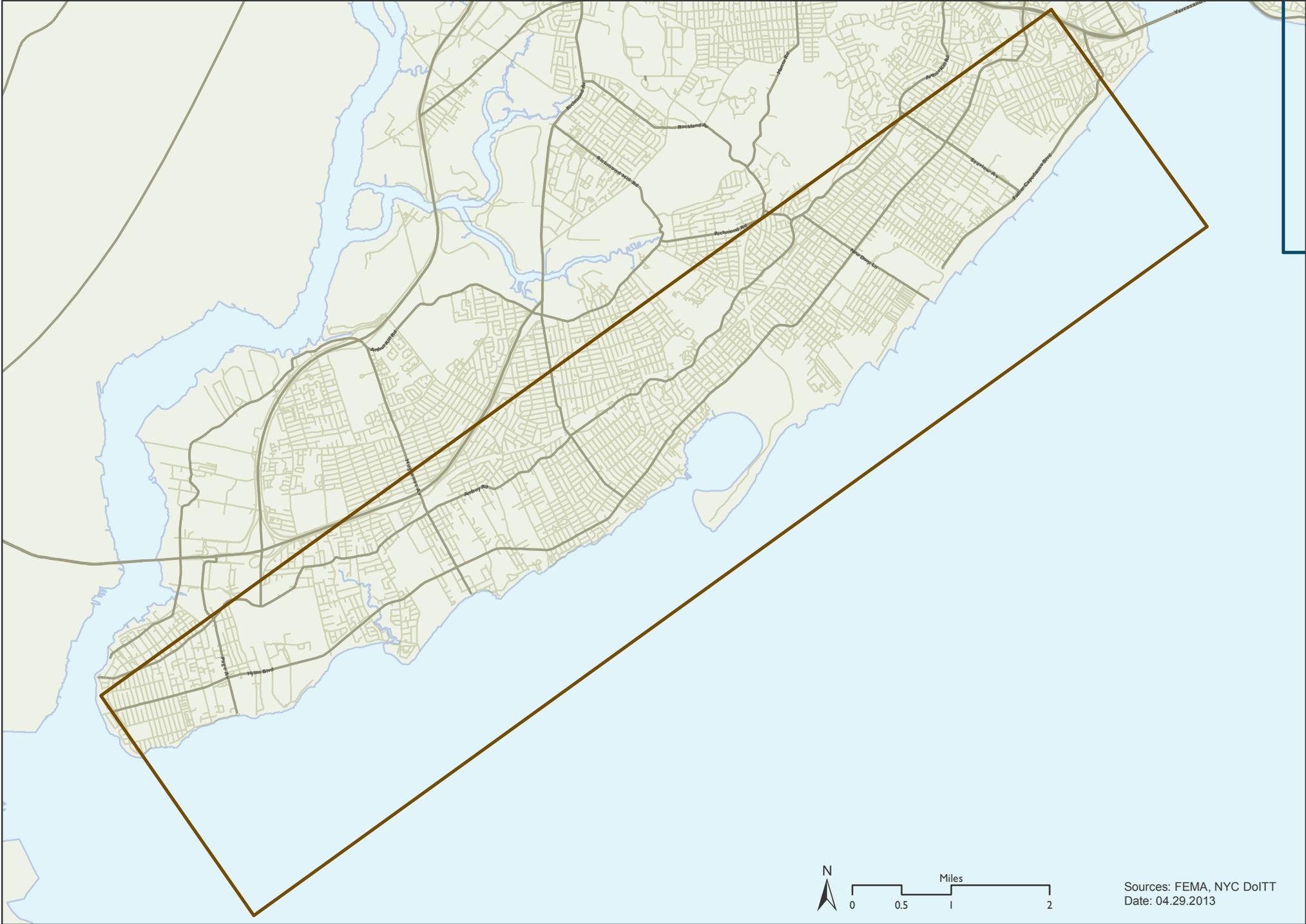
Sources: FEMA, NYC DoITT  
Date: 04.29.2013



Beach Channel Dr

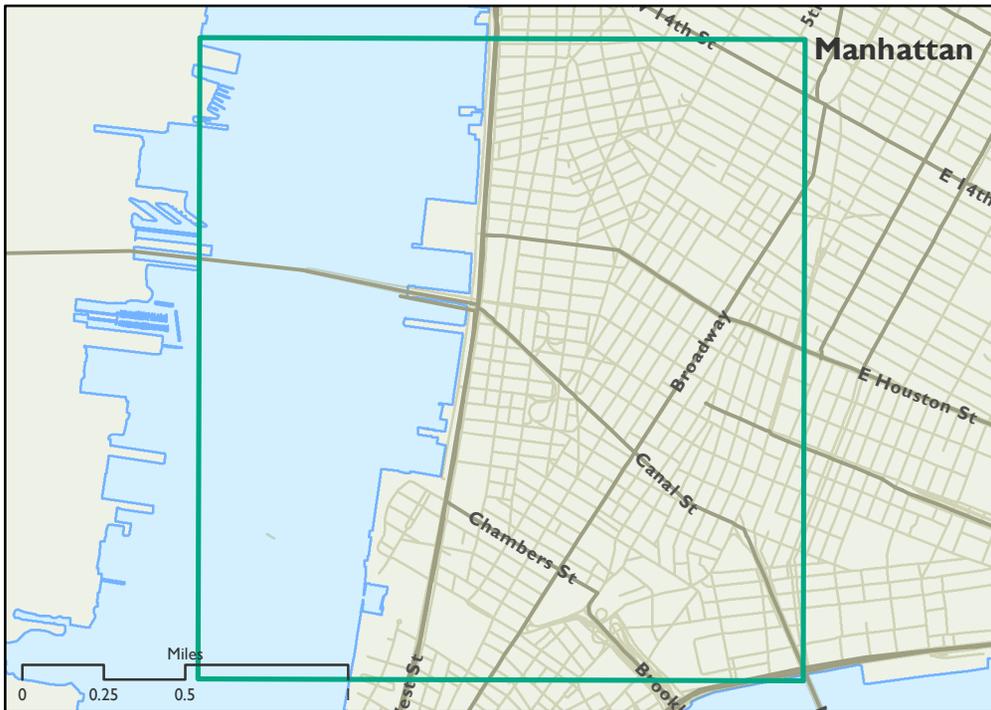
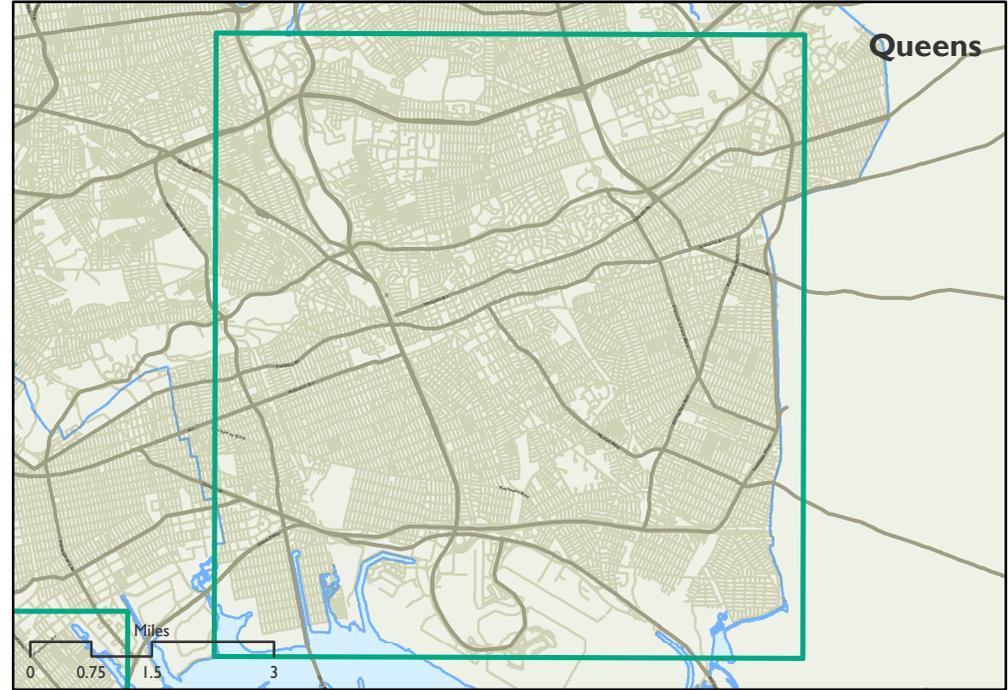
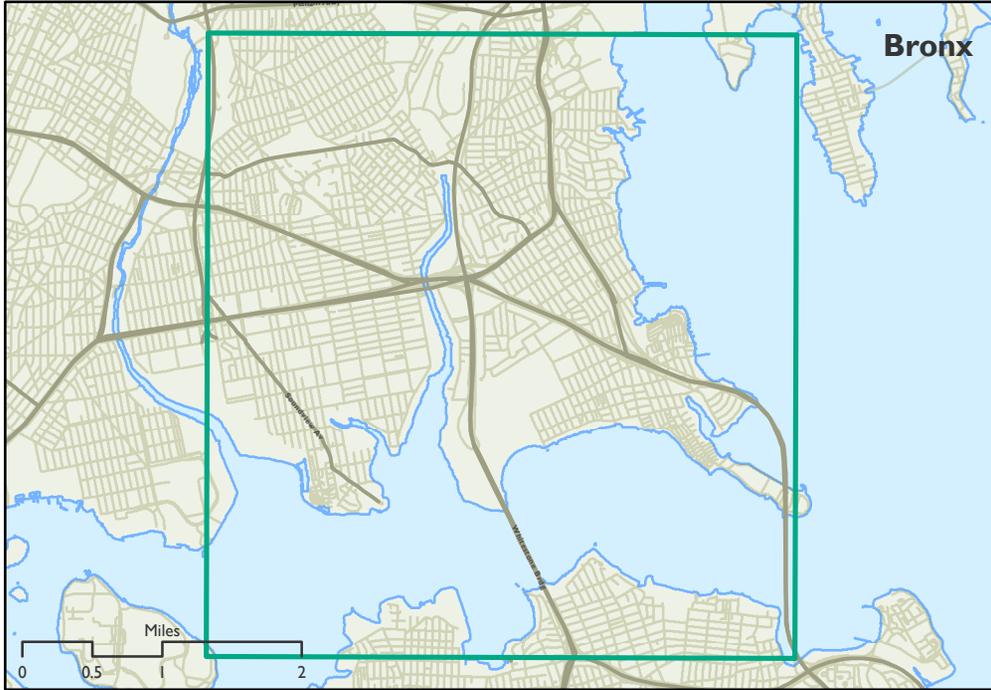


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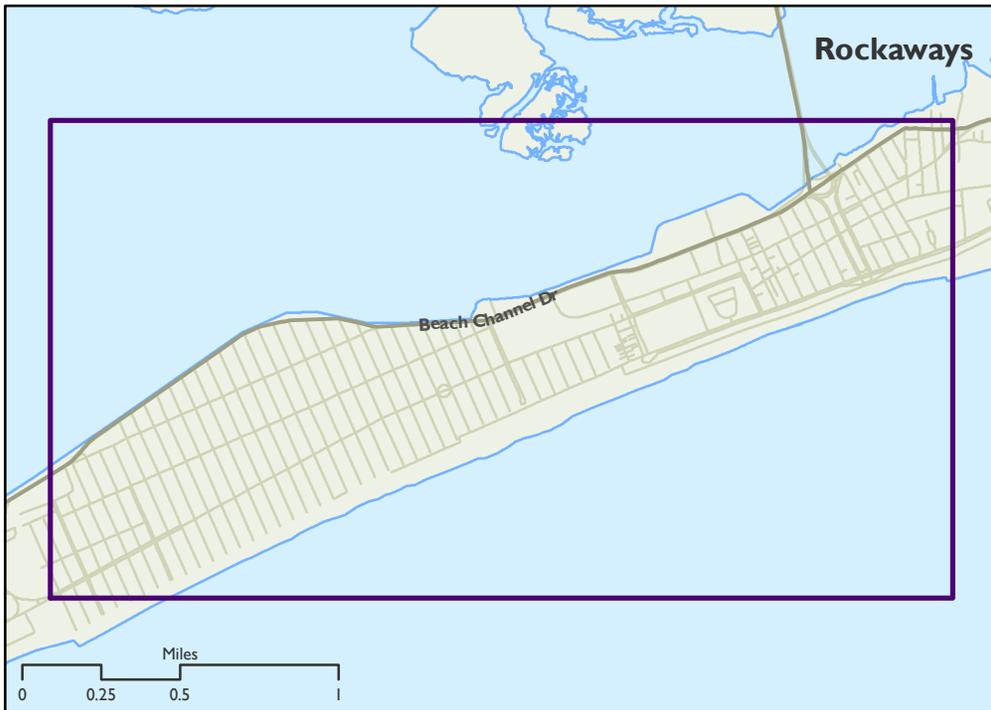
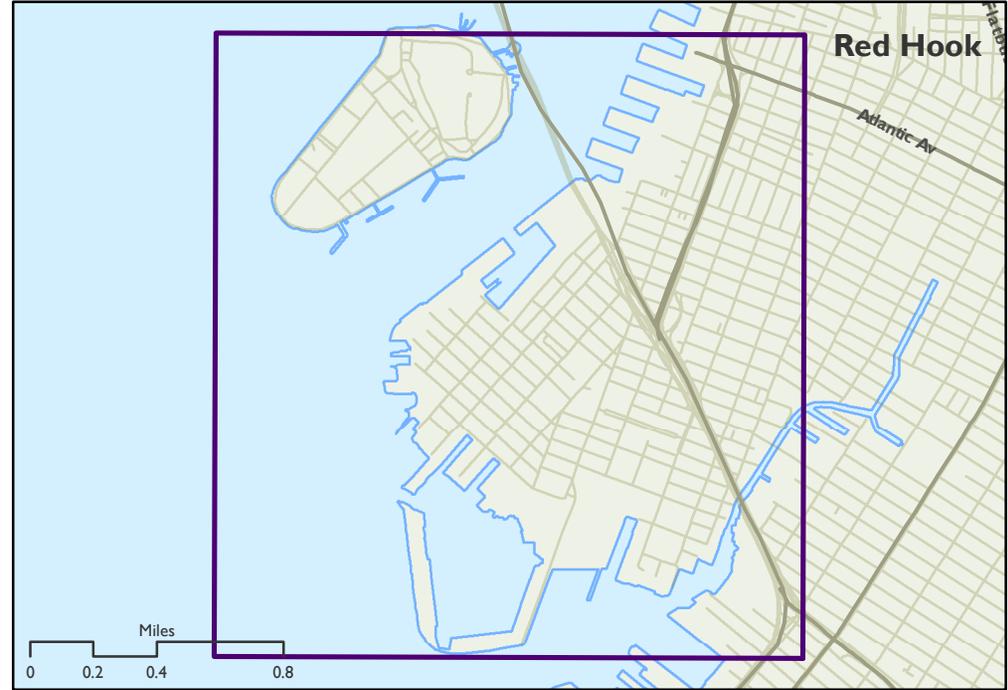
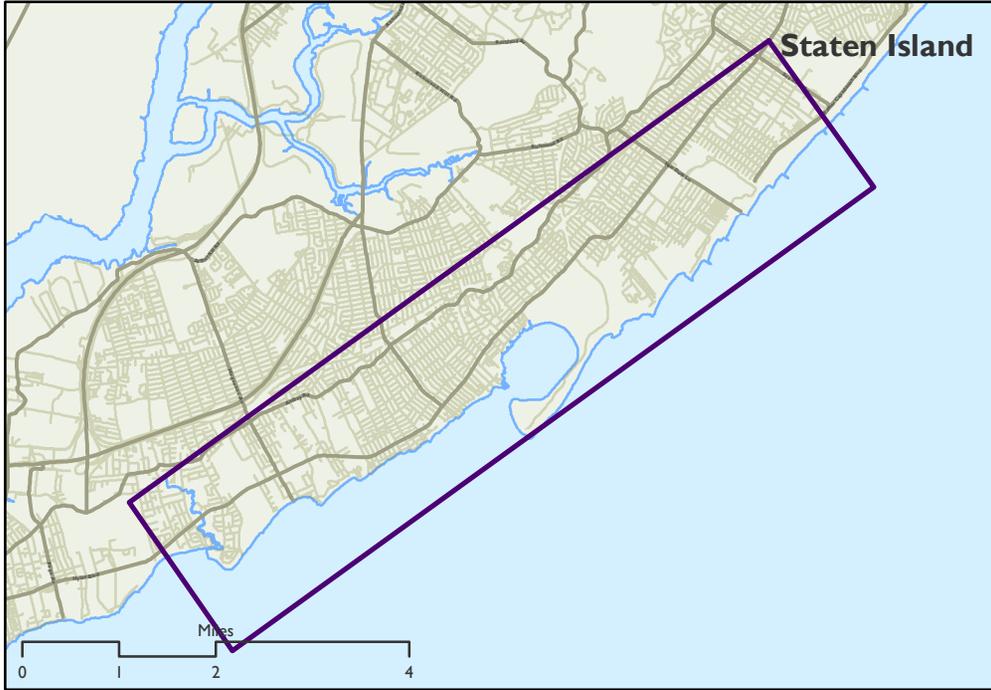


Sources: FEMA, NYC DoITT  
Date: 04.29.2013

# Scattered Residential Clusters



# Scattered Mixed Use Clusters



## Brooklyn South Cluster

Lot Details		Building Details		Zoning District
Median buildings/lot	1	1 Floors	50%	R3-1
Average lot area	2957	2 Floors	48%	R4
<b>Lot fronts</b>		3+ Floors	2%	R4-1
Average lot front	40	Median Units Res	1	R5
<40	29	pre 1960	77%	R6
40 - 50	6	Build 1961-1981	7%	R6/OP
50>	7	Built after 1981	16%	R6/C1-2/OP
<b>Lot depths</b>		Median year built	1925	
Average lot depth	76	Average building area	1779	
<100	26	Average building front	24	
100+	16	Average building depth	38	
		Average building height	23	
		Average built FAR	0.66	

Housing Type	Type Details
Beach Bungalow	Detached, single-story one- or two-family residence typically on a lot narrower than 25 feet.
Small Two-Story Home	Detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.
Ranch House	Detached, single-story one- or two-family residence typically on a lot wider than 25 feet.
Expanded Bungalow	Detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.
Small Attached Home	Attached or semi-attached single-story one- or two-family residence.
Townhouse	Attached or semi-attached multiple-story one- or two-family residence.
Boarding House	Detached, multi-family walk-up residence.
Tenement	Attached or semi-attached multifamily walk-up residence built before 1961.

## Rockaway Broad Channel Cluster

Lot Details		Building Details		Zoning District
Median buildings/lot	1	1 Floors	44%	R1-2
Average lot area	4254	2 Floors	52%	R2
Lot fronts		3+ Floors	4%	R3-2
<b>Average lot front</b>	41	Median Units Res	1	R3A
<40	49	pre 1960	89%	R3X
40 - 50	55	Build 1961-1981	7%	R4
50>	24	Built after 1981	2%	R4-1
Lot depths		Median year built	1930	R4A
<b>Average lot depth</b>	108	Average building area	2247	R5
<100	16	Average building front	30	R5A
100+	112	Average building depth	43	R5B/C1-3
		Average building height	24	
		Average built FAR	1	
		Average built FAR	0.54	

Housing Type	Type Details
Beach Bungalow	Detached, single-story one- or two-family residence typically on a lot narrower than 25 feet.
Small Two-Story Home	Detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.
Ranch House	Detached, single-story one- or two-family residence typically on a lot wider than 25 feet.
Expanded Bungalow	Detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.
Small Attached Home	Attached or semi-attached single-story one- or two-family residence.
Townhouse	Attached or semi-attached multiple-story one- or two-family residence.
Boarding House	Detached, multi-family walk-up residence.
Detached Mixed-Use	Detached building with residential units above ground-floor, non-residential space.
Pre-Code Attached Mixed-Use	Attached or semi-attached building with residential units above ground-floor, non-residential space built before 1961.

## Breezy Point Cluster

Lot Details		Building Details		Zoning District
Median buildings/lot	1	1 Floors	100%	R4/C1-2
Average lot area	*	2 Floors	0	R4
<b>Lot fronts</b>		3+ Floors	0	
Average lot front	*	Median Units Res	1	
<40	*	pre 1960	100%	
40 - 50	*	Build 1962-1981	0	
50>	*	Built after 1981	0	
<b>Lot depths</b>		Median year built	1938	
Average lot depth	*	Average building area	1610	
<100	*	Average building front	30	
100+	*	Average building depth	39	
		Average building height	18	
		Average built FAR	*	

Housing Type	Type Details
Small Two-Story Home	Detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.
Expanded Bungalow	Detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.

\*Data unavailable for Breezy Point

## Staten Island Cluster

Lot Details		Building Details		Zoning District
Median buildings/lot	1	1 Floors	84%	R4/C1-2
Average lot area	8180	2 Floors	14%	R4
<b>Lot fronts</b>		3+ Floors	2%	R3A
Average lot front	19	Median Units Residential	1	R3X
<40	122	pre 1960	91%	C3A
40 - 50	72	Build 1962-1981	3%	SRD*
50>	36	Built after 1981	5%	
<b>Lot depths</b>		Median year built	1930	
Average lot depth	92	Average building area	1200	
<100	123	Average building front	19	
100+	106	Average building depth	35	
		Average building height	19	
		Average built FAR	0.31	

Housing Type	Type Details
Beach Bungalow	Detached, single-story one- or two-family residence typically on a lot narrower than 25 feet.
Small Two-Story Home	Detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.
Ranch House	Detached, single-story one- or two-family residence typically on a lot wider than 25 feet.
Expanded Bungalow	Detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.
Small Attached Home	Attached or semi-attached single-story one- or two-family residence.
Townhouse	Attached or semi-attached multiple-story one- or two-family residence.
Boarding House	Detached, multi-family walk-up residence.
Detached Mixed-Use	Detached building with residential units above ground-floor, non-residential space.
Pre-Code Attached Mixed-Use	Attached or semi-attached multiple-story one- or two-family residence.

\*Special South Richmond Development District.

## Scattered Sites Detached

Lot Details		Building Details		Zoning District
Median buildings/lot	1.5	1 Floors	53%	R2
Average lot area	3457	2 Floors	20%	R3-1
<b>Lot fronts</b>		3+ Floors	27%	R3A
Average lot front	36	Median Units Res	1	R4
<40	10	pre 1960	100%	
40 - 50	4	Median year built	1925	
50>	1	Average building area	2424	
Lot depths		Average building front	20	
<b>Average lot depth</b>	89	Average building depth	39	
<100	10	Average building height	25	
100+	5	Average built FAR	0.89	

Housing Type	Type Details
Beach Bungalow	Detached, single-story one- or two-family residence typically on a lot narrower than 25 feet.
Small Two-Story Home	Detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.
Ranch House	Detached, single-story one- or two-family residence typically on a lot wider than 25 feet.
Expanded Bungalow	Detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.
Tenement	Attached or semi-attached multifamily walk-up residence built before 1961.

## Scattered Sites Mixed Use

Lot Details		Building Details		Zoning District
Median buildings/lot	1.8	1 Floors	13%	R3X
Average lot area	4188	2 Floors	67%	R3X/SRD
<b>Lot fronts</b>		3+ Floors	25%	R3-2/C1-1
Average lot front	41	Median Units Res	1	R5/C1-3
<40	6	pre 1960	100%	R5B/C1-3
40 - 50	4	Median year built	1925	
50>	3	Average building area	3500	
Lot depths		Average building front	30	
<b>Average lot depth</b>	108	Average building depth	49	
<100	4	Average building height	23	
100+	9	Average built FAR	0.93	

Housing Type	Type Details
Pre-Code Attached Mixed-Use	Attached or semi-attached building with residential units above ground-floor, non-residential space built before 1961.

## Appendix C. Housing Typologies

## **Housing Types in Cluster(s)**

### **Detached Homes**

#### *Beach Bungalow*

A Beach Bungalow is a detached, single-story one- or two-family residence typically on a lot narrower than 25 feet.

#### *Small Two-Story Home*

A Small Two-Story Home is a detached, multiple-story one- or two-family residence on a lot typically narrower than 25 feet.

#### *Ranch House*

A Ranch House is a detached, single-story one- or two-family residence typically on a lot wider than 25 feet.

#### *Expanded Bungalow*

An Expanded Bungalow is a detached, multiple-story one- or two-family residence typically on a lot wider than 25 feet.

### **Attached Homes**

#### *Small Attached Home*

A Small Attached Home is an attached or semi-attached single-story one- or two-family residence.

#### *Townhouse*

A Townhouse is an attached or semi-attached multiple-story one- or two-family residence.

### **3- and 4-unit Buildings**

#### *Boarding House*

A Boarding House is a detached, multi-family walk-up residence.

#### *Tenement*

A Tenement is an attached or semi-attached multifamily walk-up residence built before 1961.

### **Mixed-Use Building**

#### *Detached Mixed-Use*

A Detached Mixed-Use building is a detached building with residential units above ground-floor, non-residential space.

#### *Pre-Code Attached Mixed-Use*

A Pre-Code Attached Mixed-Use is an attached or semi-attached building with residential units above ground-floor, non-residential space built before 1961.

#### *Contemporary Attached Mixed-Use*

A Contemporary Attached Mixed-Use building is an attached or semi-attached building with residential units above ground-floor, non-residential space built after 1961.

## Appendix D. Enterprise Green Communities Checklist



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

## 2011 Enterprise Green Communities Criteria Checklist

This checklist provides an overview of the technical requirements within the Enterprise Green Communities Criteria. **To achieve Enterprise Green Communities Certification, all projects must achieve compliance with the Criteria mandatory measures applicable to that construction type. Additionally, New Construction projects must achieve 35 optional points, Substantial Rehab projects must achieve 30 optional points, and Moderate Rehab projects must also achieve 30 optional points.**

### 1: INTEGRATIVE DESIGN

YES  NO  MAYBE

M

#### 1.1a Green Development Plan: Integrative Design Meeting(s)

Conduct one or more integrative design meetings and submit a Green Development Plan or equivalent documentation.

YES  NO  MAYBE

M

#### 1.1b Green Development Plan: Criteria Documentation

Create design and construction documentation to include information on implementation of appropriate Enterprise Green Communities Criteria.

YES  NO  MAYBE

2

#### 1.2a Universal Design *(New Construction only)*

Design a minimum of 15% of the dwelling units (no fewer than one) in accordance with ICC/ANSI A117.1, Type A, Fully Accessible guidelines.

YES  NO  MAYBE

2 or 3

#### 1.2b Universal Design *(Substantial and Moderate Rehab only)*

Design a minimum of 10% of the dwelling units (no fewer than one) in accordance with ICC/ANSI A117.1, Type A, Fully Accessible guidelines [2 points] and, for an additional point, the remainder of the ground-floor units and elevator-reachable units should have accessible unit entrances.

SUBTOTAL OPTIONAL POINTS

### 2: LOCATION + NEIGHBORHOOD FABRIC

YES  NO  MAYBE

M

#### 2.1 Sensitive Site Protection *(New Construction only)*

Do not locate new development, including buildings, built structures, roads, or other parking areas, on portions of sites that meet any of the following provisions:

- Land within 100 feet of wetlands, including isolated wetlands or streams
- Land on slope greater than 15%
- Land with prime soils, unique soils, or soils of state significance
- Public parkland
- Land that is specifically identified as habitat for any species on federal or state threatened or endangered lists
- Land with elevation at or below the 100-year floodplain

YES  NO  MAYBE

M

#### 2.2 Connections to Existing Development and Infrastructure *(New Construction only, except for projects located on rural tribal lands, in colonias communities, or in communities of population less than 10,000)*

Locate project on a site with access to existing roads, water, sewers, and other infrastructure within or contiguous to existing development. Connect the project to the pedestrian grid.



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>M</p>	<p><b>LOCATION + NEIGHBORHOOD FABRIC (CONTINUED)</b></p> <p><b>2.3 Compact Development</b> <i>(New Construction only)</i> Design and build the project to a density of at least:</p> <ul style="list-style-type: none"> <li>• <i>Urban/Small Cities:</i> 10 dwelling units per acre, or at least 75% of surrounding net residential density, whichever is greater</li> <li>• <i>Suburban/Mid-Size Towns:</i> 7 dwelling units per acre, or at least 75% of surrounding net residential density, whichever is greater</li> <li>• <i>Rural/Tribal/Small Towns:</i> 5 units per acre for detached or semi-detached housing; 10 units per acre for townhomes; 15 units per acre for apartments</li> </ul>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>5 or 6</p>	<p><b>2.4 Compact Development</b> Design and build the project to a density of at least:</p> <ul style="list-style-type: none"> <li>• <i>Urban/Small Cities:</i> 15 dwelling units per acre, or at least 75% of surrounding net residential density, whichever is greater [5 points]</li> <li>• <i>Suburban/Mid-Size Towns:</i> 10 dwelling units per acre, or at least 75% of surrounding net residential density, whichever is greater [6 points]</li> <li>• <i>Rural/Tribal/Small Towns:</i> 7.5 units per acre for detached or semi-detached housing; 12 units per acre for townhomes; 20 units per acre for apartments [6 points]</li> </ul>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>M</p>	<p><b>2.5 Proximity to Services</b> <i>(New Construction only)</i> Locate the project within:</p> <ul style="list-style-type: none"> <li>• <i>Urban/Small Cities:</i> a 0.25-mile walk distance of at least two <b>OR</b> a 0.5-mile walk distance of at least four of the list of facilities</li> <li>• <i>Suburban/Mid-Size Towns:</i> a 0.5-mile walk distance of at least three <b>OR</b> a 1-mile walk distance of at least six of the list of facilities</li> <li>• <i>Rural/Tribal/Small Towns:</i> two miles of at least two of the list of facilities</li> </ul>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>M</p>	<p><b>2.6 Preservation of and Access to Open Space: Rural/Tribal/Small Towns Only</b> <i>(New Construction only)</i> Set aside a minimum of 10% of the total project acreage as open space for use by residents <b>OR</b> locate project within a 0.25-mile walk distance of dedicated public open space that is a minimum of 0.75 acres</p>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>3 max</p>	<p><b>2.7 Preservation of and Access to Open Space</b> Set aside a percentage of the total project acreage as open space for use by residents: 20% [1 point]; 30% [2 points]; and 40% + written statement of preservation/conservation policy for set-aside land [3 points]</p>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>5</p>	<p><b>2.8 Access to Public Transportation</b> Locate the project within:</p> <ul style="list-style-type: none"> <li>• <i>Urban/Small Cities:</i> a 0.5-mile walk distance of combined transit services (bus, rail, and ferry) constituting 76 or more transit rides per weekday and 32 or more transit rides on the weekend</li> <li>• <i>Suburban/Mid-Size Towns:</i> a 0.5-mile walk distance of combined transit services (bus, rail, and ferry) constituting 60 or more transit rides per weekday and some type of weekend ride option</li> <li>• <i>Rural/Tribal/Small Towns:</i> 5-mile distance of either a vehicle share program, a dial-a-ride program, an employer van pool, or public-private regional transportation</li> </ul>
<p><input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE</p>	<p>5</p>	<p><b>2.9 Walkable Neighborhoods: Connections to Surrounding Neighborhood—Rural/Tribal/Small Towns</b> Connect the project to public spaces, open spaces, and adjacent development by providing at least three separate connections from the project to sidewalks or pathways in surrounding neighborhoods and natural areas.</p>



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

**LOCATION + NEIGHBORHOOD FABRIC (CONTINUED)**

YES  NO  MAYBE

**7**  
**max**

**2.10 Smart Site Location: Passive Solar Heating/Cooling**

Demonstrate a building with a passive solar design, orientation, and shading that meet specified guidelines. *Select one:*

- Single building—New Construction [7 points]
- Multiple buildings—New Construction [7 points]
- Moderate or Substantial Rehab [7 points]

YES  NO  MAYBE

**2**

**2.11 Brownfield or Adaptive Reuse Site**

Locate the project on a brownfield or adaptive reuse site. *Select either:* adaptive reuse site [2 points] or brownfield remediation [2 points]

YES  NO  MAYBE

**6**

**2.12 Access to Fresh, Local Foods**

Pursue one of three options to provide residents and staff with access to fresh, local foods, including neighborhood farms and gardens; community-supported agriculture; proximity to farmers market.

YES  NO  MAYBE

**4**

**2.13 LEED for Neighborhood Development Certification**

Locate the project in a Stage 2 Pre-Certified LEED for Neighborhood Development plan or a Stage 3 LEED for Neighborhood Development Certified Neighborhood Development.

SUBTOTAL OPTIONAL POINTS

**3: SITE IMPROVEMENTS**

YES  NO  MAYBE

**M**

**3.1 Environmental Remediation**

Conduct an environmental site assessment to determine whether any hazardous materials are present on site.

YES  NO  MAYBE

**M**

**3.2 Erosion and Sedimentation Control** *(Except for infill sites with buildable area smaller than one acre)*

Implement EPA's Best Management Practices for erosion and sedimentation control during construction.

YES  NO  MAYBE

**M**

**3.3 Low-Impact Development** *(New Construction only)*

Projects located on greenfields must meet the list of low-impact development criteria.

YES  NO  MAYBE

**M**

**3.4 Landscaping**

Provide new plants (including trees, shrubs, and ground cover) such that at least 50% of area available for landscaping is planted with native or adaptive species, all new plants are appropriate to the site's soil and microclimate, and none of the new plants is an invasive species.

YES  NO  MAYBE

**M**

**3.5 Efficient Irrigation and Water Reuse**

If irrigation is utilized, install an efficient irrigation or water reuse system.

YES  NO  MAYBE

**2 or 6**

**3.6 Surface Stormwater Management**

Retain, infiltrate, and/or harvest stormwater on site. *Select only one:* partial stormwater retention [2 points] or full stormwater retention [6 points]

SUBTOTAL OPTIONAL POINTS



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

**4: WATER CONSERVATION**

YES  NO  MAYBE

M

**4.1 Water-Conserving Fixtures**

Install or retrofit water-conserving fixtures in all units and any common facilities with the following specifications: Toilets—1.28 gpf; Urinals—0.5 gpf; Showerheads—2.0 gpm; Kitchen faucets—2.0 gpm; Bathroom faucets—1.5 gpm

YES  NO  MAYBE

6  
max

**4.2 Advanced Water-Conserving Appliances and Fixtures**

Install or retrofit water-conserving fixtures in all units and any common facilities with the following specifications: Toilets—1.2 gpf; Showerheads—1.5 gpm; Kitchen faucets—1.5 gpm; Bathroom faucets—0.5 gpm. *Select any, or all, of the options:*

- Toilets [2 points]
- Showerheads [2 points]
- Faucets—kitchen and bathroom [2 points]

YES  NO  MAYBE

4  
max

**4.3 Water Reuse**

Harvest, treat, and reuse rainwater and/or greywater to meet a portion of the project's water needs.

- 10% reuse [1 point]
- 20% reuse [2 points]
- 30% reuse [3 points]
- 40% reuse [4 points]

SUBTOTAL OPTIONAL POINTS

**5: ENERGY EFFICIENCY**

YES  NO  MAYBE

M

**5.1a Building Performance Standard: Single family and Multifamily (three stories or fewer)**  
*(New Construction only)*

Certify the project under ENERGY STAR New Homes.

YES  NO  MAYBE

M

**5.1b Building Performance Standard: Multifamily (four stories or more)**  
*(New Construction only)*

Demonstrate compliance with EPA's Multifamily High-Rise program (MFHR) using either the prescriptive or the performance pathway.

YES  NO  MAYBE

M

**5.1c Building Performance Standard: Single family and Multifamily (three stories or fewer)**  
*(Substantial and Moderate Rehab only)*

Demonstrate that the final energy performance of the building is equivalent to a Home Energy Rating System (HERS) Index of 85.

YES  NO  MAYBE

M

**5.1d Building Performance Standard: Multifamily (four stories or more)**  
*(Substantial and Moderate Rehab only)*

Demonstrate that the final energy performance of the building is equivalent to ASHRAE 90.1-2007.

YES  NO  MAYBE

15  
max

**5.2 Additional Reductions in Energy Use**

Improve whole-building energy performance by percentage increment above baseline building performance standard for additional points.

YES  NO  MAYBE

M

**5.3 Sizing of Heating and Cooling Equipment**

Size heating and cooling equipment in accordance with the Air Conditioning Contractors of America (ACCA) Manuals, Parts J and S, or ASHRAE handbooks.

YES  NO  MAYBE

M

**5.4 ENERGY STAR Appliances**

If providing appliances, install ENERGY STAR-labeled clothes washers, dishwashers, and refrigerators.



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>ENERGY EFFICIENCY (CONTINUED)</b></p> <p><b>5.5a Efficient Lighting: Interior Units</b> Follow the guidance appropriate for the project type: install the ENERGY STAR Advanced Lighting Package (ALP); <i>OR</i> follow the ENERGY STAR MFHR program guidelines, which require that 80% of installed lighting fixtures within units must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; <i>OR</i> if replacing, new fixtures and ceiling fans must meet or exceed ENERGY STAR efficiency levels.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>5.5b Efficient Lighting: Common Areas and Emergency Lighting</b> Follow the guidance appropriate for the project type: use ENERGY STAR-labeled fixtures or any equivalent high-performance lighting fixtures and bulbs in all common areas; <i>OR</i> if replacing, new common space and emergency lighting fixtures must meet or exceed ENERGY STAR efficiency levels. For emergency lighting, if installing new or replacing, all exit signs shall meet or exceed LED efficiency levels and conform to local building codes.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>5.5c Efficient Lighting: Exterior</b> Follow the guidance appropriate for the project type: install ENERGY STAR-qualified fixtures or LEDs with a minimum efficacy of 45 lumens/watt; <i>OR</i> follow the ENERGY STAR MFHR program guidelines, which require that 80% of outdoor lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed; <i>OR</i> if replacing, install ENERGY STAR compact fluorescents or LEDs with a minimum efficacy of 45 lumens/watt.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>5.6a Electricity Meter</b> <i>(New Construction and Substantial Rehab only)</i> Install individual or sub-metered electric meters in all dwelling units.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	3	<p><b>5.6b Electricity Meter</b> <i>(Moderate Rehab only)</i> Install individual or sub-metered electric meters in all dwelling units.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	12 max	<p><b>5.7a Renewable Energy</b> Install photovoltaic (PV) panels, wind turbines, or other electric-generating renewable energy source to provide a specified percentage of the project's estimated energy demand.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	1 or 2	<p><b>5.7b Photovoltaic/Solar Hot Water Ready</b> Site, design, engineer, and/or plumb the development to accommodate installation of photovoltaic (PV) or solar hot water system in the future.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	5	<p><b>5.8 Advanced Metering Infrastructure</b> Site, design, engineer, and wire the development to accommodate installation of smart meters and/or be able to interface with smart grid systems in the future.</p>
SUBTOTAL OPTIONAL POINTS		

**6: MATERIALS BENEFICIAL TO THE ENVIRONMENT**

<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>6.1 Low/No VOC Paints and Primers</b> All interior paints and primers must be less than or equal to the following VOC levels: Flats—50 g/L; Non-flats—50 g/L; Floor—100 g/L</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>6.2 Low/No VOC Adhesives and Sealants</b> All adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks and sealants must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	M	<p><b>6.3 Construction Waste Management</b> Commit to following a waste management plan that reduces non-hazardous construction and demolition waste by at least 25% by weight through recycling, salvaging, or diversion strategies.</p>



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

**MATERIALS BENEFICIAL TO THE ENVIRONMENT (CONTINUED)**

YES  NO  MAYBE

**5**  
**max**

**6.4 Construction Waste Management: Optional**

Determine percentage of waste diversion and earn all points below that threshold:

- 35% waste diversion [1 point]
- 45% waste diversion [1 point]
- 55% waste diversion [1 point]
- 65% waste diversion [1 point]
- 75% waste diversion [1 point]

YES  NO  MAYBE

**5**

**6.5 Recycling Storage for Multifamily Project**

Provide one or more easily accessible, permanent areas for the collection and storage of materials for recycling.

YES  NO  MAYBE

**5**  
**max**

**6.6 Recycled Content Material**

Incorporate building materials that are composed of at least 25% post-consumer recycled content or at least 50% post-industrial recycled content. *Select from the following:*

- Framing materials [1 point]
- Exterior materials: siding, masonry, roofing [1 point]
- Concrete/cement and aggregate [1 point]
- Drywall/interior sheathing [1 point]
- Flooring materials [1 point]

YES  NO  MAYBE

**5**  
**max**

**6.7 Regional Material Selection**

Use products that were extracted, processed, and manufactured within 500 miles of the home or building for a minimum of 50% of the building material value (based on cost). *Select any or all of these options:*

- Framing materials [1 point]
- Exterior materials: siding, masonry, roofing [1 point]
- Concrete/cement and aggregate [1 point]
- Drywall/interior sheathing [1 point]
- Flooring materials [1 point]

YES  NO  MAYBE

**5**

**6.8 Certified, Salvaged, and Engineered Wood Products**

Commit to using wood products and materials of at least 25% that are (by cost): FSC-certified, salvaged products, or engineered framing materials without urea-formaldehyde binders.

YES  NO  MAYBE

**1 or 3**

**6.9a Reduced Heat-Island Effect: Roofing**

Use Energy Star-compliant roofing or install a “green” (vegetated) roof for at least 50% of the roof area. *Select only one: cool roof [3 points] or green roof [1 point]*

YES  NO  MAYBE

**2**

**6.9b Reduced Heat-Island Effect: Paving**

Use light-colored, high-albedo materials and/or an open-grid pavement, with a minimum solar reflectance of 0.3, over at least 50% of the site’s hardscaped area.

SUBTOTAL OPTIONAL POINTS

**7: HEALTHY LIVING ENVIRONMENT**

YES  NO  MAYBE

**M**

**7.1 Composite Wood Products that Emit Low/No Formaldehyde**

All composite wood products must be certified compliant with California 93120. If using a composite wood product that does not comply with California 93120, all exposed edges and sides must be sealed with low-VOC sealants.



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

**HEALTHY LIVING ENVIRONMENT (CONTINUED)**

<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.2 Environmentally Preferable Flooring</b> Do not install carpets in entryways, laundry rooms, bathrooms, kitchens / kitchenettes, utility rooms, and all rooms of ground-connected floors. Any carpet products used must meet the Carpet and Rug Institute’s Green Label or Green Label Plus certification for carpet, pad, and carpet adhesives. Any hard surface flooring products used must be either ceramic tile, unfinished hardwood floors, <b>OR</b> in compliance with the Scientific Certification System’s FloorScore program criteria.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>4</p>	<p><b>7.3 Environmentally Preferable Flooring: Alternative Sources</b> Use non-vinyl, non-carpet floor coverings in all rooms of building.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.4a Exhaust Fans: Bathroom</b> <i>(New Construction and Substantial Rehab only)</i> Install Energy Star–labeled bathroom fans that exhaust to the outdoors, are connected to a light switch, and are equipped with a humidistat sensor, timer, or other control (e.g., occupancy sensor, delay off switch, ventilation controller).</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>6</p>	<p><b>7.4b Exhaust Fans: Bathroom</b> <i>(Moderate Rehab only)</i> Install Energy Star–labeled bathroom fans that exhaust to the outdoors, are connected to a light switch, and are equipped with a humidistat sensor, timer, or other control (e.g., occupancy sensor, delay off switch, ventilation controller).</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.5a Exhaust Fans: Kitchen</b> <i>(New Construction and Substantial Rehab only)</i> Install power-vented fans or range hoods that exhaust to the exterior at the appropriate cfm rate, per ASHRAE 62.2, or install a central ventilation system with rooftop fans that meet efficiency criteria.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>6</p>	<p><b>7.5b Exhaust Fans: Kitchen</b> <i>(Moderate Rehab only)</i> Install power-vented fans or range hoods that exhaust to the exterior at the appropriate cfm rate, per ASHRAE 62.2, or install a central ventilation system with rooftop fans that meet efficiency criteria.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.6a Ventilation</b> <i>(New Construction and Substantial Rehab only)</i> Install a ventilation system for the dwelling unit capable of providing adequate fresh air per ASHRAE requirements for the building type.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>5</p>	<p><b>7.6b Ventilation</b> <i>(Moderate Rehab only)</i> Install a ventilation system for the dwelling unit capable of providing adequate fresh air per ASHRAE requirements for the building type.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.7 Clothes Dryer Exhaust</b> Clothes dryers must be exhausted directly to the outdoors using rigid-type duct work.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.8 Combustion Equipment</b> Specify power-vented or direct vent equipment when installing new space and water-heating equipment in New Construction and any Substantial and Moderate Rehab projects.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.9a Mold Prevention: Water Heaters</b> Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.9b Mold Prevention: Surfaces</b> In bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.</p>
<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> MAYBE	<p>M</p>	<p><b>7.9c Mold Prevention: Tub and Shower Enclosures</b> Use non–paper-faced backing materials such as cement board, fiber cement board, or equivalent in bathrooms.</p>



M = MANDATORY  
# = AVAILABLE OPTIONAL POINTS

**HEALTHY LIVING ENVIRONMENT (CONTINUED)**

YES  NO  MAYBE

M

**7.10 Vapor Barrier Strategies** *(New Construction and Rehab Projects with foundation work only)*  
Install vapor barriers that meet specified criteria appropriate for the foundation type.

YES  NO  MAYBE

M

**7.11 Radon Mitigation** *(New Construction and Substantial Rehab only)*  
For New Construction in EPA Zone 1 and 2 areas, install passive radon-resistant features below the slab. For Substantial Rehab projects in those Zones, test for the presence of radon and mitigate if elevated levels exist.

YES  NO  MAYBE

M

**7.12 Water Drainage** *(New Construction and Rehab projects replacing assemblies called out in Criterion only)*  
Provide drainage of water away from windows, walls, and foundations by implementing list of techniques.

YES  NO  MAYBE

M

**7.13 Garage Isolation**  
Follow list of criteria for projects with garages, including: provide a continuous air barrier between the conditioned (living) space and any garage space to prevent the migration of any contaminants into the living space, and install a CO alarm inside the house in the room with a door to the garage and outside all sleeping areas.

YES  NO  MAYBE

M

**7.14 Integrated Pest Management**  
Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate sealing methods to prevent pest entry.

YES  NO  MAYBE

M

**7.15 Lead-Safe Work Practices** *(Substantial and Moderate Rehab only)*  
For properties built before 1978, use lead-safe work practices consistent with the EPA's Renovation, Repair, and Painting Regulation and applicable HUD requirements.

YES  NO  MAYBE

9

**7.16 Smoke-Free Building**  
Implement and enforce a no smoking policy in all common, individual living areas, and with a 25-foot perimeter around the exterior of all residential buildings.

SUBTOTAL OPTIONAL POINTS

**8: OPERATIONS + MAINTENANCE**

YES  NO  MAYBE

M

**8.1 Building Maintenance Manual** *(All Multifamily Projects)*  
Provide a building maintenance manual that addresses maintenance schedules and other specific instructions related to the building's green features.

YES  NO  MAYBE

M

**8.2 Resident Manual**  
Provide a guide for homeowners and renters that explains the intent, benefits, use, and maintenance of green building features.

YES  NO  MAYBE

M

**8.3 Resident and Property Manager Orientation**  
Provide a comprehensive walk-through and orientation for residents and property managers using the appropriate building maintenance or resident's manual.

YES  NO  MAYBE

12

**8.4 Project Data Collection and Monitoring System**  
Collect and monitor project performance data on energy, water, and, if possible, healthy living environments for a minimum of five years.

SUBTOTAL OPTIONAL POINTS

**TOTAL OPTIONAL POINTS**

## Appendix E. Forms

## **FORM A-2: Applicant's Letter**

NYC Department of Housing Preservation and Development  
Office of Development  
100 Gold Street, 9E4-A  
New York, NY 10038  
Attention: Gabriella Amabile

Re: Application in Response To NYC Houses Reconstruction RFQ

Dear Ms. Amabile:

This letter is being submitted in connection with my application ("Application") on behalf of \_\_\_\_\_ ("Applicant") submitted in response to the Request for Qualifications ("RFQ") issued by the Department of Housing Preservation and Development ("HPD") of the City of New York ("City") for NYC Houses Reconstruction.

I have received, read, and understand the provisions of the RFQ. I understand that, if HPD qualifies Applicant under the RFQ and if HPD subsequently selects Applicant for a Project, such selection will mean only that HPD will commence negotiations with Applicant regarding the Project. I recognize that any such negotiations with HPD will be subject to the following terms and conditions:

1. The commencement of negotiations will not represent any obligation or agreement on the part of the City, which may only be incurred or entered into by a written agreement which has been approved as to form by the City's Law Department and duly executed by the Applicant and the City. The Negotiation Letter will only indicate HPD's intention to commence negotiations, which may ultimately lead to the execution of such an agreement.

2. The following requirements will have to be satisfied prior to closing of the Project:

The Project must be reviewed and approved in accordance with all applicable HPD and City policies, which include, but are not limited to, the following:

- a. The Applicant and its principals must successfully undergo a background check concerning their suitability to do business with the City.
- b. The Project will not occur with any Applicant or with any entity with a principal who has not fulfilled development responsibilities undertaken in connection with the City or other governmental entities or is in default on any obligations to the City.
- c. The terms of the Project will be consistent with applicable City and federal policies.
- d. The Applicant must execute legal documents in form and substance acceptable to HPD and in form approved by the City's Law Department.
- e. Any City financing for the Project will be subject to availability of funds.

4. During negotiations, the Applicant must diligently, competently, and expeditiously comply with all requirements communicated to the Applicant by HPD.
5. The design of the Project must comply with any applicable HPD development requirements and guidelines.
6. Either HPD or the Applicant may terminate negotiations at any time with or without cause. Negotiations will be terminated if Applicant does not commence construction within twelve (12) months from the date of the Negotiation Letter.
7. If negotiations are terminated by either HPD or the Applicant, whether with or without cause, or if negotiations terminate automatically, then neither the City nor the Applicant will have any rights against or liabilities to the other.
8. The City is not obligated to pay, nor will it in fact pay, any costs or losses incurred by the Applicant at any time, including, but not limited to, the cost of: (i) any prior actions by the Applicant in order to respond to any selection process, or (ii) any future actions by the Applicant in connection with the negotiations, including, but not limited to, actions to comply with requirements of HPD, the City, or any applicable laws.

Very truly yours,

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Applicant

**Form B: Development Team Information and Applicant Questionnaire**

**B1 – Development Team Information (Tab B)**

All applicants shall complete pages 1 - 3 of this form. Applicants that include a not-for-profit entity as principal of the developer or part of the Development Team shall also complete pages 4 -6.

Name of Applicant: \_\_\_\_\_

Name of Contact Person: \_\_\_\_\_ E-mail: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Telephone No: \_\_\_\_\_ Alternate Phone: \_\_\_\_\_

**COMPOSITION OF APPLICANT ENTITY:**

1. Type of organization (i.e. partnership, corporation, limited liability company, joint venture): \_\_\_\_\_

2. Provide the following information about all principals of the applicant. For corporations, provide the names of the officers and any shareholders owning 10% or more; for partnerships, provide the names of all general partners. For joint ventures, provide the information separately for each entity that comprises the joint venture. Also, state the role(s) that each principal would play in the development of the site, using the categories specified below.

**NAME OF ENTITY # 1:** \_\_\_\_\_ **Percent Interest in Proposed Project:** \_\_\_\_\_

PRINCIPALS: Name/Position/Title	Home Address	Role*	% Interest in Entity

**NAME OF ENTITY # 2:** \_\_\_\_\_ **Percent Interest in Proposed Project:** \_\_\_\_\_

PRINCIPALS: Name/Position/Title	Home Address	Role*	% Interest in Entity

\* Role Categories: GP = General/Managing Partner; GC = General Contractor; F = Provides financing, inactive; A = Architect; L = Legal Services; MA = Managing Agent; O = Other (specify)

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3. Provide the names, addresses, e-mail addresses, and telephone of members of the development team to the extent that these have been decided; if unknown, enter "N/A".

DEVELOPMENT TEAM:

<u>Architect:</u>	<u>Marketing Agent:</u>
<u>General Contractor:</u>	<u>Managing Agent:</u>
<u>Legal Counsel:</u>	<u>Social Service Provider:</u>
<u>Other:</u>	<u>Other:</u>

Is there an identity of interest between any principals of the developer and any other entities that comprise the development team? Yes [ ] No [ ]

If yes, please explain.

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4. Has any principal identified above, or any organization in which the principal is or was a general partner, corporate officer, or owned more than 10% of the shares of the corporation, been the subject of any of the following:

- (1) Arson conviction or pending case? Yes [ ] No [ ]
- (2) Harassment complaint filed by the New York State Division of Rent Control or the New York State Division of Housing and Community Renewal? Yes [ ] No [ ]
- (3) Had an ownership or management interest in a property that was taken in rem by the City or assigned by a judge of Landlord and Tenant Court to a 7A Administrator or receiver, or was subject to tax lien sale? Yes [ ] No [ ]
- (4) City State or Federal mortgage foreclosure, or currently more than 90 days in arrears on any City loan? Yes [ ] No [ ]
- (5) Default on any contract obligation or agreement of any kind or nature entered into with the City of New York or one of its agencies? Yes [ ] No [ ]
- (6) In the past 5 years, failed to qualify as a responsible bidder, or refused to enter into a contract after an award has been made, privately or with any government agency? Yes [ ] No [ ]
- (7) In the last 7 years, filed a bankruptcy petition or been the subject of involuntary bankruptcy proceedings? Yes [ ] No [ ]
- (8) In the last 5 years, failed to file any required tax returns, or failed to pay any applicable Federal, State of New York, or City taxes or other charges? Yes [ ] No [ ]
- (9) Been convicted of fraud, bribery, or grand larceny? Yes [ ] No [ ]
- (10) Negative findings from the Inspector General's Office? Yes [ ] No [ ]

If the answer to any question is yes, provide the following information about each instance: name of principal(s); name(s) of organization(s) or corporation(s); principal's status in the organization or corporation (e.g. officer), the date of the action, and current status and disposition.

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CERTIFICATION

[This certification must be signed by one of the principals listed above; if the applicant is a joint venture, it must be signed by a principal of each entity that comprises the joint venture.]

I certify that the information set forth in this application and all attachments and supporting documentation is true and correct. I understand that the City of New York will rely on the information in or attached to this document and that this document is submitted to induce the City of New York to select this proposal for development of a site.

I understand that this statement is part of a continuing application and that until such time that the subject project is finally and unconditionally approved by the City of New York, I will report any changes in or additions to the information herein, and will furnish such further documentation or information as may be requested by the City of New York or any agency thereof.

I understand that if I receive preliminary designation to develop this site, I must submit all additional disclosure forms required.

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Name of Organization

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Signature

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Date

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Print or Type Name and Title

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Name of Organization

---

Signature

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Date

---

Print or Type Name and Title

**B2 – Not-For-Profit Organization: Applicant Description**

Name of Organization: \_\_\_\_\_

Office Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code \_\_\_\_\_

Executive Director: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Phone No. \_\_\_\_\_ FAX No. \_\_\_\_\_

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**ROLE OF ORGANIZATION IN THE PROJECT:** Describe the role that the not-for-profit organization will play, such as developer, marketing agent, etc.

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Date Established: \_\_\_\_\_ Date Incorporated: \_\_\_\_\_

**CERTIFICATION:** I CERTIFY THAT THE INFORMATION SET FORTH IN THIS DISCLOSURE STATEMENT AND ITS ATTACHMENTS IS TRUE AND CORRECT.

\_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Date

**B2 – Not-For-Profit Organization: Directors, Officers, and Key Staff**

Name of Organization: \_\_\_\_\_

Name and Home Address	Position and/or Office in Organization	Date of Initial Appointment	Current Occupation and Name of Employer

**B2 – Not-For-Profit Organization: Major Sources of Funding**

Name of Organization: \_\_\_\_\_

Provide the following information regarding your major sources of funding during the two years preceding the deadline for submission of proposals under this RFP.

Funding Source (Agency, Department, etc.)	Name of Program	Contact Person Name and Phone Number	Purposes of Funding	Dates of Funding	Funding Amount



**FORM G: DEVELOPMENT BUDGET**

Instructions: Please complete budgets for each of the three scenarios provided. Applicants should complete this document for each of the housing typologies in a cluster. Applicants may add line-items, as needed.

<b>Development Budget</b>	Applicant to provide:			Scenario 1			Scenario 2			Scenario 3		
	Standard wage scenario	Prevailing wage scenario	Standard wage scenario - V Zone construction									
Applicant name												
Cluster name												
Building typology												
Square feet	0											
<b>CONSTRUCTION COSTS:</b>												
Contractor Price	\$0 #DIV/0!	per sq ft		\$0 #DIV/0!	per sq ft		\$0 #DIV/0!	per sq ft				
General Conditions	\$0			\$0			\$0					
Contingency	\$0			\$0			\$0					
Payment & Performance Bond	\$0			\$0			\$0					
Contractor's Overhead	\$0			\$0			\$0					
Contractor's Profit:	\$0			\$0			\$0					
<b>Subtotal:</b>	<b>\$0 #DIV/0!</b>	<b>per sq ft</b>		<b>\$0 #DIV/0!</b>	<b>per sq ft</b>		<b>\$0 #DIV/0!</b>	<b>per sq ft</b>				
<b>PROFESSIONAL FEES:</b>												
Developer Legal	\$0			\$0			\$0					
Accounting	\$0			\$0			\$0					
Architect/Engineering Fees	\$0			\$0			\$0					
Environmental Phase II testing	\$0			\$0			\$0					
Survey	\$0			\$0			\$0					
Borings	\$0			\$0			\$0					
DOB Fees	\$0			\$0			\$0					
Bank Engineer	\$0			\$0			\$0					
Bank Servicing Fee	\$0			\$0			\$0					
<b>Subtotal</b>	<b>\$0</b>			<b>\$0</b>			<b>\$0</b>					
<b>CARRYING COSTS:</b>												
Insurance (Fire and Extended)	\$0			\$0			\$0					
Soft Cost Contingency	\$0 #DIV/0!	of soft costs		\$0 #DIV/0!	of soft costs		\$0 #DIV/0!	of soft costs				
<b>Subtotal</b>	<b>\$0</b>			<b>\$0</b>			<b>\$0</b>					
<b>TOTAL SOFT COSTS</b>	<b>\$0 #DIV/0!</b>	<b>per sq ft</b>		<b>\$0 #DIV/0!</b>	<b>per sq ft</b>		<b>\$0 #DIV/0!</b>	<b>per sq ft</b>				
Developer's Fee	\$0			\$0			\$0					
<b>Total Development Cost:</b>	<b>\$0</b>			<b>\$0</b>			<b>\$0</b>					

## Form H: Assets Statement

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### H- Assets Statement (Tab H)

[Assets Statement must describe financial status within the last twelve months and must be dated and signed.]

**Principal or Individual whose assets are described below:**

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#### 1. Personal Information

Name:

Business Name:

Business Phone:

Residence Address:

City:

State:

Zip Code:

Business Address:

City:

State:

Zip Code:

Position (Title):

Years of Service:

Salary:

Bonus/Commission:

Other Income:

Source of Other Income:

Are you a defendant in any lawsuits or legal action that may impact your financial standing?

If so, please describe:

Do you have any contingent liabilities?

If so, please describe:

## 2. Statement of Financial Condition

<b>Assets</b>	<b>Dollars (omit cents)</b>	<b>Liabilities</b>	<b>Dollars (omit cents)</b>
Cash On Hand and in Banks		Notes Payable to Banks <i>Secured</i>	
Notes Receivable		Notes Payable to Banks <i>Unsecured</i>	
Mortgages Owned		Notes Payable to Others <i>Secured</i>	
		Notes Payable to Others <i>Unsecured</i>	
Marketable Securities Owned See <b>Schedule A</b>		Debt Balances in Margin Accounts with Brokers	
Real Estate Owned		Mortgages on Real Estate	
Cash Value of Life Insurance		Loans Against Life Insurance	
Other Assets* (Itemize)		Other Liabilities (Itemize)	
<b>Total Assets</b>		<b>Total Liabilities</b>	
		<b>Net Worth</b>	

\* Any interest in a closely held business must be documented by providing a current balance sheet for that business and stating the percent of interest held by the applicant.

**Schedule A: Marketable Securities Owned**

List separately and check (X) next to those pledged as collateral.

Marketable Securities Owned	Dollars (Omit Cents)	Collateral?

### 3. Signature Page

For the purpose of procuring and maintaining credit from time to time in any form whatsoever with you, the undersigned hereby represents the above to be a true and accurate Statement signed as of the date herein before set forth and agrees (I) that, if said Statement or any part thereof proves false or misleading in any particular, each and all of the obligation and/or liabilities of the undersigned of every kind to you, whether joint or several, primary or secondary, direct or contingent, shall, at your option, become immediately due and payable all without demand or notice of any kind and (II) that you will be notified promptly in writing of any materially unfavorable changes in the financial conditions herein set forth. Whenever the undersigned may apply to you for credit, and until a substitute Statement may have been submitted to you, this Statement shall have the same force and effect as if delivered at the time such further credit is requested.

Name of Principal: \_\_\_\_\_

Signature of Individual: \_\_\_\_\_

Print Name and Title of Individual: \_\_\_\_\_

Date: \_\_\_\_\_