Committee on Housing and Buildings
Laura Rogers, Counsel
Edward Atkin, Assistant Counsel
Guillermo Patino, Policy Analyst
Amy Stokes, Financial Analyst

Committee on Transportation
Lyle Frank, Counsel
Jonathan Masserano, Policy Analyst
Gaffar Zaalof, Policy Analyst

Committee on Environmental Protection
Samara Swanston, Counsel
Daniel Avery, Policy Analyst

Committee on Parks and Recreation
Kris Sartori, Counsel
Patrick Mulvihill, Policy Analyst

Committee on Waterfronts
Cullen Howe, Counsel

Fiona Vardy, Intern

COMMITTEE REPORT OF THE INFRASTRUCTURE
AND HUMAN SERVICES DIVISIONS
Robert Newman, Legislative Director

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COMMITTEE ON WATERFRONTS
Hon. Peter Koo, Chair

June 27, 2013

Oversight - Rebuilding After Sandy and Improving the Resiliency of the City's Infrastructure.

INT. NO. 983: By Council Members Arroyo, Brewer, Cabrera, Chin, Comrie, Dickens, Eugene, Ferreras, Fidler, Gentile, Gonzalez, Jackson, James, King, Koppell, Mark-Viverito, Mendez, Nelson, Palma, Reyna, Williams, Wills, Lappin and Rodriguez

TITLE: A Local Law to amend the New York city building code, in relation to flood-resistant construction requirements for health facilities.

BUILDING CODE: Amends section BC G201.2.

PROPOSED INT. NO. 990-A: By Council Members Ulrich, Oddo, Arroyo, Cabrera, Comrie, Gentile, Gonzalez, James, Nelson, Vallone, Wills, Rodriguez, Lappin and Halloran

TITLE: A Local Law to amend the New York city building code, in relation to the adoption of best available flood maps.

BUILDING CODE: Amends sections BC G201.2, BC G103.3, BC G103.5, BC G402, and BC G501.1; repeals and reenacts section BC G102.3.

INT. NO. 1085: By Council Member Chin

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to emergency plans for residential and commercial buildings and the posting of emergency information in certain residential buildings.

ADMINISTRATIVE CODE: Amends Chapter 1 of Title 30 to add a new section 30-104, and amends Subchapter 2 of Chapter 2 of Title 27 to add a new section 27-2057.

INT. NO. 1086: By Council Member Fidler

TITLE: A Local Law to amend the New York city plumbing code, in relation to requiring that toilets and faucets be capable of operating without an external supply of electrical power.

PLUMBING CODE: Amends section PC 424 to add a new section 424.7, and amends section PC 425 to add a new section PC 425.5.

INT. NO. 1087: By Council Member Garodnick

TITLE: A Local Law to amend the New York city building code, in relation to using cool roof surfaces to reduce summer heat.

BUILDING CODE: Amends section BC 1504.8.

INT. NO. 1088: By Council Member Gennaro

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to water retentive sidewalks and a study on absorptive street and sidewalk materials and alternative street angulation.

ADMINISTRATIVE CODE: Amends Subchapter 1 of Chapter 1 of Title 18 by adding a new section 19-156.

INT. NO. 1089: By Council Member Gonzalez

TITLE: A Local Law to amend the administrative code of the city of New York, the New York city building code and the New York city mechanical code, in relation to allowing elevation of certain building systems in flood-prone areas.

ADMINISTRATIVE CODE: Amends Section 27-3025.

BUILDING CODE: Amends Sections BC 202, BC G201.2, and BC G307.

MECHANICAL CODE: Amends Section MC 1305.11.1.3.

INT. NO. 1090: By Council Member Ignizio

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to studying the effects of wind on certain buildings.

ADMINISTRATIVE CODE: Amends Subchapter 2 of Chapter 1 of Title 3 to add a new section 3-124.

INT. NO. 1092: By Council Member Lappin

TITLE: A Local Law to amend the New York city building code, in relation to the installation of external electrical hookups.

BUILDING CODE: Amends sections BC 2702, BC G304.1.1 and BC G304.1.2.

INT. NO. 1093: By Council Member Levin

TITLE: A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to removing barriers to usage of temporary flood control and response devices.

ADMINISTRATIVE CODE: Amends sections 18-109 and 18-113.

BUILDING CODE: Amends sections BC 3202.1.1, BC 3202.2, BC 3203.4, BC G308, and BC G501.1.

INT. NO. 1094: By Council Member Mendez

TITLE: A Local Law to amend the New York city plumbing code and the administrative code of the city of New York, in relation to requiring residential buildings to provide drinking water to a common area supplied

directly through pressure in the public water main.

ADMINISTRATIVE CODE: Amends section 28-101.4.3.

PLUMBING CODE: Adds a new section PC 614.

INT. NO. 1095: By Council Member Nelson

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to creating a manual on flood construction and protection standards.

ADMINISTRATIVE CODE: Amends Article 103 of Chapter 1 of Title 28 to add a new section 28-103.21.

INT. NO. 1096: By Council Member Oddo

TITLE: A Local Law to amend the administrative code of the city of New York, the New York city building code, the New York city mechanical code and the New York city fire code, in relation to relocating and protecting building systems in flood-prone areas.

ADMINISTRATIVE CODE: Amends section 27-3025.

BUILDING CODE: Amends sections BC 202, BC G201.2, BC G304.1.1, BC G304.1.2, BC G304.2, BC G304, BC G307, BC G501.1, and BC 903.3.

MECHANICAL CODE: Amends section MC 301.13.

FIRE CODE: Amends sections FC 903.2, FC 904.2, FC 2703.2.4, FC 3003.3.3, and FC 3203.1.2.

INT. NO. 1097: By Council Member Recchia

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to requiring backup power sources for fire and life safety communications systems.

ADMINISTRATIVE CODE: Amends section 27-3025.

INT. NO. 1098: By Council Member Richards

TITLE: A Local Law to amend the New York city plumbing code, in relation to preventing the backflow of sewage.

PLUMBING CODE: Amends sections PC 715.1, and PC 1002.6.

INT. NO. 1099: By Council Member Richards

TITLE: A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to preventing wind damage to existing buildings.

ADMINISTRATIVE CODE: Amends section 28-101.4.3.

BUILDING CODE: Amends sections BC 1609.1, and amends Chapter 24 to add a new section BC 2403.7.

MECHANICAL CODE: Amends Chapter 4 to add a new section MC 401.5.4.

INT. NO. 1100: By Council Member Ulrich

TITLE: A Local Law to amend the New York city building code, in relation to keeping residential stairwells and hallways lit during blackouts.

BUILDING CODE: Amends sections BC 1002, and BC 1006.

INT. NO. 1101: By Council Member Vacca

TITLE: A Local Law to amend the administrative code of the city of New York and the New York city building code, in relation to

voluntarily installed emergency power systems and natural gas usage.

ADMINISTRATIVE CODE: Amends section 27-3025.

BUILDING CODE: Amends sections BC 2702.1, BC 2702.1.2 and adds a new section BC 2702.4.

INT. NO. 1101: By Council Member Van Bramer

TITLE: A Local Law to amend the administrative code of the city of New York, in relation to improving hazardous materials storage pursuant to the New York city community right-to-know law.

ADMINISTRATIVE CODE: Amends section 24-718.

INT. NO. ____: By Council Member Gennaro (in conjunction with the Mayor)

TITLE: A Local Law to amend the New York city charter, in relation to planning for resiliency to climate change as a responsibility of the office of long-term planning and sustainability.

CHARTER: Amends section 20.

RES. NO. 1708: By The Speaker (Council Member Quinn) and Council Members Recchia, Jr., Foster, Chin, Fidler, Garodnick, Gonzalez, Ignizio, Levin, Mendez, Nelson, Ulrich, Van Bramer, Oddo, Brewer, Cabrera, Comrie, Dromm, Eugene, Ferreras, Gennaro, Gentile, James, Koo, Koslowitz, Lander, Palma, Richards, Rose, Vann, Williams and Lappin

TITLE: Resolution calling upon the United States Congress to enact and the President to sign the Flood Victim Premium Relief Act of 2013.

RES. NO. 1771: By Council Members Oddo, Arroyo, Comrie, Eugene, Fidler, Gentile, James, Koo, Palma, Rose, Wills and Ulrich

TITLE: Resolution calling upon the New York State Legislature to pass and the Governor to sign S.3942/A.4380, the "Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act" which would protect from liability professional engineers, architects, landscape architects and land surveyors who render voluntary services at the scene of a natural disaster or catastrophe.

RES. NO. 1808: By Council Member Ulrich, the Speaker (Council Member Quinn) and Chin

TITLE: Resolution calling upon the United States Congress to amend the Biggert-Waters Flood Insurance Reform Act of 2012.

1. INTRODUCTION

On Thursday, June 27, 2013, the Committee on Housing and Buildings, chaired by Council Member Erik Martin Dilan, the Committee on Environmental Protection, chaired by Council Member James F. Gennaro, the Committee on Transportation, chaired by Council Member James Vacca, the Committee on Parks and Recreation, chaired by Council Member Melissa Mark-Viverito, and the Committee on Waterfronts, chaired by Council Member Peter Koo, will hold a joint hearing on "Rebuilding After Sandy and Improving the Resiliency of the City's Infrastructure." In addition the Committee on Housing and Buildings will consider, for the first time, Int. No. 983, Proposed Int. No. 990-A, Int. No. 1085, Int. No. 1086, Int. No. 1087, Int. No. 1089, Int. No. 1090, Int. No. 1092, Int. No. 1093, Int. No. 1094, Int. No. 1095, Int. No. 1096, Int. No. 1097, Int. No. 1098, Int. No. 1099, Int. No. 1100, Int. No. 1101, Int. No. 1102, Res. No. 1708, Res. No.

1771, and Res. No. 1808; the Committee on Environmental Protection will consider, for the first time, Int. No. ____; and the Committee on Transportation will consider, for the first time, Int. No. 1088.

2. BACKGROUND

a. Superstorm Sandy

Superstorm Sandy hit New York City with intensity unparalleled by any coastal storm in recent history. The storm began on October 22, 2012, as a tropical depression cyclone in the southern Caribbean with wind speeds below 39 mph.[1] The depression strengthened and became Tropical Storm Sandy, with maximum winds of about 40 mph.[2] By October 24th, Sandy was a Category 1 hurricane and crossed Jamaica with reported winds of 80 mph. On October 26th, Sandy struck Cuba with winds of about 110 mph, just below the status of a major Category 3 hurricane and on October 27th, the storm turned to the northeast, off the coast of Florida, and left in its path an estimated death toll in the Caribbean of 70 or more. After briefly weakening to a tropical depression, Sandy re-intensified into a Category 1 hurricane and meteorologists warned that the storm would likely morph into a powerful, hybrid super-storm as it moved further northward towards a high-pressure cold front that was expected to force Sandy to start turning to the northwest toward Baltimore, Washington, Philadelphia and New York.[3] The full moon was

[1] *See* Posting of Willie Drye to National Geographic Newswatch, *A Timeline of Hurricane Sandy's Path of Destruction*, Nov. 2, 2012, *available at:* http://newswatch.nationalgeographic.com/2012/11/02/a-timeline-of-hurricane-sandys-path-of-destruction/; *see also* Hurricane Sandy Advisory Archive, NOAA National Hurricane Center, *available at*: http://www.nhc.noaa.gov/archive/2012/SANDY.shtml.
[2] Id.
[3] Hurricane Sandy Advisory Archive, NOAA National Hurricane Center, *available at*: http://www.nhc.noaa.gov/archive/2012/SANDY.shtml.

expected to make Sandy's storm surge – initially expected to be 11 to 12 feet in some places – even a little higher as it made landfall.[4]

On October 29th Sandy made the anticipated sharp turn toward the northwest on a path to the coast of New Jersey.[5] The storm began interacting with other weather systems and gained energy and by approximately 8 p.m. Sandy's center had come ashore near Atlantic City, New Jersey. The storm's unusual path from the southeast made its storm surge much worse for New Jersey and New York.[6] In fact, the National Weather Service's New York office reported that the nearly 14 foot surge was a new record for a storm surge in the harbor. The surge topped the seawall at The Battery in Lower Manhattan and flooded parts of the City's subway system. The surge also flooded the Hugh Carey Tunnel that links Lower Manhattan to Brooklyn and did unspeakable damage throughout Staten Island, Coney Island, and the Rockaways. [7] As a result, forty-three New Yorkers lost their lives – half of whom were on Staten Island – and tens of thousands were injured, or temporarily or permanently displaced by the storm's impact.[8]

b. Special Initiative for Rebuilding and Resiliency

i. History

In December 2012, Mayor Bloomberg created the Special Initiative for Rebuilding and Resiliency (SIRR) to address how to create a more resilient New York City in the wake of Hurricane Sandy, with a long-term focus on preparing for and

[4] Id.
[5] Id.
[6] Id.
[7] Id.
[8] Hurricane Sandy After Action Plan. May 2013. Report and Recommendations to Mayor Michael R. Bloomberg.

protecting against the impacts of climate change.[9] The final SIRR report (report) was released on June 11, 2013.[10] The report describes what occurred during the super storm Sandy and gives proposed solutions to remedy issues related to the city's infrastructure and resilience against future perils. The report covers a broad range of subcategories from insurance policies to environmental protection and remediation. In addition, the report highlights communities that suffered especially severe damage during the storm and describes the precautions that need to be taken to prepare for future climate change and risks. The report estimates that cost for the recovery will be approximately $19.5 billion.

ii. Summary of the SIRR Report

Coastal Protection

First and foremost, the report emphasizes that New York City is a coastal area and is at imminent risk of heavy flooding during storms such as Sandy. There were three major contributing factors to the inundation of the city during hurricane Sandy. First, the water from the storm surge flowed over the existing barriers between the shore and the ocean and flooded bordering neighborhoods. Second, it reached the city through smaller, less direct routes, such as Bays, inlets, and creeks, which acted as channels for the water to enter. Third, the vast amount of water entering the city streets overtopped the existing drainage systems which were not designed to resist strong storm surge.[11] However, by observing the design elements that successfully protected the coast, it will be possible to draw inspiration for constructing better coastal defenses. For example, the sand dunes,

[9] New York City. *Special Initiative for Rebuilding and Resiliency*. New York, New York: 2013. http://nytelecom.vo.llnwd.net/o15/agencies/sirr/SIRR_spreads_Lo_Res.pdf
[10] Id .
[11] Id.

wetlands, elevated drainage systems, and nourished beaches of Brighton Beach and Coney Island prevented the level of damage that Sea Gate experienced.[12]

Insurance

Hurricane Sandy is likely to become the third most expensive hurricane in United States History in terms of losses covered by insurance. Sandy's insurance losses stand at $18.8 billion, following previous storms Andrew, which had $25.6 billion in losses, while Katrina had $48.7 billion.

However, many New Yorkers did not know they needed a separate policy for flood insurance. The insurance system for floods and other natural disasters is currently based on the "principle of risk-based premiums,"[13] in which, those with greater risk (those more likely to suffer damage and require a claims payment from an insurance provider) pay higher premiums than those with less risk.[14] Coverage for flooding, like other natural disasters, is usually excluded from home insurance policies and has to be purchased through a separate policy.

The National Flood Insurance Program (NFIP) was created in 1968 to provide insurance to property owners in high flood risk areas. In 1983, the Federal Emergency Management Agency (FEMA) issued Flood Insurance Rate Maps (FIRMs) for New York City areas of the city that are at risk of heavy flooding. Buildings that are located within Special Flood Hazard Areas, as mapped by the FIRM, were required to purchase flood insurance through the NFIP if they had a Federally-backed mortgage. Unfortuantely, because the risk of flooding was perceived as a low probability, and because enforcement of the law was weak, many individuals and businesses choose not to purchase this type of

[12] Id.
[13] Id.
[14] Id.

insurance.[15] Even for property owners with NFIP policies, in many cases, those policies covered only a portion of what homeowners needed to pay for repairs.[16]

Prior to Hurricane Sandy, FEMA was working on updating New York City's FIRMs, and in 2013, they released Preliminary Work Maps (PWMs), which, after a review process will eventually be adopted as the city's new FIRM maps. The PWM expand the 100-year floodplain by 15 square miles compared to the 1983 versions of the FIRMs.[17] The PWM and the new FIRMs will map A Zones, V Zones, Coastal A Zones, and Shaded X Zones. A Zones are in the 100-year floodplain, and have a 1% or greater chance of flooding in a given year. V Zones are the portion of the 100-year floodplain that is at risk of high-velocity wave action (defined as 3ft or greater breaking wave). Coastal A Zones are the portion of the 100-year floodplain which are subject to breaking waves between 1.5 and 3 feet. Shaded X Zones are in the 500-year floodplain, which is an area that has a 0.2% chance or greater of flooding in a given year.[18] The new FIRMs will go into effect around 2015 and are expected to be consistent with the PWMs.

In 2012 the NFIP was reauthorized and amended by the Biggert-Waters Flood Insurance Reform Act, which made several substantial changes to the way flood insurance premiums would be calculated. Most importantly, it ended subsidized rates for buildings that had been built consistent with an existing FIRM, but are no longer compliant with a new FIRM. It also strengthened the enforcement mechanism that requires buildings with Federally-backed mortgages to have flood insurance. Consequentially, the new FIRMs will require many New Yorkers to purchase flood

[15] Id.
[16] Id.
[17] Id.
[18] Id.

insurance for the first time at unsubsidized rates. The projected added costs of this flood insurance will most likely decrease the value of properties in the floodplain because buyers will factor future insurance costs into the price they are willing to pay for the properties. Furthermore, the New York City Panel on Climate Change (NPCC) projects that the number of buildings in the 100-year floodplain will rise to 88,700 by the 2020s and to 114,000 by the 2050s.

The city needs to develop solutions to help citizens be more prepared for future risks. To that end, the city will propose a series of reforms to the NFIP to Congress that will encourage flood mitigation by, and offer commensurately lower premiums to, those who obtain flood insurance; create to lower-cost flood insurance products for those who are vulnerable to flooding but are not required to obtain insurance."[19]

Buildings

Hurricane Sandy damaged approximately 88,700 structures in the City.[20] The economy suffered as many businesses experienced damage to equipment and inventory and were unable to operate as a result. The Mayor's Office estimated that collective private losses due to Sandy resulted in about $8.6 billion, of which $4.8 billion was uninsured.

The report has made major risk estimates for the future and how buildings could be impacted. For instance, buildings can be categorized according to their physical characteristics, use, age, the height of the building, construction type, and proximity to

[19] Id.
[20] Id.

other buildings.[21] The buildings deemed most vulnerable to extreme weather were one story, combustible buildings that were constructed before 1961.[22]

PWMs would map 67,700 buildings into the 100-year floodplain. This is a 90% increase compared to the 1983 FIRM map which included 35,500 buildings. Forecasts for sea level change in the 2020s and 2050s have been made by the NCPP. The number of buildings in the 100-year floodplain will increase due to sea level rise, and grow to include 88,000 in the 2020s, and as many as 114,000 by the 2050s.[23] Based on these future forecasts, the city has come up with strategies to protect buildings. Two major approaches include strengthening new and improved buildings to meet the highest possible standards, and protecting existing buildings by encouraging retrofits over time.

Healthcare/Community Preparedness and Response

Around the city during and after Sandy, a large number of healthcare providers were unable to open. Telecommunications and transportation failures made it impossible for healthcare staff to reach patients. According to the report, "across the city, five acute care hospitals and one psychiatric hospital closed. This resulted in the emergency evacuation of nearly 2,000 patients…"[24] Not only were patients in hospitals affected, but also persons in nursing homes and adult care facilities. It is important that the healthcare system be made more resilient because stressful emergency scenarios can add to patients' health risks.

Communication between citizens and the City in times of emergencies is imperative. Anticipating the arrival of Sandy, the City's Office of Emergency

[21] Id.
[22] Id.
[23] Id.
[24] Id.

Management (OEM) sent electronic alerts to more than 165,000 residents, as well as information to four million visitors via the NYC.gov website.[25] Even with these efforts to inform citizens, the system can always be improved. The report includes a number of initiatives as an effort to increase the level of communication with the community about how to prepare for storms. For instance, encouraging telecommunications resiliency by developing a best practice guide and outreach plan to help community-based providers understand the importance of telecommunications resiliency, as well as the options they might consider and questions to ask when evaluating solutions. Resiliency solutions could include using backup phone systems, Voice over Internet Protocol (VoIP), and pre-disaster planning to inform patients of available emergency phone numbers.[26] There is also a proposal to expand the OEM's Community Response Teams, as well as create a new online Emergency Notification Contact System.

Transportation

According to the report, the elements of the transportation system that were most severely affected by the storm were those located underground or by the shore. While it was possible to move vehicles such as cars, buses, and trains to higher ground, the inundation of some parts of the subways and the flooding near the coast caused major disruption. Storm water flooded the tunnel entrances in Southern Manhattan, Long Island City, Red Hook, Hoboken, and Jersey City.[27]

The storm surge risk to the transportations systems continues to be great. The 100-year floodplain in the PWM is an area that encompasses approximately 12% of the roadway network, all of the major tunnel portals other than the Lincoln Tunnel, portions

[25] Id.
[26] Id.
[27] Id.

of both airports, a variety of commuter rail assets, all three heliports, and a number of subway entrances and vent structures, mostly in Lower Manhattan.[28] With rising sea elevation, minor storm surges could be more disruptive in the future.

The transportation system is also vulnerable to other effect of climate change. High winds could cause chaos if above ground traffic equipment such as traffic signals, signs, bridges, street lights and aviation systems are damaged; and heat waves pose a threat to the opening and closing of moveable bridges, and soften asphalt roads. The report recommends initiatives to protect assets to maintain transportation system operations. Examples of initiatives include reconstructing and resurfacing key streets damaged by Sandy, integrating climate resiliency features into future capital projects, and elevating traffic signals and provide backup electrical power.[29]

Parks/Environmental Protection and Remediation

During the storm, over 5,700 acres of New York's park system was underwater. The total damage to Parks totaled approximately $800 million. The areas that were most significantly damaged were Rockaway Peninsula, Coney Island and the adjacent Southern Brooklyn, and along the East/South Shores of Staten Island.[30] Waterfront parks had the most direct impacts, yet there were inland problems as well. Examples of quantifiable damage were to the Inwood Nature Center and the Red Hook Recreation Center, which both suffered from immense water damage to the structural and mechanical systems.

Despite flooding in 3,000 acres of natural areas, the wetlands fared well. The salt marshes in Jamaica Bay and its tributary systems stayed clear of floating debris and a lot

[28] Id.
[29] Id.
[30] Id.

of the vegetation survived, and the Greenstreets of New York also added an extra filter to the amount of water overtaking the streets.

The biggest risk to most of the New York area remains flooding, and the park systems are no exception. According to the PWMs over 5,800 acres of parkland are in the 100-year floodplain. It is expected that by in the future, due to sea level rise, 6,000 acres (27%) of parkland could lie in the 100-year floodplain by the 2020s and 7,400 acres (31%) by the 2050s.[31]

The report outlines strategies to adapt parks and expand green infrastructure to shield adjacent communities from the impacts of extreme weather events. Examples include restoring city beaches, expanding the City's Greenstreets, including Jamaica Bay, and relocating or increasing the resiliency of playgrounds and athletic fields.[32]

Water and Wastewater

The report states that the wastewater system was heavily impacted by Sandy. Ten of the fourteen wastewater treatment plans were damaged or lost power in the aftermath of Sandy.[33] Untreated or partially treated wastewater was released in the local waterways. In addition, 42 out of 96 pumping stations were damaged or lost power. According to the report, "the Department of Environmental Protection (DEP) reported 560 million gallons of untreated combined sewage, storm water, and seawater from water disinfection process from sewers, and approximately 800 million gallons of partially treated and disinfected wastewater, were released in the waterways."[34]

[31] Id.
[32] Id.
[33] Id.
[34] Id.

Major risks to the water infrastructure in the future include heavy downpour that could cause runoff and increase pathogens and contamination levels in reservoirs, which could disrupt the drinking water disinfection processes. The vulnerability of the water systems will increase with climate changes. According to the report, as sea levels rise, expected flood heights will also increase, putting a greater percentage of treatment facility equipment at risk of flooding and increasing the likelihood that surge from a coastal storm would disrupt or even shut down DEP facilities."[35] The PWMs place 37 of the City's 96 pumping stations in the 100-year floodplain. This number is expected to grow to include 48 pumping stations by the 2020s, and to 58 by the 2050s. Strategies recommended by the report include hardening pumping stations and wastewater treatment plants, encouraging regional resiliency planning, and reducing combined sewer overflows with high-level storm sewers citywide.[36]

c. Building Resiliency Task Force

In the aftermath of Hurricane Sandy, the Department of Buildings (DOB) Housing Recovery Operations team surveyed one-to-two family homes and multi-family residential buildings and found that upwards of 30,000 housing units located in 9,000 buildings suffered some damage as a result of Sandy. Out of the 9,000 damaged buildings, over 1,000 buildings were initially deemed structurally unsafe to occupy by (DOB).[37] 400-500 of these unsafe buildings were either swept off their foundations by Sandy or subsequently demolished due to safety concerns. The day after Hurricane Sandy devastated New York City, nearly 2 million residents had lost power. Service was not

[35] Id.
[36] Id.
[37] Testimony provided to the Committee on Housing and Buildings on 12/13/12. Hearing on Int. 977-A. *available at:* http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=1254493&GUID=A7EDAB2B-E0D8-4BFD-B82D- 62FBE2DB9F20&Options=Advanced&Search=

restored to some New Yorkers for several days and for others it took weeks. Long-term utility outages in some areas of the City made some buildings uninhabitable when residents were unable to get fresh water, flush toilets, or navigate hallways and stairways safely. One week after Hurricane Sandy hit, New York Mayor Michael Bloomberg announced that the City would likely have to find housing for 30,000- 40,000 people who were displaced from their pre-Sandy homes.[38] As of this week over 200 families continue to reside in the City's hotel system as a result of damage or destruction to their homes by Sandy.

To address the ways that the City's existing building stock could be made more resilient and survivable, in November, 2012, Mayor Bloomberg and City Council Speaker Christine Quinn announced the formation of the Building Resiliency Task Force (Task Force). The Task Force, overseen by the Urban Green Council, is a collection of over 200 experts from a variety of fields, such as mechanical engineering, real estate development, and sustainability consulting, that were charged with making recommendations to improve building resiliency and maximize preparedness for future weather emergencies, including coastal flooding, heat waves, high winds, and extended utility outages.[39] After considering dozens of specific recommendations, on June 13, 2013, the Task Force issued a report containing 33 actionable proposals for improving building resiliency in New York City for both new and existing buildings.[40]

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[38] Julie Shapiro and Jill Colvin. *Up to 40,000 New Yorkers Left Homeless after Hurricane Sandy, Mayor says.* DNAINFO. *available at:* http://www.dnainfo.com/new-york/20121104/new-york-city/up-40000-new-yorkers-left-homeless-after-hurricane-sandy-mayor-says

[39] Green Building Council New York Chapter. *Building Resiliency Task Force Report. N*ew York, New York: 2013. http://www.urbangreencouncil.org/BuildingResiliency

[40] Id.

The proposals were divided into four groups related to (1) improving the strength and resiliency of buildings, including proposals to remove impediments to making building upgrades, harden building defenses, and by establish best practices; (2) improving building backup power, including recommendations to remove impediments to using alternative sources of energy and non-mandatory generators during emergencies; (3) improving the essential safety of buildings, including proposals to require that fixtures work without power and that tenants have access to fresh water; and (4) better planning, including proposals to create building emergency plans, and to support good Samaritan legislation that would encourage engineers and architects to lend their expertise to inspection and recovery efforts in the aftermath of a disaster. The bills that are being considered today address many of the recommendations proposed by the Task Force.

3. ANALYSIS OF LEGISLATIVE ITEMS

For the purposes of organization, the analysis of legislative items have been divided into four groups related to (a) Stronger Buildings, (b) Backup Power, (c) Essential Safety and (d) Better Planning.

a. Legislative Items Related to Stronger Buildings

Int. No. 983

Bill section one would amend the definition of "nonresidential (for flood zone purposes" as set forth in Section BC G201.2 of the Building Code to provide that buildings or structures containing space classified in Occupancy Group I-2 cannot be classified as nonresidential (for flood zone purposes) unless such building or structure also contains, on its lowest floor, space that is not accessory, as defined in the New York City Zoning Resolution, to an I-1, I-2, R-1, R-2, or R-3 occupancy.

Bill section two would amend the definition of "residential (for flood zone purposes)" as set forth in Section BC G201.2 of the Building Code to provide that buildings or structures containing space classified in Occupancy Group I-2 must be classified as residential (for flood zone purposes) unless such building or structure also contains, on its lowest floor, space that is not accessory, as defined in the New York City Zoning Resolution, to an I-1, I-2, R-1, R-2, or R-3 occupancy, whereupon the building or structure would be classified as nonresidential (for flood zone purposes).

Bill section three provides the enactment clause and states that the legislation will take effect immediately upon enactment.

Int. No. 1087

This bill would amend the New York City Building Code, in relation to using cool roof surfaces to reduce summer heat.

Bill section one of this bill amends Section BC 1504.8 of the New York City Building Code by requiring that roof coverings on roofs or setbacks with slope greater than two units vertical in 12 units horizontal (17 percent) shall have a minimum solar reflectance index (SRI) of 25 as determined in accordance with ASTM E1980.

Bill section two provides that it shall take effect on January 1, 2014.

Int. No. 1088

Bill section one amends Chapter 1 of Title 19 of the Administrative Code of the City of New York by adding a new Section 19-156.

Subdivision a of new Section 19-156 would require the Department of Transportation and the Department of Buildings to conduct a study on the possible use of absorptive materials on public and private streets. The study would be required to include the following: (i) various types of absorptive material for street use; (ii) the anticipated costs of such materials and the projected durability of such materials, disaggregated by their anticipated durability on arterial, secondary and tertiary streets; (iii) the amounts of water anticipated to be absorbed by such materials; (iv) the possible alternative angulation of streets in areas prone to flooding near bodies of water, with the cost and effect on durability of the street; (v) estimates of the amount of water that may be diverted from the city's sewer system; (vi) recommendations and limitations regarding the use of absorptive materials on streets under the department's jurisdiction and a comparison of possible alternative angulation of streets; (vii) the estimated maintenance costs of such streets; and (viii) the effect on utilities and other entities who need to make cuts in the streets. Such study would be completed and delivered to the council and posted on the Department of Transportation's website one year following the effective date of the local law that added this new section.

Subdivision b of new section 19-156 would require the Department of Transportation to conduct a pilot program on the use of absorptive materials on street and sidewalk surfaces. The pilot product would start no later than one hundred twenty days after the release of the study referenced in subdivision a, and its completion would be required not later than one year after its commencement. The pilot program would be conducted in three locations in three different boroughs, and would examine both streets and sidewalks of not less than one quarter mile in area each. A report on the pilot

program would be delivered to the City Council and posted on the Department of Transportation's website no later than one hundred and twenty days following completion of the pilot.

Subdivision c of new section 19-156 would require that no later than January 1, 2016, the Department of Transportation, Department of Parks and Recreation, in consultation with other agency including, but not limited to, the Department of Design and Construction and the Fire Department would be required to set a uniform standard for sidewalks to improve water retention. Such rules would include, but not be limited to, specifications for a water permeable strip along the curbside length of the sidewalk including width, depth, and appropriate fill material; specifications for plantings in the permeable strip including the use of storm water tolerant plants, planting location, plant spacing, and the protection of existing plants; the use of water retentive materials for sidewalks; with any reasonable and prudent exceptions to such uniform standards permitted.

Bill section two states that the local law takes effect immediately upon enactment.

Int. No. 1089

Bill section one would add two new exceptions to Section 770.48 of Section 27-3025 of the Administrative Code. The exceptions would allow optical fiber cabling serving buildings located in areas of special flood hazard (Exception 1) or areas of moderate flood hazard (Exception 2) to exceed 50 feet in length to the extent necessary to provide direct service to those buildings at a point that is 5 feet above the applicable design flood elevation (for buildings located in areas of special flood hazard) or 5 feet

above the moderate flood elevation (for buildings located in areas of moderate flood hazard).

Bill section two would add two new exceptions to Section 800.48 of Section 27-3025 of the Administrative Code. The exceptions would allow communications cabling serving buildings located in areas of special flood hazard (Exception 1) or areas of moderate flood hazard (Exception 2) to exceed 50 feet in length to the extent necessary to provide direct service to those buildings at a point that is 5 feet above the applicable design flood elevation (for buildings located in areas of special flood hazard) or 5 feet above the moderate flood elevation (for buildings located in areas of moderate flood hazard).

Bill section three would amend Section BC 202 of the Building Code to add new definitions for "area of moderate flood hazard," "moderate flood," and "moderate flood elevation." These definitions would refer to Section BC G201.2 where the substance of the definitions would be set forth (see bill section three).

Bill section four would amend Section BC G201.2 of the Building Code to add new definitions for "area of moderate flood hazard," "moderate flood," and "moderate flood elevation." An area of moderate flood hazard would be defined as land delineated in the flood plain on the Flood Insurance Rate Map (FIRM) as subject to a chance of flooding between 0.2% and 1% in any given year – these are marked as shaded X-Zones on the FIRM. Moderate flood would be defined as the flood having a 0.2% chance of being equaled or exceeded in any given year. Moderate flood elevation would be defined as the expected elevation of the moderate flood and would be determined either through

reference to the FIRM or by way of the alternative method of elevation calculation set forth in Section BC G103.3.

Bill section five would add two new Sections BC G307.4 and BC G307.5 to the Building Code. New Section BC G307.4 would be reserved. New Section BC G307.5 would establish a set of requirements for fuel-oil storage in areas of special flood hazard or areas of moderate flood hazard. New Section BC G307.5 would have three subsections:

New subsection BC G307.5.1 would require that fuel-oil storage tanks be separately enclosed in vaults where (1) the walls, floor, and top of the vault has a fire resistance rating of at least 3 hours (an exterior building wall with a fire resistance rating of at least 3 hours may serve as a wall of the vault); (2) the walls of the vault are bonded to the floor of the vault; (3) the top and walls of the vault must be independent of or connected to the building structure; and (4) the vault must be located in a dedicated room or area within the building that is separated vertically and horizontally from the rest of the building by construction having a fire resistance rating of at least 2 hours.

New subsection BC G307.5.2 would require that fuel-oil storage be protected by alternative extinguishing systems complying with Section BC 904.

New subsection BC G307.5.3 would require that fuel-oil storage comply with the per-story quantity limitations set forth in Section MC 1305.11.1.3 of the Mechanical Code, except that, on the lowest story having its floor above the applicable design flood elevation, up to 3,000 gallons of fuel-oil may be stored; provided that no individual storage tanks exceeds the lesser of (i) 1,500 gallons or (ii) the amount of fuel-oil needed to operate emergency or standby generator(s) served by such tank for 24 hours.

Bill section six would add an exception to Section MC 1305.11.1.3 of the Mechanical Code providing that, in areas of special flood hazard and areas of moderate flood hazard, the fuel storage quantity limitations set forth in Section BC G307.5 of the Building Code shall control rather than the limitations specified in Section MC 1305.11.1.3.

Bill section seven provides the enactment clause and states that the legislation will take effect immediately upon enactment.

Int. No. 1090

Bill section one adds a new section 3-124 to the Administrative Code to require the Office of Long Term Planning and Sustainability, in consultation with the Department of Buildings (DOB), to undertake a wind study and submit a report to the Mayor and the Speaker of the City Council, on the effects of wind on existing buildings, including buildings that are supported by columns and buildings that are under construction in the city of New York. Such report must be provided no later than one year from the effective date of the local law.

The report must include: 1. an analysis on the types of existing buildings that are at risk for falling debris based on the age, construction classification, construction methods and materials, height and occupancy use of such buildings; 2. an analysis on the effects of wind on buildings that are raised, lifted, elevated or supported by columns or that are moved in order to comply with Appendix G of the New York city building code or to address flood hazard concerns; 3. an analysis on the effects of wind on buildings that are under construction including how construction materials are stored on such sites

and buildings with incomplete façade assemblies; 4. an analysis of forecasts related to potential changes in the frequency, intensity, and path of future storm events along with consideration of whether climate change will impact wind speeds; and 5. an examination of the benefits of installing and maintaining weather stations across the city, including on high-rise buildings, to better understand localized wind patterns.

The report must also include recommendations on items 1-5 as well as recommendations on whether the applicable wind loads under the city's Building Codes should be revised; whether standard wind plans for sites in various stages of construction are needed; how equipment and temporary structures such as cranes, derricks, scaffolds, concrete formwork and sidewalk bridges should be secured in light of wind effects; whether changes to the Building Code or DOB rules related to façade work filing and inspection exemptions or safety inspection requirements are necessary and if existing buildings should be made to comply with current wind load requirements.

Bill section two contains the enactment clause and provides that this local law shall take effect immediately.

Int. No. 1093

Bill section one would add a new subdivision c to Section 18-109 of the Administrative Code providing that such section shall not prevent or make unlawful the installation of temporary stairs or ramps that comply with Section BC 3202.4.3 of the Building Code.

Bill section two would add a new subdivision c to Section 18-113 of the Administrative Code providing that such section shall not prevent or make unlawful the

installation of temporary stairs or ramps that comply with Section BC 3202.4.3 of the Building Code.

Bill section three would amend Section BC 3202.1.1 of the Building Code to permit footings for the support and attachment of removable dry floodproofing barriers or shields to project beyond the street line up to 12 inches at grade and below grade in areas of special flood hazard.

Bill section four would add a new Section BC 3202.2.1.9 to the Building Code permitting footings for the support and attachment of removable dry floodproofing barriers or shields to project beyond the street line up to 12 inches at grade and below grade in areas of special flood hazard.

Bill section five would make a technical edit to Section BC 3202.4 of the Building Code.

Bill section six would add a new Section BC 3202.4.3 to the Building Code permitting, in areas of special flood hazard, use of temporary stairs and ramps complying with Section BC G308.5.

Bill section seven would add a new Section BC G308.5 to the Building Code requiring temporary stairs and ramps used to provide access to elevated doors or elevated means of egress to comply with Chapters 10 (Means of Egress) and 11 (Accessibility) of the Building Code.

Bill section eight would make technical edits to Section 6.2.2 of Section BC G501.1 of the Building Code and would add a new exception to such section providing that, during a flood, nonresidential buildings that have been entirely evacuated need only maintain one means of egress that complies with Item 3 of such section.

Bill section nine would amend Section 6.2.3 of Section BC G501.1 of the Building Code by clarifying that temporary stairs and ramps providing access to elevated doors or elevated means of egress are among the dry floodproofing measures governed by such section.

Bill section ten provides the enactment clause and states that the legislation will take effect immediately upon enactment.

Int. No. 1095

Bill section one would add a new Section 28-103.21 to Article 103 of Chapter 1 of Title 28 of the Administrative Code requiring DOB to create and make publicly available, in print and on DOB's website, a manual explaining in detail the flood construction and protection requirements and standards applicable in the city. This manual must (1) address materials requirements; (2) address location and floodproofing of utilities and attendant equipment; (3) address flood construction and protection requirements and standards for existing structures; (4) be in plain English, Spanish, and other languages (at DOB's discretion); and (5) be updated as necessary to reflect changes to applicable flood construction requirements and standards.

Int. No. 1096

Bill section one would add a new Section 90.10 to Article 90 of Section 27-3025 of the Administrative Code.[41] The new section would provide that structures located in areas of special flood hazard and areas of moderate flood hazard must comply with the

[41] Section 27-3025 incorporates the 2008 National Electrical Code, with certain amendments for New York City's unique environment, as the City's Electrical Code.

flood protection provisions of Appendix G of the Building Code in addition to the applicable provisions of the Electrical Code. The new section would also provide that, in the event of a conflict between Appendix G and the Electrical Code, the more restrictive provision would govern.

Bill section two would amend Section BC 202 of the Building Code to add new definitions for "area of moderate flood hazard," "moderate flood," and "moderate flood elevation." These definitions would refer to Section BC G201.2 where the substance of the definitions would be set forth (see bill section three).

Bill section three would amend Section BC G201.2 of the Building Code to add new definitions for "area of moderate flood hazard," "moderate flood," and "moderate flood elevation." An area of moderate flood hazard would be defined as land delineated in the flood plain on the Flood Insurance Rate Map (FIRM) as subject to a chance of flooding between 0.2% and 1% in any given year – these are marked as shaded X-Zones on the FIRM. Moderate flood would be defined as the flood having a 0.2% chance of being equaled or exceeded in any given year. Moderate flood elevation would be defined as the expected elevation of the moderate flood and would be determined either through reference to the FIRM or by way of the alternative method of elevation calculation set forth in Section BC G103.3.

Bill section four would amend the definition of "design flood elevation" as it appears in Section BC G201.2 of the Building Code. The amended definition would provide that, for spaces in Occupancy Group I-2 that are hospitals, the design flood elevation shall be either (i) the applicable moderate flood elevation or (ii) the applicable elevation specified in ASCE 24, Tables 2-1, 4-1, 5-1, 6-1, or 7-1.

Bill section five would add new Items 4.1, 4.2, 4.3, and 4.4 to Section BC G304.1.1 of the Building Code, which addresses post-FIRM new construction (and substantial improvements) affecting residential structures.

New Item 4.1 would require that the following fire protection systems and equipment be located at or above the applicable design flood elevation: (1) sprinkler control valves (except for outside stem and yoke valves); (2) fire standpipe control valves (except for outside stem and yoke valves); (3) sprinkler booster pumps (except that, in buildings where all occupied floors are less than 300 feet above the lowest level of Fire Department (FDNY) vehicle access and where locating sprinkler pumps above the applicable design flood elevation is not feasible, such pumps shall instead be supplied by gravity tanks); (4) dry pipe valve-related electrically operated alarm appurtenances; (5) electrically activated water and non-water fire extinguishing systems; (6) electrically activated sprinkler systems, pre-action sprinkler systems, deluge sprinkler systems, and combined dry pipe and pre-action sprinkler systems; (7) electrically operated waterflow detection devices that serve sprinkler systems; and (8) air compressors that serve sprinkler systems.

New Item 4.2 would require that at least one fire alarm zoning indicator panel be installed at least 5 feet above the applicable design flood elevation in a location approved by the Department of Buildings (DOB) and FDNY. If such panel is a secondary panel that is only operable upon transfer of control from another panel, then that transfer shall be accomplished through means approved by FDNY. All power supplies and transfer means for such panels, and all elements of the fire alarm system, shall be located at least 5 feet above the applicable design flood elevation.

New Item 4.3 would require that fill piping for fuel-oil systems must terminate at least 3 feet above the greater of (i) the applicable design flood elevation or (ii) the moderate flood elevation. This Item would also require that normal vent piping and emergency vent piping terminate at least three above the applicable design flood elevation.

New Item 4.4 would require that relief vents and fresh air intakes serving building traps be carried above grade and terminate in a screened outlet located outside of the building and at or above the applicable design flood elevation. This Item would also require that reduced pressure zone backflow prevents be located at or above the applicable design flood elevation.

Bill section six would amend Section BC G304.1.2 of the Building Code by adding a new Item 2.3.1. This Item would require that nonresidential post-FIRM new construction (and substantial improvements) affecting nonresidential structures comply with Items 4.1 through 4.4 of Section BC G304.1 (as set forth in bill section five). This Item would also require that, for I-2 occupancies that are hospitals, emergency power generators and fuel pumps must be accessible for maintenance and repair during conditions of the moderate flood (the flood having a 0.2% chance of being equaled or exceeded in any given year).

Bill section seven would amend Section BC G304.2 of the Building Code by adding a new Item 5.1, which would require post-FIRM new construction (and substantial improvements) located in V-Zones to comply with Item 2.3.1 of Section BC G304.1.2 (see bill section six).

Bill section eight would add a new Section BC G304.3 to the Building Code setting forth standards for post-FIRM new construction (and substantial improvements) located in areas of moderate flood hazard. The new section would have two subsections:

New subsection BC G304.3.1 would require that I-2 occupancies that are hospitals be treated as if they were located in A-Zones and comply with the requirements of Section BC G304.1.2 and ASCE 24-05, Flood Resistant Design and Construction, accordingly.

New subsection BC G304.3.2 would require that fill piping serving fuel-oil piping terminate at least three feet above the moderate flood elevation.

Bill section nine would add a new Section 7.2.4 to Section BC G501.142 of the Building Code. The new section would modify Section 7.2.4 of ASCE 24-05 to require that fuse boxes and all means of disconnecting electrical service be located at or above the applicable design flood elevation.

Bill section ten would add a new Section BC G307.4 to the Building Code requiring that, in areas of special flood hazard and areas of moderate flood hazard, certain tanks and containers be located at or above the greater of (i) the applicable design flood elevation or (ii) when serving critical facilities, the moderate flood elevation. The new section would also require that such tanks and containers be designed to maintain service during flood conditions. The tanks and containers covered by this section are (1) medical and compressed gas storage tanks, oxygen tanks, and other cryogenic system storage tanks; (2) hazardous material storage tanks; (3) stationary compressed gas containers; (4) stationary cryogenic containers; and (5) stationary flammable gas storage containers.

[42] Section BC G501.1 sets forth New York City-specific amendments to the reference standard ASCE 24-05, which is incorporated into Appendix G.

Bill section eleven would amend the definition of "design flood elevation" as set forth in Section 1.2 of Section BC G501.1 of the Building Code so that such definition refers to the definition of "design flood elevation" contained in Section BC G201.2.

Bill section twelve would amend Section BC 903.3 of the Building Code to require that sprinkler booster pumps be located in 2-hour fire-rated enclosures that are accessible from 2-hour fire-rated passageways or stairways.

Bill section thirteen would amend Section BC 905.2.1 of the Building Code to require that fire pumps be located in 2-hour fire-rated enclosures that are accessible from 2-hour fire-rated passageways or stairways.

Bill section fourteen would amend Section MC 301.13 of the Mechanical Code to require that structures located in areas of moderate flood hazard comply with the applicable provisions of Appendix G of the Building Code.

Bill section fifteen would add a new Section FC 903.2.14 to the Fire Code requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, electrically activated sprinkler systems be located at or above the applicable design flood elevation.

Bill section sixteen would add a new Section FC 904.2.1 to the Fire Code requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, electrically activated fire extinguishing systems be located at or above the applicable design flood elevation.

Bill section seventeen would make technical edits to Section FC 2703.2.4 of the Fire Code.

Bill section eighteen would add a new Section FC 2703.2.4.3 to the Fire Code requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, hazardous material storage tanks comply with Section BC G307.4 of the Building Code.

Bill section nineteen would add a new Section FC 3003.3.3.1 to the Fire Code requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, stationary compressed gas containers comply with Section BC G307.4 of the Building Code.

Bill section twenty would REPEAL Section FC 3203.1.2 of the Fire Code and replace it with a new Section FC 3203.1.2 requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, stationary cryogenic containers comply with Section BC G307.4 of the Building Code.

Bill section twenty-one would add a new Section FC 3503.1.2.1 to the Fire Code requiring that, for structures located in areas of special flood hazard or areas of moderate flood hazard, stationary flammable gas containers comply with Section BC G307.4 of the Building Code.

Bill section twenty-two provides the enactment clause and states that the legislation will take effect immediately upon enactment.

Int. No. 1097

Bill section one would amend the first paragraph of subsection 700.12(A) of section 27-3025 of the administrative code to require backup power sources for fire and life safety communications systems. The amended paragraph would now include the

requirement that storage batteries be used as a power source for emergency and life safety telecommunications systems. The amended paragraph would further require that such storage batteries be of a suitable rating and capacity to supply and maintain the total load for at least eight hours, without the voltage applied to the load falling below 87 ½ percent of normal.

Bill section two provides that this local law would take effect immediately.

Int. No. 1098

Bill section one amends the plumbing code of the city of New York by adding a new Section 715.1.1 that would require a backwater valve at the point of exit from the building and downstream from the building trap in all buildings located in Special Flood Hazard Areas.

Bill section two amends the plumbing code of the city of New York by adding a new Section 1002.6.1 to require backflow or backwater valves in all buildings located in Special Flood Hazard Areas.

Bill section three provides that this local law will take effect ninety days after its enactment.

Int. No. 1099

Bill section one amends section 28-101.4.3 of the Administrative Code of the city of New York by adding a new item 14 to prohibit the use of the 1968 building code or building laws in effect prior to the effective date of the 1968 building code to guide the installation and alteration of curtain wall systems, windows, doors, attachments, fixtures,

building mounted equipment, and equipment enclosures, and states that instead such installations and alterations shall be governed by section 1609 of the New York city building code.

Bill section two amends section 1609.1 of the Building Code to require that curtain wall systems, windows, doors, building mounted equipment such as cooling towers, fans, tanks, air conditioning units, hoods, louvers, antennae, plumbing fixtures, gas appliances and equipment enclosures attached to buildings be designed to remain intact and firmly attached to such building when subjected to minimum wind loads. Such ability to withstand wind loads through gravity or friction shall be verified either by engineering calculations or manufacturer certification.

Bill section three adds a new section 2403.7 to the Building Code to require that buildings located in 1. Structural Occupancy Category IV, as defined in Table 1604.5, and wind exposure C or D as defined in Section 1609.4 and 2. Structural Occupancy Category III, as defined in Table 1604.5, located in wind exposure D, as defined in Section 1609.4, be protected with an impact resistant covering or glazing in accordance with Missile Levels and Wind Zones specified in ASTM E1886 and ASTM E1996 or other approved test methods and performance criteria. Glazing is allowed to be unprotected if it is located over 60 feet above thr ground and over 30 feet above aggregate-surfaced roofs, including roofs with gravel or stone ballast located within 1,500 feet of the building.

Bill section four adds a new section 401.5.4 to the Mechanical Code to require that all exterior louvers for building ventilation and exhaust systems either receive an A rating according to ACMA Standard 500L for wind-driven rain penetration for a 50 mile

per hour wind velocity with a rainfall rate of eight inches per hour; or be installed on a plenum configured to intercept any wind driven rain penetrating the louver and prevent the rain from entering the building ductwork system. Such plenum must be waterproofed and equipped with a drainage system to convey water penetrating the louver to storm or sanitary drains.

Bill section five contains the enactment clause and provides that this local law shall take effect ninety days after its enactment.

Int. No. 1102

Bill section one amends section 24-718 of the administrative code of the city of New York to require buildings subject to the New York City Right-to-Know Act that are located in a Special Flood Hazard Area, to include in the risk management plan that they file with the Department of Environmental Protection, a plan to ensure that extremely hazardous and regulated toxic substances are located in areas that have been dry flood proofed in accordance with ASCE 24, or are located on a story that is entirely above the design flood elevation.

Bill section five contains the enactment clause and provides that this local law shall take effect ninety days after its enactment, except that the Commissioner of Environmental Protection may take such measures as are necessary for its implementation prior to its effective date.

b. Legislative Items Related to Backup Power

Int. No. 1092

Bill section one adds a new subsection BC 2702.4 to section BC 2702 of the building code. New subsection 2702.4 would require the installation of external electrical hookups for temporary generators in group I-2 occupancies and buildings served electrically by a separate spot network that allows a utility to disconnect electric service, or that have a single main disconnect switch. Two types of buildings would be exempt from the generation hookup requirement: buildings with permanently installed generators supplying a secondary power source for space heating, vertical transportation, domestic water and lighting and power for half of occupied spaces, and buildings with interior transformer vault elevated above the design flood elevation and that are a safe distance from the main distribution to the temporary generator. New subsection 2702.4.1 would require that the main electrical distribution for a building allow for an externally located power source through switchboard modification. The new subsection would require that switchboards be constructed to create a connection point for temporary cables to connect to the temporary power source. First or second level distribution gear would be considered permissible connection points. Switchboard cabling extensions would not be required to be part of the permanent installation. Connection points could be established "ahead of the main," or as secondary or tertiary connection points, so long as the total sum of the points does not exceed the equivalent quantity of main devices. If a connection point is "ahead of the main," it would be required to have a secure panel section with warning labels. Connection points would need to be established as additional over-current protective devices or main or branch busway extensions, provided that the connection points permit full service capacity with temporary cabling. Notice identifying the generator in service would be required to be posted near the connection points. Non-

hospital occupancy group I-2 structures would be required to have electrical systems designed with a “quick-connect” for external generators. Existing and new occupancy group I-2 hospitals would be required to have electrical systems designed with a "quick-connect" to allow an external generator to be easily connected and power, at a minimum, emergency power services. Existing and new occupancy group I-2 adult homes located in Special or Moderate Flood Hazard Areas would be required to have an electrical system designed with a "quick-connect" to allow an external generator to be easily connected and power all electrical services. The new subsection would also require architectural openings to be established and sized to readily permit the installation of temporary cabling. Finally, the new subsection would require that external connection routes be located above the design flood elevation or wet flood proofed.

Bill section two adds a new Item 7 to Section BC G304.1.1 of the building code. The new Item would require post-FIRM construction or substantial improvements of adult homes in Group I-2 occupancies are in A-Zones to elevate back-up systems.

Bill section three adds a new Item 3 to Section BC G304.1.2 of the building code. The new Item would require all new occupancy group I-2 facilities in A-Zones be designed with electrical quick-connect for the easy connection of external generators to power all electrical services. Hospital I-2 facilities in A-Zones would be required to be designed an electrical quick-connect capable of at least powering emergency power services. All new hospital I-2 facilities in A-Zones with heating or cooling equipment located below the design flood elevation would be required to be designed with a quick-connect that could allow temporary heating or cooling to be connected.

Bill section four provides that this local law would take effect immediately.

Int. No. 1100

This bill would amend the New York City Building Code, in relation to keeping residential stairwells and hallways lit during blackouts.

Bill section one amends Section BC 1002 of the New York City Building Code by adding the term "lumens" and defining it as "the unit of luminous flux, equal to the luminous flux emitted in a unit solid angle by a point source of one candle intensity."

Bill section two amends Section BC 1006 of the New York City Building Code by adding a new Section 1006.4 which states that exit access corridors, exit passageways, exit stairways, and interior exit discharge elements serving occupancies in Groups I-1, R-1, and R-2 must provide a backup lighting system in accordance with Section 1006.4.1 and Section 1006.4.2.

The new section 1006.4 lists four exceptions from this requirement: (1) buildings in Group R-2 occupancy that are four stories or less and do not contain more than three dwelling units per story; (2) where the emergency power source for the illumination is an on-site generator utilizing natural gas from the public utility street main as a fuel supply; (3) any level of a stairwell that is provided with not less than 12 square feet of exterior glazed opening facing onto a public way, or onto a yard or court; and (4) public corridors that are provided with exterior glazed openings facing onto a public way, or onto a yard or court.

New section 1006.4.1 states that the power supply from the backup lighting system power source shall be available no later than 10 seconds after the building's emergency power system fails and shall last for a duration of not less than 120 hours.

New section 1006.4.2 states that not less than 60 lumens of light output shall be provided at each stairway entrance and discharge. In addition, not less than 60 lumens of light output shall be provided at every 30 feet of public corridor. In addition, the backup lighting system shall be designed and installed so that the failure of any individual lighting element shall not leave in total darkness any space the requires emergency illumination.

Bill section three states that this law shall take effect on January 1, 2014.

Int. No. 1101

Bill section one would amend Section 700.12 of Section 3025 of the Administrative Code to provide that emergency power systems shall supply power within 60 seconds of the failure of normal power; provided that, where power for emergency lighting shall not be available within 10 seconds of such failure, storage batteries must be used to provide power for emergency lighting within 10 seconds of such failure.

Bill section two would amend Section BC 2702.1 of the Building Code to permit natural gas as a fuel supply for emergency power systems and to provide that on-premises fuel supply requirements shall not apply to emergency power systems supplied by natural gas.

Bill section three would add an exception to Section BC 2702.1.2 of the Building Code permitting buildings having occupied floors located more than 75 feet above the lowest level of FDNY vehicle access and having at least one elevator serving all floors to use the capacity and rating requirements for voluntarily installed emergency power systems in Section BC 2702.4 rather than the requirements in Section BC 2702.1.2.

Bill section four would add a new Section BC 2702.4 the Building Code and would establish certain requirements for voluntarily installed emergency power systems. The new section would have two subsections:

New subsection BC 2702.4.1 would require that voluntarily installed emergency power systems be capable of providing power to the following systems where such systems are required or otherwise provided: emergency lighting; fire alarm systems; and, for buildings having occupied floors more than 75 feet above the lowest level of FDNY vehicle access, at least one elevator serving all floors.

New subsection BC 2702.4.2 would provide that, in buildings having occupied floors located more than 75 feet above the lowest level of FDNY vehicle access and having at least one elevator serving all floors, voluntarily installed emergency power systems may be equipped with a manual transfer switch for supplying power to at least one elevator serving all floors by shedding all other loads.

Bill section five provides the enactment clause and states that the legislation will take effect immediately upon enactment.

c. Legislative Items Related to Essential Safety

Int. No. 1086

This bill would amend the New York City Plumbing Code, in relation to requiring that toilets and faucets be capable of operating without an external supply of electrical power.

Bill section one adds a new section 424.7 that requires that the valves of at least one lavatory faucet in each bathroom or washroom be able to continue normal operation

without an external supply of electrical power for a period of at least two weeks. Only one lavatory faucet per dwelling unit is required to comply with this section.

Bill section two adds a new section 425.5 that requires that the flushing devices of at least one water closet in each bathroom or toilet room be able to continue normal operation without an external supply of electrical power for a period of at least two weeks. Only one water closet per dwelling unit is required to comply with this section.

Bill section three provides that this law shall take effect on January 1, 2014.

Int. No. 1094

This bill would amend the New York City Plumbing Code and the New York City Administrative Code in relation to requiring residential buildings to provide drinking water to a common area supplied directly through pressure in the public water main.

Bill section one adds a new section 614 to the Plumbing Code entitled "Emergency Drinking Water Access." This section first states that buildings with residential occupancies that have a source of water supply other than the public water main, or that have a water pressure booster pump, must comply with Sections 614.1.1 through 614.1.6.

New section 614.1.1 states that an emergency source of water fixture shall consist of a faucet for supplying drinking water for human ingestion supplied only by street pressure from the public water main, and either a sink or a floor drain.

New section 614.1.2 states that one emergency source of water fixture is required for every 75 residents as determined by the occupant load of the building.

New section 614.1.3 states that these fixtures shall be located indoors in an area that is accessible to all tenants of the building.

New section 614.1.4 states that these fixtures shall be designated by a legible sign stating "EMERGENCY DRINKING WATER" and that these signs shall be readily visible and located near the emergency source of water fixture, and on the door to any room or closet in which the fixture is located.

New section 614.1.5 states that for any building that is located in a special flood hazard area and is in existence as of January 1, 2014, all emergency source of water fixtures are to be located on a story that is entirely above the design flood elevation. In addition, emergency source of water fixtures shall not be located in a bathroom or toilet room.

New section 614.1.6 states that beginning January 1, 2019, the requirements of this law shall be required for all buildings with residential occupancies that have a source of water supply other than the public water main, or that have a water pressure booster pump installed.

Section two of the bill adds a new item to Section 28-101.4.3 of the New York City Administrative Code stating that emergency source of water supply for human ingestion shall be provided in accordance with section 614 of the New York City Plumbing Code.

Bill section three adds a new Article 314 to Chapter 2 of Title 28 of the New York City Administrative Code concerning retroactive application. This article states that beginning January 1, 2019, Section 614 of the New York City Plumbing Code shall apply retroactively to all buildings in existence on January 1, 2014.

Bill section four states that this law shall take effect on January 1, 2014.

d. Legislative Items Related to Better Planning

Proposed Int. No. 990-A

Bill section one would amend Section BC G102.2 of the Building Code to incorporate the Federal Emergency Management Agency's (FEMA) Preliminary Work Map (PWM) as the City's flood map in place of the FEMA Flood Insurance Rate Map (FIRM).

Bill section two would REPEAL Section BC G102.3 of the Building Code.

Bill section three would amend Section BC G103.3 of the Building Code to replace references to the FIRM with references to the PWM.

Bill section four would amend Section BC G103.5 of the Building Code to remove references to the FIRM letter of map change procedure.

Bill section five would amend the definitions of "A-Zone," "area of special flood hazard," "base flood elevation," "pre-FIRM development," and "V-Zone" set forth in Section BC G201.2 of the Building Code to replace references to the FIRM with references to the PWM.

Bill section six would amend BC G201.2 of the Building Code to add a new definition for "Preliminary Work Map (PWM)." The PWM is defined as the preliminary work map released by FEMA in June 2013, which delineates areas of special flood hazard, base flood elevations, flood boundaries, and floodways for the city of New York.

Bill section seven would amend Section BC G402 to reflect the removal of the FIRM as a reference standard and the inclusion of the PWM as a reference standard.

Bill section eight would amend Section 1.1.1 of Section BC G501.1 of the Building Code to replace references to the FIRM with references to the PWM.

Bill section nine would amend Section 1.2 of Section BC G501.1 of the Building Code to make technical edits reflecting the usage of the PWM, rather than the FIRM, as the City's flood map.

Bill section ten provides the enactment clause and states that the legislation will take effect immediately upon enactment.

Amendments to Int. No. 990

Technical changes were made throughout the bill, and to the title of the bill, for the purposes of clarity and to provide that the FIRM be replaced by the PWM rather than by the FEMA advisory base flood elevation maps released shortly after Hurricane Sandy.

Int. No. 1085

Bill section one would add a new section 30-104 to title 30 of the Administrative Code to require that the office of emergency management, in consultation with the Department of Buildings and the Department of Housing Preservation and Development (HPD) and development develop guidelines for how residential and commercial property owners shall prepare for and communicate certain information to the tenants of such buildings in the event of a weather emergency or extended utility outage.

At a minimum such guidelines shall include: 1. Information on the property's flood zone and evacuation zone; 2. What, if any, protective measures will be provided or may be installed to protect against flooding, including sandbags, jersey barriers or other protections; 3. How window air conditioning units, patio furniture flower boxes,

windows, doors and other loose items should be secured; 4. Whether equipment such as elevators and boilers should be shut down or moved above flood risks; 5. The options available to a property owner to rent equipment, such as pumps and generators after a weather event or extended utility outage; 6. The methods that property owners can use to communicate with tenants during and after a weather event or extended utility outage and identifying relevant building contacts for emergencies; and 7. Guidelines for tenants sheltering in place, including tenants aged sixty-two and older and tenants with disabilities.

Bill section two would amend subchapter two of title 27 of the Administrative Code by adding a new Article 15. New Article 15 would require the posting of certain emergency information in multiple dwellings. The bill would require the owner of a dwelling who must register with HPD under section 27-2097 of the Code to post the following information in the common area of the building's ground floor: (i) whether the building is located in a hurricane evacuation zone; (ii) the address of the nearest designated evacuation center; (iii) when a person should contact 911 and 311 during a weather event or extended utility outage; (iv) whether services will be provided for tenants during an extended utility outage; (v) contact information for building personnel in case of an emergency; (vi) instructions for removing furniture from rooftops.

Bill section three contains the enactment clause and provides that this local law shall take effect immediately, provided, however, that section two of the bill shall take effect ninety days after its enactment.

Bill section one amends section 20 of the New York City Charter to add the resiliency of critical infrastructure, the built environment and coastal protection to the list of items that the Director of the Mayor's Office of Long-Term Planning and Sustainability should consider when planning to meet the long-term sustainability needs of the City. It also adds a requirement that the long-term sustainability plan shall list programs and actions that the City will implement or undertake to achieve goals related to the resiliency of critical infrastructure, the built environment and coastal protection. These requirements will go into effect for the next long-term sustainability plan which shall be released no later than 2015. Finally, it adds requirements for experts in the fields of engineering, coastal protection and critical infrastructure to the list of members on the sustainability advisory board.

Bill section two creates the position of Director of Resiliency who shall report to the Director of the Mayor's Office of Long-Term Planning and Sustainability.

Bill section three states that this law shall take effect immediately.

Res. No. 1708

Resolution calling upon the United States Congress to enact and the President to sign the Flood Victim Premium Relief Act of 2013.

The Biggert-Waters Flood Insurance Reform Act of 2012, which re-authorized the National Flood insurance Program, made significant changes to how flood insurance rates would be calculated for many homeowners. Previously, many buildings, for a number of different reasons, received rates well below what they would be charged based solely on their risk of flooding. For example, houses built before 1975, built before they

were mapped into a Flood Insurance Rate Map (FIRM) and thereby needed insurance, or built to conform to an existing FIRM but that would no longer be compliant because their FIRM changed, received a lower, "grandfathered" rate. Biggert-Waters ends these reduced rates, in many cases phasing in actuarial-based rates over five years. These actuarial rates can be significantly higher than the reduced rates and could dramatically impact New York City homeowners. This resolution supports federal legislation proposed in the House of Representatives that would delay any such increase by phasing it in in 5% adjustments for each of the first four years and then 20% increases for each of the next four years. This would allow homeowners more time to comply with FIRMs prior to their rates increasing dramatically.

Res. No. 1771

Following Superstorm Sandy, the New York City Department of Buildings ("DOB") was tasked with inspecting tens of thousands of properties in the floodplain to determine their structural stability. In addition to using its team of inspectors, DOB contracted with engineers from a private firm to help with the inspections as the demand for services exceeded the capacity of its staff. At least 300 architects and engineers in the New York area indicated a willingness to volunteer to inspect damaged properties but were unable to without the assurance that their volunteer services would not expose them to future litigation or liability.

In 2013, Senator Kemp Hannon (R-NY) and Assemblymember Steven Englebright (D-NY) introduced S.3942 and companion bill A.4380, the Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act, in the New

York State Legislature. The legislation would provide professional engineers, architects, landscape architects and land surveyors immunity from liability for providing volunteer services during times of crisis and catastrophe.

The resolution states that in order to get homeowners back into their homes as quickly and safely as possible by avoiding lengthy home inspection processes in the aftermath of future disasters, engineers and architects should be protected from liability when contributing their professional services to recovery efforts. Further, the resolution states that the Council of the City of the City of New York calls upon the New York State Legislature to pass, and the Governor to sign S.3942/A.4380, the Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act.

Res. No. 1808

In July 2012, President Obama signed into law the Biggert-Waters Flood Insurance Reform Act of 2012 ("the Act"). The Act requires that flood insurance premium rates for all properties located in National Flood Insurance Program ("NFIP") participating areas accurately reflect the current actuarial risk to such property from floods. To achieve this goal, the Act seeks to eliminate all subsidies and grandfathered rates, commonly referred to as Pre-FIRM subsidies.

Following the adoption of the new Flood Insurance Rate Maps ("FIRMs"), property owners currently receiving Pre-FIRM subsides will have actuarial premium rates phased-in over a five-year period at 20 percent per year. Actuarial rates will become immediately effective, subjecting property owners to exorbitant premiums, upon the lapse of a policy, purchase of a new policy or the sale of a property. The Act doesn't make it

clear whether the 32,000 properties that will find themselves in the floodplain for the first time when the new FIRMs are adopted will be able to avail themselves of phase-ins. The resolution would note that the Act should be amended to allow newly mapped properties to participate in the phase-in of the actuarial rate. Buyers wishing to purchase property in an NFIP participating area after the new FIRMs are adopted will face actuarial rates instantly as the purchase of a new policy triggers actuarial rates. The resolution would also note that the Act should be amended to allow for current subsidized rates to continue upon the sale of a property, allowing new buyers to participate in the phase-in.

Further, the resolution notes that the NFIP should allow for higher deductibles as this will significantly reduce premiums. Currently, the only factors for determining flood premiums post Biggert-Waters are the flood zone and the elevation of a property's lowest occupied flood relative to Base Flood Elevation. The resolution notes that the NFIP should reduce premiums for partial mitigation and building type by giving owners credit for the actual risk–mitigating alterations they make to their buildings (i.e. construction materials, foundation type and whether the mechanicals in a building have been elevated). Currently, condominium associations are able to receive separate flood insurance policies for each of its units, however, cooperatives are only able to receive one policy for the entire building, leaving NYC cooperatives under-insured. The resolution would note that the NFIP should treat cooperatives the same as condominiums.

Int. No. 983

By Council Members Arroyo, Brewer, Cabrera, Chin, Comrie, Dickens, Eugene, Ferreras, Fidler, Gentile, Gonzalez, Jackson, James, King, Koppell, Mark-Viverito, Mendez, Nelson, Palma, Reyna, Williams, Wills, Lappin and Rodriguez

A LOCAL LAW

To amend the New York city building code, in relation to flood-resistant construction requirements for health facilities.

Be it enacted by the Council as follows:

Section 1. The definition of "NONRESIDENTIAL (FOR FLOOD ZONE PURPOSES)" as set forth in Section BC G201.2 of the New York city building code, as added by local law 33 for the year 2007, is amended to read as follows:

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

1. Contains no space classified in Groups I-1, I-2, 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, I-2, 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, I-2, R-1, R-2, or R-3 occupancy.

§2. The definition of "RESIDENTIAL (FOR FLOOD ZONE PURPOSES)" as set forth in Section BC G201.2 of the New York city building code, as added by local law 33 for the year 2007, is amended to read as follows:

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

1. Classified in Groups I-1, I-2, R-1, R-2, or R-3; or

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

§3. This local law shall take effect immediately.

Int. No. 1087

By Council Member Garodnick

A LOCAL LAW

To amend the New York city building code, in relation to using cool roof surfaces to reduce summer heat.

Be it enacted by the Council as follows:

Section 1. Section BC 1504.8 of the New York city building code is amended to read as follows:

1504.8 Reflectance. Roof coverings on roofs or setbacks with slope equal to or less than two units vertical in 12 units horizontal (17 percent) shall have:

1. a minimum initial solar reflectance of 0.7 in accordance with ASTM C1549 or ASTM E 1918, and a minimum thermal emittance of 0.75 as determined in accordance with ASTM C1371 or ASTM E 408; or

2. a minimum SRI of 78 as determined in accordance with ASTM E 1980.

Roof coverings on roofs or setbacks with slope greater than two units vertical in 12 units horizontal (17 percent) shall have a minimum SRI of 25 as determined in accordance with ASTM E1980.

§ 2. This local law shall take effect on January 1, 2014.

Int. No. 1088

By Council Member Gennaro

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to water retentive sidewalks and a study on absorptive street and sidewalk materials and alternative street angulation.

Be it enacted by the Council as follows:

Section 1. Subchapter 1 of chapter 1 of title 19 of the administrative code of the city of New York is amended by adding a new section 19-156 to read as follows:

§19-156 Study of alternative street and sidewalk materials and angulation. a. The department and the department of buildings shall conduct a study on the possible use of absorptive materials on streets under the department's jurisdiction, as well as their possible use on private streets. Such study shall include the following: (i) various types of absorptive material for street use; (ii) the anticipated costs of such materials and the projected durability of such materials, disaggregated by their anticipated durability on arterial, secondary and tertiary streets; (iii) the amounts of water anticipated to be absorbed by such materials; (iv) the possible alternative angulation of streets in areas prone to flooding near bodies of water, with the cost and effect on durability of the street; (v) estimates of the amount of water that may be diverted from the city's sewer system; (vi) recommendations and limitations regarding the use of absorptive materials on streets under the department's jurisdiction and a comparison of possible alternative angulation of streets; (vii) the estimated maintenance costs of such streets; and (viii) the effect on utilities and other entities who need to make cuts in the streets. Such study shall be

completed and delivered to the council and posted on the department's website one year following the effective date of the local law that added this section.

b. The department shall undertake a pilot program using absorptive materials on street and sidewalk surfaces. The pilot program shall commence not later than one hundred twenty days following the release of the study required pursuant to subdivision a of this section, and shall be completed one year following the commencement of the pilot program. Such pilot program shall be put into place in three locations in three different boroughs, with each such location including both streets and sidewalks and being no less than one quarter mile in area. A report on such pilot program shall be completed and delivered to the council and posted on the department's website not more than one hundred twenty days following the completion of the pilot program.

c. Not later than January first, two thousand sixteen, the department and the department of parks and recreation, in consultation with other agencies including, but not limited to, the department of design and construction and the fire department, shall, by rule, set a uniform standard for sidewalks within the city of New York to improve water retention. Such rules shall include, but not be limited to, specifications for a water permeable strip along the curbside length of the sidewalk including width, depth, and appropriate fill material; specifications for plantings in the permeable strip including the use of storm water tolerant plants, planting location, plant spacing, and the protection of existing plants; the use of water retentive materials for sidewalks; and any reasonable and prudent exceptions to such uniform standard.

§ 2. This local law shall take effect immediately.

Int. No. 1089

By Council Member Gonzalez

A LOCAL LAW

To amend the administrative code of the city of New York, the New York city building code and the New York city mechanical code, in relation to allowing elevation of certain building systems in flood-prone areas.

Be it enacted by the Council as follows:

Section 1. Subsection 770.48(A) of section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, is amended to read as follows:

SECTION 770.48
Subsection 770.48(A) – Add a new second sentence and two exceptions to the end of subsection 770.48(A) to read as follows: All other cables shall be considered to be within the building.

Exception No. 1: In areas of special flood hazard, as defined in Section G201.2 of the New York City Building Code, the length of such cabling may exceed 15 m (50 ft) to the extent necessary to provide direct delivery to a level 5 feet (1.52 m) above the design flood elevation specified in Section 7.1 (Table 7-1) of Section BC G501.1 of the New York City Building Code.

Exception No. 2: In areas of moderate flood hazard, as defined in Section G201.2 of the New York City Building Code, the length of such cabling may exceed 15 m (50 ft) to the extent necessary to provide direct delivery to a level 5 feet (1.52 m) above the moderate flood elevation, as defined in Section BC G201.2 of the New York City Building Code.

§2. Section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, is amended by adding a new subsection 800.48 to read as follows:

SECTION 800.48
Section 800.48 – Add two exceptions to the end of section 800.48 to read as follows:

Exception No. 1: In areas of special flood hazard, as defined in Section G201.2 of the New York City Building Code, the length of such cabling may exceed 15 m (50 ft) to the extent necessary to provide direct delivery to a level 5 feet (1.52 m) above the design flood elevation specified in Section 7.1 (Table 7-1) of Section BC G501.1 of the New York City Building Code.

Exception No. 2: In areas of moderate flood hazard, as defined in Section G201.2 of the New York City Building Code, the length of such cabling may exceed 15 m (50 ft) to the extent necessary to provide direct delivery to a level 5 feet (1.52 m) above the moderate flood elevation, as defined in Section G201.2 of the New York City Building Code.

§3. Section BC 202 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new definitions of "AREA OF MODERATE FLOOD HAZARD," "MODERATE FLOOD" and "MODERATE FLOOD ELEVATION" in appropriate alphabetical order to read as follows:

AREA OF MODERATE FLOOD HAZARD. See Section G201.2.

MODERATE FLOOD. See Section G201.2.

MODERATE FLOOD ELEVATION. See Section G201.2.

§4. Section BC G201.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new definitions of "AREA OF MODERATE FLOOD HAZARD," "MODERATE FLOOD" and "MODERATE FLOOD ELEVATION" in appropriate alphabetical order to read as follows:

AREA OF MODERATE FLOOD HAZARD. The land in the flood plain delineated on the Flood Insurance Rate Map (FIRM) as subject to a chance of flooding that is 0.2 percent or greater, but less than one percent, in any given year. Areas of moderate flood hazard are designated on the FIRM as X-Zones (shaded) and are also known as the five hundred year flood plain.

MODERATE FLOOD. The flood having a 0.2 percent chance of being equaled or exceeded in any given year.

MODERATE FLOOD ELEVATION. The elevation of the moderate flood, including wave height, as specified on the Flood Insurance Rate Map (FIRM) or as determined in accordance with Section G103.3.

§5. Section BC G307 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new sections BC G307.4 and BC G307.5 to read as follows:

G307.4 Reserved.

G307.5 Fuel-oil storage. Fuel-oil storage in areas of special flood hazard and areas of moderate flood hazard shall comply with this section.

G307.5.1 Vault. Each fuel-oil storage tank shall be separately enclosed in a vault complying with the following requirements:

1. The walls, floor, and top of such vault shall have a fire resistance rating of not less than 3 hours;

2. The walls of such vault shall be bonded to the floor of such vault;

3. The top and walls of such vault shall be independent of or connected to the building structure;

4. An exterior building wall having a fire resistance rating of not less than 3 hours shall be permitted to serve as a wall of such vault;

5. The vault shall be located in a dedicated room or area of the building that is separated vertically and horizontally from other areas of the building by construction having a fire resistance rating of not less than 2 hours;

G307.5.2 Extinguishing system. Fuel-oil storage shall be protected with an alternate extinguishing system complying with Section BC 904.

G307.5.3 Capacity limits. Fuel-oil storage shall comply with Section MC 1305.11.1.3 of the New York city mechanical code except:

1. In A-Zones, fuel-oil on the lowest story having its floor above the design flood elevation specified in ASCE 24, Table 2-1, shall be limited to 3,000 gallons (11 356 L) and no storage tank may exceed the lesser of 1,500 gallons (5 678 L) or the quantity of fuel-oil needed to operate the emergency or standby generator(s) served by such tank for 24 hours;

2. In V-Zones, fuel oil on the lowest story having its floor above the design flood elevation specified in ASCE 24, Table 4-1, shall be limited to 3,000 gallons (11 356 L) and no storage tank may exceed the lesser of 1,500 gallons (5 678 L) or the quantity of fuel-oil needed to operate the emergency or standby generator(s) served by such tank for 24 hours; and

3. In areas of moderate flood hazard, fuel oil on the lowest story having its floor above the moderate flood elevation shall be limited to 3,000 gallons (11 356 L) and no storage tank may exceed the lesser of 1,500 gallons (5 678 L) or the quantity of fuel-oil needed to operate the emergency or standby generator(s) served by such tank for 24 hours.

§6. Section MC 1305.11.1.3 of the New York city mechanical code, as added by local law number 33 for the year 2007, is amended to read as follows:

1305.11.1.3 Inside of buildings; above the lower floor. Fuel-oil above the lowest floor inside of a building shall be limited to 330 gallons (1249 L) per story. The maximum quantity shall include oversized piping as described in 1305.9.12. Piping installations shall comply with the requirements of Section 1305.9.

Exception: Fuel-oil storage in areas of special flood hazard and areas of moderate flood hazard, as defined in Section BC G201.2 of the New York city building code, shall comply with Section BC G307.5 of the New York city building code.

§7. This local law shall take effect immediately.

Int. No. 1090

By Council Member Ignizio

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to studying the effects of wind on certain buildings.

Be it enacted by the Council as follows:

Section 1. Subchapter 2 of title 3 of the administrative code of the city of New York is amended by adding a new section 3-124, to read as follows:

§3-124. Study and report on the effects of wind on certain buildings. a. The office of long-term planning and sustainability in consultation with the department of buildings shall undertake a wind study and submit a report to the mayor and the speaker of the city council, on the effects of wind on existing buildings including buildings that are supported by columns and buildings that are under construction in the city of New York. Such report and accompanying recommendations shall be provided no later than one year from the effective date of this local law and shall include the following:

1. An analysis on the types of existing buildings that are at risk for falling debris based on the age, construction classification, construction methods and materials, height, and occupancy use of such buildings;

2. An analysis on the effects of wind on buildings that are raised, lifted, elevated or supported by columns or that are moved in order to comply with Appendix G of the New York city building code or to address flood hazard concerns;

3. An analysis on the effects of wind on buildings that are under construction including how construction materials are stored on such sites and buildings with incomplete façade assemblies;

4. An analysis of forecasts related to potential changes in the frequency, intensity, and path of future storm events along with consideration of whether climate change may impact wind speeds; and

5. An examination of the benefits of installing and maintaining weather stations across the city, including on high-rise buildings, to better understand localized wind patterns.

b. The report shall include recommendations on items one through five of subdivision a of this section as well as recommendations on whether the applicable wind loads under the city's building code should be revised; whether standard wind plans for sites in various stages of construction are needed; how equipment and temporary structures such as cranes, derricks, scaffolds, concrete formwork and sidewalk bridges should be secured in light of wind effects; whether changes to the building code or department of buildings rules related to façade work filing and inspection exemptions or safety inspection requirements are necessary and if existing buildings should be made to comply with current wind load requirements.

§ 2. This local law shall take effect immediately.

Int. No. 1093

By Council Member Levin

A LOCAL LAW

To amend the administrative code of the city of New York and the New York city building code, in relation to removing barriers to usage of temporary flood control and response devices.

Be it enacted by the Council as follows:

Section 1. Section 18-109 of the administrative code of the city of New York, as amended by chapter 100 of the laws of 1963 and recodified by chapter 907 of the laws of 1985, is amended by adding a new subdivision c to read as follows

c. This section shall not prevent or make unlawful the installation of temporary stairs or ramps complying with section BC 3202.4.3 of the New York city building code.

§2. Section 18-113 of the administrative code of the city of New York, as added by local law number 42 for the year 1939 and recodified by chapter 907 of the laws of 1985, is amended by adding a new subdivision c to read as follows:

c. This section shall not prevent or make unlawful the installation of temporary stairs or ramps complying with section BC 3202.4.3 of the New York city building code.

§3. Section BC 3202.1.1 of the New York city building code, as added by local law 33 for the year 2007, is amended to read as follows:

> **3202.1.1 Footings.** Exterior wall and column footings may be constructed to project beyond the street line not more than 12 inches (305 mm), provided that the top of the footing is not less than 8 feet (2438 mm) below the ground or sidewalk level. Foundation walls required to support permitted projections may be constructed to project not more than the permitted projection beyond the street line. In areas of special flood hazard, continuous footings for the support and attachment of removable dryfloodproofing barriers or shields may be constructed to project beyond the street line not more than 12 inches (305 mm) both at grade and below grade.

§4. Section BC 3202.2 of the New York city building code, as added by local law 33 for the year 2007, is amended by adding a new subsection BC 3202.2.1.9 to read as follows:

3202.2.1.9 Footings for dryfloodproofing barriers or shields. In areas of special flood hazard, continuous footings for the support and attachment of removable dryfloodproofing barriers or shields may be constructed to project beyond the street line not more than 12 inches (305 mm) both at grade and below grade.

§5. Section BC 3202.4 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

3202.4 Temporary encroachments. Encroachments of temporary nature shall comply with Sections 3202.4.1 [and 3202.4.2] through 3202.4.3.

§6. Section BC 3202.4 of the New York city building code, as added by local law 33 for the year 2007, is amended by adding a new subsection BC 3202.4.3 to read as follows:

3202.4.3 Temporary stairs and ramps in areas of special flood hazard. In areas of special flood hazard, temporary stairs and ramps complying with Section G308.5 shall be permitted.

§7. Section BC G308 of the New York city building code, as added by local law 33 for the year 2007, is amended by adding a new section BC G308.5 to read as follows:

G308.5 Temporary stairs and ramps. Temporary stairs and ramps providing access to elevated doors or elevated means of egress as described by Item 3 of Section 6.2.2 of ASCE 24 shall comply with the applicable provisions of Chapters 10 and 11 of this code.

§8. Section 6.2.2 of Section BC G501.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

Section 6.2.2. [Item 3 of] Section 6.2.2 (Dry Floodproofing Requirements) is amended by modifying Item 3 and by adding a new exception to the end of section 6.2.2 to read as follows:

3. Have either:

3.1. All required means of egress elevated to or above the applicable [DFE] design flood elevation 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] design flood elevation 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 the supplemental egress and ingress during conditions of flooding and to provide emergency egress at other times.

Exception: During a flood, nonresidential buildings that have been entirely evacuated, except for emergency personnel, shall not be required to maintain more than one means of egress complying with Item 3.

§9. Section BC G501.1 of the New York city building code , as added by local law 33 for the year 2007,is amended by adding a new subsection 6.2.3 to read as follows:

Section 6.2.3. Section 6.2.3 (Limits on Human Intervention) is amended to read as follows:

Section 6.2.3 Limits on Human Intervention. Dry floodproofing measures that require human intervention to activate or implement prior to or during a flood, including temporary stairs or ramps providing access to elevated doors or elevated means of egress, as described by Item 3 of Section 6.2.2, shall be permitted only when all of the following conditions are satisfied:

1. The flood warning time (alerting potential flood victims of pending flood situation) shall be a minimum of 12 hours, unless the community operates a flood warning system and implements an emergency plan to ensure safe evacuation of flood hazard areas, in which case human intervention is allowed only if the community can provide a minimum flood warning time equal to or longer than the cumulative

(a) time to notify person(s) responsible for installation of floodproofing measures, plus

(b) time for responsible persons to travel to structure to be floodproofed, plus

(c) time to install, activate, or implement floodproofing measures, plus

(d) time to evacuate all occupants from the flood hazard area;

2. All removable shields or covers for openings such as windows, doors, and other openings in walls and temporary stairs or ramps providing access to elevated doors or elevated means of egress as described by Item 3 of Section 6.2.2 shall be designed to resist flood loads specified in Section 1.6; and

3. Where removable shields or temporary stairs or ramps providing access to elevated doors or elevated means of egress as described by Item 3 of Section 6.2.2 are to be used, a flood emergency plan shall be approved by the authority having jurisdiction and shall specify, at a minimum, the following information: storage location(s) of the shields and temporary stairs and ramps; the method of installation; conditions activating installation; maintenance of shields and attachment devices and temporary stairs and ramps; periodic practice of installing shields and temporary stairs and ramps; testing sump pumps and other drainage measures; and inspecting necessary material and equipment to activate or implement floodproofing. The flood emergency plan shall be permanently posted in at least two conspicuous locations within the structure.

§10. This local law shall take effect immediately.

Int. No. 1095

By Council Member Nelson

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to creating a manual on flood construction and protection standards.

Be it enacted by the Council as follows:

Section 1. Article 103 of chapter one of title 28 of the administrative code of the city of New York is amended, by adding a new section 28-103.21, to read as follows:

§28-103.21 Manual on flood construction and protection standards. a. The commissioner shall create and make publicly available, in print and on the department's website, a manual explaining in detail the flood construction and protection requirements and standards applicable in the city. Such manual shall include, but not be limited to, a description and explanation of the following:

1. The materials requirements imposed by applicable flood construction requirements and standards, including the elements of structures subject to such materials requirements;

2. The manner in which specific utilities and attendant equipment must be protected from flooding; and

3. The application of the flood construction and protection requirements and standards to existing structures.

b. The manual on flood construction and protection standards shall be made available in plain English and Spanish and in other languages as determined by the commissioner and shall be updated as necessary to reflect changes to applicable flood construction requirements and standards.

§2. This local law shall take effect immediately.

Int. No. 1096

By Council Member Oddo

A LOCAL LAW

To amend the administrative code of the city of New York, the New York city building code, the New York city mechanical code and the New York city fire code, in relation to relocating and protecting building systems in flood-prone areas.

Be it enacted by the Council as follows:

Section 1. Article 90 of section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, is amended by adding a new section 90.10 to read as follows:

SECTION 90.10 – Add a new section 90.10 to read as follows:

90.10 Areas of Special Flood Hazard and Areas of Moderate Flood Hazard. Structures located in areas of special flood hazard and areas of moderate flood hazard, as defined in Section BC G201.1 of the New York City Building Code, shall also comply with the provisions of Appendix G of the New York City Building Code. Where, in any specific case, the provisions of this code conflict with the provisions of Appendix G of the New York City Building Code, the more restrictive shall govern.

§2. Section BC 202 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new definitions of "AREA OF MODERATE FLOOD HAZARD," "MODERATE FLOOD" and "MODERATE FLOOD ELEVATION" in appropriate alphabetical order to read as follows:

AREA OF MODERATE FLOOD HAZARD. See Section G201.2.

MODERATE FLOOD. See Section G201.2.

MODERATE FLOOD ELEVATION. See Section G201.2.

§3. Section BC G201.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new definitions of "AREA OF

MODERATE FLOOD HAZARD," "MODERATE FLOOD" and "MODERATE FLOOD ELEVATION" in appropriate alphabetical order to read as follows:

AREA OF MODERATE FLOOD HAZARD. The land delineated in the flood plain on the Flood Insurance Rate Map (FIRM) as subject to a chance of flooding that is 0.2 percent or greater, but less than one percent, in any given year. Areas of moderate flood hazard are designated on the FIRM as X-Zones (shaded) and are also known as the five hundred year flood plain.

MODERATE FLOOD. The flood having a 0.2 percent chance of being equaled or exceeded in any given year.

MODERATE FLOOD ELEVATION. The elevation of the moderate flood, including wave height, as specified on the Flood Insurance Rate Map (FIRM) or as determined in accordance with Section G103.3.

§4. The definition of "DESIGN FLOOD ELEVATION" as set forth in section BC G201.2, as amended by local law number 8 for the year 2008, is amended to read as follows:

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 structural occupancy category designated in ASCE 24, Table 1-1, except that for I-2 occupancies that are hospitals, the design flood elevation shall be the greater of (i) the moderate flood elevation or (ii) the applicable elevation specified in ASCE 24, Tables 2-1, 4-1, 5-1, 6-1, or 7-1.

§5. Item 4 of section BC G304.1.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding new items 4.1, 4.2, 4.3 and 4.4 to read as follows:

4.1 Fire protection systems and equipment. The following fire protection systems and equipment shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1:

4.1.1. Sprinkler control valves that are not outside stem and yoke valves;

4.1.2. Fire standpipe control valves that are not outside stem and yoke valves;

4.1.3. Sprinkler booster pumps and fire pumps except that, in buildings where all occupied floors are less than 300 feet (91.44 m) in height above the lowest level of Fire Department vehicle access and where locating such pumps above the design flood elevation specified in ASCE 24, Table 7-1, is not feasible, sprinkler systems and fire standpipe systems shall be supplied by gravity tanks in accordance with Section 9.1.4(4) of NFPA 13R as modified in Appendix Q;

4.1.4. Dry pipe valve-related electrically operated alarm appurtenances;

4.1.5. Electrically activated water and non-water fire extinguishing systems;

4.1.6. Electrically activated sprinkler systems, pre-action sprinkler systems, deluge sprinkler systems, and combined dry pipe and pre-action sprinkler systems;

4.1.7. Electrically operated waterflow detection devices serving sprinkler systems; and

4.1.8. Air compressors serving sprinkler systems;

4.2. Fire alarm systems and components. At least one zoning indicator panel required in Section BC 907.8.1 of this code shall comply with the following additional requirements:

4.2.1. The zoning indicator panel and associated controls shall be provided at least five feet (1524 mm) above the design flood elevation specified in ASCE 24, Table 7-1, in a location approved by the department and the Fire Department;

4.2.2. Where the zoning indicator panel or associated controls are only operable upon transfer of control from another zoning indicator panel, such transfer shall be by a means that is approved by the Fire Department;

4.2.3. All power supplies for the zoning indicator panel and associated controls, the means of transferring control to the zoning indicator panel and all elements of the fire alarm system shall be located at least five feet (1524 mm) above the design flood elevation specified in ASCE 24, Table 7-1;

4.3 Fuel-oil piping systems. The following requirements shall apply to fuel-oil piping systems, as defined by Section MC 202 of the New York city mechanical code:

4.3.1 Fill piping shall terminate three feet (914 mm) above the greater of (i) the design flood elevation specified in ASCE 24, Table 7-1, or (ii) the moderate flood elevation;

4.3.2 Normal vent piping and emergency vent piping shall terminate three feet (914 mm) above the design flood elevation specified in ASCE 24, Table 7-1;

4.4 Plumbing systems and components. The structure shall comply with the following requirements:

4.4.1 Relief vents and fresh air intakes. Relief vents and fresh air intakes serving building traps in accordance with Section PC 1002.6 of the New York city plumbing code shall be carried above grade and shall terminate in a screened outlet that is located outside of the building and at or above the design flood elevation specified in ASCE 24, Table 7-1;

4.4.2 Reduced pressure zone backflow preventers. Reduced pressure principle backflow preventers complying with Section PC 608.13.2 of the New York city plumbing code and backflow preventers with intermediate atmospheric vents complying with Section PC 608.13.3 of the New York city plumbing code shall be located at or above the design flood elevation specified in ASCE 24, Table 7-1;

§6. Section BC G304.1.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new item 2.3.1 to read as follows:

2.3.1 Additional requirements. The structure shall comply with Items 4.1 through 4.4 of Section G304.1.1 and the following additional requirements:

2.3.2 Generators and emergency power systems in hospitals. In I-2 occupancies that are hospitals, generators and fuel pumps serving emergency power systems shall be accessible for maintenance and repair during moderate flood conditions;

§7. Section BC G304.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new item 5.1 to read as follows:

5.1 Additional requirements. The structure shall comply with Item 2.3.1 of G304.1.2;

§8. Section BC G304 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new subsection BC G304.3 to read as follows:

G304.3 Construction standards for areas of moderate flood hazard. In areas of moderate flood hazard, the following standards shall apply to new construction and substantial improvements.

G304.3.1 Hospitals. I-2 occupancies that are hospitals shall be considered to be in A-Zones and shall comply with Section G304.1.2 and the applicable provisions of ASCE 24.

G304.3.2 Fuel-oil piping systems. For fuel-oil piping systems, as defined by Section MC 202 of the New York city mechanical code, fill piping shall terminate three feet (914 mm) above the moderate flood elevation;

§9. Section BC G501.1 of the New York city building code, as amended by local law number 8 for the year 2008, is amended by adding a new subsection 7.2.4 to read as follows:

Section 7.2.4. Section 7.2.4 (Disconnect Switches and Circuit Breakers) is amended to read as follows:

7.2.4 Disconnect Switches and Circuit Breakers. The main disconnect switch, all service disconnecting means, and all circuit breakers and fuse boxes shall be located above and be accessible from the elevation specified in Table 7-1. Switches, all service disconnecting means, and circuit breakers and fuse boxes shall be located no more than 5 ft above the floor, or a platform shall be installed to provide access.

§10. Section BC G307 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new section BC G307.4 to read as follows:

G307.4 Elevation of certain tanks and containers serving critical facilities. The following tanks and containers shall be located at or above the greater of (i) the design flood elevation specified in ASCE 24, Table 7-1, or (ii) the moderate flood elevation, when serving structures in structural occupancy category IV, as designated in ASCE 24, Table 1-1. Such tanks and containers must be designed to

maintain service to such structure during flood conditions and shall comply with section 9.6 of ASCE 24:

1. Medical and compressed gas storage tanks, oxygen tanks, and other cryogenic system storage tanks;

2. Hazardous material storage tanks;

3. Stationary compressed gas containers;

4. Stationary cryogenic containers; and

5. Stationary flammable gas storage containers.

§11. The definition of "Design Flood Elevation" as set forth in sections 1.2 of section BC G501.1 of the New York city building code, as amended by local law number 8 for the year 2008, is amended to read as follows:

Design Flood Elevation—[The applicable elevation specified in Table 2-1, 4-1, 5-1, 6-1, or 7-1, depending on the structural occupancy category designated in Table 1-1.] As defined in Section G201 of the New York City Building Code, Appendix G.

§12. Section BC 903.3 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new subsection BC 903.3.8 to read as follows:

903.3.8 Location of sprinkler booster pumps. Sprinkler booster pumps shall be located in a 2-hour fire-rated enclosure. Such enclosure shall be accessible from a 2-hour fire-rated passageway or stairway.

§13. Section BC 905.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new subsection BC 905.2.1 to read as follows:

905.2.1 Location of fire pumps. Fire pumps shall be located in a 2-hour fire-rated enclosure. Such enclosure shall be accessible from a 2-hour fire-rated passageway or stairway.

§14. Section MC 301.13 of the New York city mechanical code, as added by local law number 33 for the year 2007, is amended to read as follows:

301.13 Flood hazard. For structures located in areas of special flood hazard or areas of moderate flood hazard, mechanical systems, equipment and appliances shall comply with Appendix G of the New York City Building Code.

§15. Section FC 903.2 of the New York city fire code, as added by local law number 26 for the year 2008, is amended by adding a new subsection FC 903.2.14 to read as follows:

903.2.14 Flood Hazard. For structures located in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, electrically activated sprinkler systems shall be located at or above the design flood elevation specified in Section 7.1 (Table 7-1) of Section BC G501.1 of the New York city building code.

§16. Section FC 904.2 of the New York city fire code, as added by local law number 26 for the year 2008, is amended by adding a new subsection FC 904.2.1 to read as follows:

904.2.1 Flood Hazard. For structures located in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, electrically activated fire extinguishing systems shall be located at or above the design flood elevation specified in Section 7.1 (Table 7-1) of Section BC G501.1 of the New York city building code.

§17. Section FC 2703.2.4 of the New York city fire code, as added by local law number 26 for the year 2008, is amended to read as follows:

2703.2.4 Installation of tanks. Installation of tanks shall be in accordance with Sections 2703.2.4.1 through [2703.2.4.2.1] 2703.2.4.3 and with the regulations of the New York State Department of Environmental Conservation as set forth in 6 NYCRR Sections 599.6, 614.7 and 614.13.

§18. Section FC 2703.2.4 of the New York city fire code, as added by local law number 26 for the year 2008, is amended by adding a new subsection FC 2703.2.4.3 to read as follows:

2703.2.4.3 Flood Hazard. Notwithstanding any other provision in this section, for structures located in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, hazardous material storage tanks shall comply with Section BC G307.4 of the New York city building code.

§19. Section FC 3003.3.3 of the New York city fire code, as added by local law number 26 for the year 2008, is amended by adding a new subsection FC 3003.3.3.1 to read as follows:

3003.3.3.1 Flood Hazard. Notwithstanding any other provision in this section, for structures located in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, stationary compressed gas containers shall comply with Section BC G307.4 of the New York city building code.

§20. Section FC 3203.1.2 of the New York city fire code is REPEALED and replaced with a new section FC 3203.1.2 to read as follows:

3203.1.2 Flood Hazard. Notwithstanding any other provision in this section, for structures located in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, stationary cryogenic containers shall comply with Section BC G307.4 of the New York city building code.

§21. Section FC 3503.1.2 of the New York city fire code, as added by local law number 26 for the year 2008, is amended by adding a new subsection FC 3503.1.2.1 to read as follows:

3503.1.2.1 Areas of Special Flood Hazard. Notwithstanding any other provision in this section, in areas of special flood hazard, as defined by Section BC G201.2 of the New York city building code, stationary flammable gas containers shall comply with Section BC G307.4 of the New York city building code.

§22. This local law shall take effect immediately.

Int. No. 1097

By Council Member Recchia

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to requiring backup power sources for fire and life safety communications systems.

Be it enacted by the Council as follows:

Section 1. The first paragraph of subsection 700.12(A) of section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, is amended to read as follows:

700.12(A) Storage batteries may be used as a source of power for emergency lighting systems and shall be of suitable rating and capacity to supply and maintain the total load for a minimum period of 1½ hours, without the voltage applied to the load falling below 87½ percent of normal. Storage batteries shall be used as a source of power for emergency and life safety telecommunications systems and shall be of suitable rating and capacity to supply and maintain the total load for a minimum period of 8 hours, without the voltage applied to the load falling below 87 ½ percent of normal. Storage batteries may be used for other emergency systems only where special permission is granted for such use.

§ 2. This local law shall take effect immediately.

Int. No. 1098

By Council Member Richards

A LOCAL LAW

To amend the New York city plumbing code, in relation to preventing the backflow of sewage.

Be it enacted by the Council as follows:

Section 1. Section 715.1 of the plumbing code of the city of New York is amended by adding a new section 715.1.1 to read as follows:

715.1.1 Backwater valves in special flood hazard areas. Building drains serving buildings located in Special Flood Hazard Areas, as established by Section G102.2 of Appendix G of the New York City Building Code, shall be provided with a backwater valve at the point of exit from the building and downstream from the building trap.

§ 2. Section 1002.6 of the plumbing code of the city of New York is amended by adding a new section 1002.6.1 to read as follows:

1002.6.1 Backwater valves in special flood hazard areas. Backwater valves shall be provided on the building storm drainage system in accordance with Section 715 for all buildings located in the Special Flood Hazard Areas, as established by Section G102.2 of Appendix G of the New York City Building Code.

§ 3. This local law shall take effect ninety days after its enactment.

Int. No. 1099

By Council Member Richards

A LOCAL LAW

To amend the administrative code of the city of New York and the New York city building code, in relation to preventing wind damage to existing buildings.

Be it enacted by the Council as follows:

Section 1. Section 28-101.4.3 of the administrative code of the city of New York is amended by adding a new item 14, to read as follows:

14. The installation and alteration of curtain wall systems, windows, doors, attachments, fixtures, building mounted equipment, and equipment enclosures shall be governed by section 1609 of the New York city building code.

§ 2. Section 1609.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

1609.1 Applications. Buildings, structures and parts thereof shall be designed to withstand the minimum wind loads prescribed herein. Decreases in wind loads shall not be made for the effect of shielding by other structures. Curtain wall systems, windows, doors, building mounted equipment such as cooling towers, fans, tanks, air conditioning units, hoods, louvers, antennae, plumbing fixtures, gas appliances, and equipment enclosures shall be designed to remain intact and firmly attached to such building, structure, or part thereof when subjected to such minimum wind loads. The design or ability of such systems, windows, doors, fixtures, building mounted equipment, and equipment enclosures to withstand minimum wind loads through gravity or friction shall be verified either by engineering calculations or manufacturer certification.

§ 3. Chapter 24 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new section 2403.7 to read as follows:

2403.7. Protection from wind born debris. The following buildings shall be protected with an impact resistant covering or glazing in accordance with the Missile Levels and Wind Zones specified in ASTM E1886 and ASTM E1996 or other approved test methods and performance criteria:

1. Buildings in Structural Occupancy Category IV, as defined in Table 1604.5, located in wind exposure C or D, as defined in Section 1609.4,

2. Buildings in Structural Occupancy Category III, as defined in Table 1604.5, located in exposure D, as defined in Section 1609.4 where the glazing of such building encloses areas of assembly for 300 or more persons or areas of in-place shelter.

Exception: Glazing shall be permitted to be unprotected if it is located over 60 feet above the ground and over 30 feet above aggregate-surfaced roofs, including roofs with gravel or stone ballast located within 1,500 feet of the building.

§ 4. Chapter 4 of the New York city mechanical code, is amended by adding a new section 401.5.4 to read as follows:

401.5.4 Wind-driven rain rating. All exterior louvers for building ventilation and exhaust systems shall either:

1. Receive an A rating according to ACMA Standard 500L for wind-driven rain penetration for a 50 mile per hour wind velocity with a rainfall rate of eight inches per hour; or

2. Be installed on a plenum configured to intercept any wind driven rain penetrating the louver and prevent the rain from entering the building ductwork system. Such plenum shall be waterproofed and equipped with a drainage system to convey water penetrating the louver to storm or sanitary drains.

§ 5. This local law shall take effect ninety days after its enactment.

Int. No. 1102

By Council Member Van Bramer

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to improving hazardous materials storage pursuant to the New York city community right-to-know law.

Be it enacted by the Council as follows:

Section 1. Subdivision c of section 24-718 of the administrative code of the city of New York is amended to read as follows:

(c) [On or before July first, nineteen hundred ninety-four, the] The commissioner, in consultation with the emergency response agencies, shall by rule establish the contents of a risk management plan, which shall be designed to prevent the accidental release and to minimize the consequences of any such release of any extremely hazardous or regulated toxic substance. The plan shall include but need not be limited to: (1) a site plan; (2) a safety review of design for new and existing equipment and processes; (3) an emergency response program, including an emergency response plan, emergency response training, and emergency response exercises; (4) standard operating procedures; (5) a preventive maintenance program for equipment; (6) a training program for equipment operators, including duration and type of training, and retraining; (7) accident investigation procedures; and (8) a risk assessment program, including a hazard analysis and a consideration of the use of alternate equipment and alternate substances. For facilities any portion of which exists in a special flood hazard area, as established by section G102.2 of appendix G of the New York city building code, the risk management plan shall also include a plan to ensure that extremely hazardous and regulated toxic

substances are located in areas that have been dry floodproofed in accordance with ASCE 24, or are located on a story that is entirely above the design flood elevation specified in ASCE 24, table 7-1, as modified by appendix G of the New York city building code.

§ 2. This local law shall take effect ninety days after enactment, except that the commissioner of environmental protection shall take such measures as are necessary for its implementation, including the promulgation of rules, prior to such effective date.

Int. No. 1092

By Council Member Lappin

A LOCAL LAW

To amend the New York city building code, in relation to the installation of external electrical hookups.

Be it enacted by the Council as follows:

Section 1. Section BC 2702 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new subsection BC 2702.4, to read as follows:

2702.4 Temporary Generators. An external connection of secondary source of power for temporary generators shall be provided for buildings and structures that are:

a. Served electrically by either a separate spot network for the building or structure that allows the utility company to disconnect electric service to the building or structure, or that have a single main disconnect switch; or

b. In group I-2 occupancies.

Exceptions:

1. Buildings or structures with permanently installed generators in accordance with this chapter that supply a secondary source of power for space heating, vertical transportation, domestic water and lighting and power for 50% of occupied spaces.

2. Buildings or structures with interior transformer vaults which are elevated above the design flood elevation in accordance with Appendix G of this code and have a distance in excess of 200 feet

from the main distribution to the temporary generator.

2702.4.1 Switchboard Modifications. The main electrical distribution for a building or structure shall allow for use of an externally located source of power, such as a portable generator, by means of a manual or automatic switch meeting the requirements of sections 2704.4.1.1 through 2704.4.1.8.

2704.4.1.1 The switchboard shall be constructed to create a point of connection for temporary cables that connect to a temporary source of power, such as a generator.

2704.4.1.2 First or second level distribution gear shall be considered permissible connection points for temporary cabling. Cabling extensions from the switchboard(s) shall not be required as part of the permanent installation.

2704.4.1.3 Connection points can be established "ahead of the main" or as a secondary or tertiary level connection point, provided that the sum total of the connection points does not exceed the equivalent quantity of main (1st Level) devices.

2704.4.1.4 Connection points that are "ahead of the main" shall employ hinged, locking panel sections with warning labels that include the following information:

1. Contact information for the electrical utility company serving the building;
2. Necessary safety procedures to implement a temporary

connection; and

3. Maximum cabling and generator size.

2704.4.1.5 Connection points shall either be established as additional over-current protective devices or as main or branch busway extensions, provided that the connection points permit the full service capacity to be made with temporary cabling.

2704.4.1.6 A notice shall be posted near the connection points identifying the generator in service, including the phases, voltage, capacity, and any other pertinent information needed to procure a temporary generator.

2704.4.1.7 In Occupancy Group I-2 structures that are not hospitals the electrical system shall be designed with an electrical "quick-connect" to allow an external generator to be easily connected to power all electrical services.

2704.4.1.8 In existing and new Occupancy Group I-2 structures that are hospitals, the electrical system shall be designed with an electrical "quick-connect" to allow an external generator to be easily connected and power, at a minimum, emergency power services.

2704.4.1.9 In existing and new Occupancy Group I-2 structures that are adult homes located within a Special or Moderate Flood Hazard Area as defined by Section G201.2 of Appendix G of this code the electrical system shall be designed with an electrical

"quick-connect" to allow an external generator to be easily connected to power all electrical services.

2704.4.2 Architectural Openings. Architectural provisions, including but not limited to, doors, hatches, framed openings, access panels, sleeves, and conduit, shall be established and sized to readily permit the installation of temporary cabling in accordance with the New York City Electrical Code.

2704.4.3 Flood Areas. External connection routes shall be either located above the design flood elevation or wet flood proofed in accordance with Appendix G of this code.

§ 2. Section BC G304.1.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new Item 7, to read as follows:

7. Back-up systems. For Group I-2 occupancies that are adult homes, a back-up generator above the design flood elevation or an electrical quick-connect which allows an external generator to be easily connected to power all electrical services in such facility shall be provided.

§ 3. Section BC G304.1.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new Item 3, to read as follows:

3. Back-up systems. All new occupancy group I-2 facilities shall be designed with an electrical quick-connect to allow for an external generator to be easily connected and power all electrical services, except that I-2 facilities that are hospitals shall be designed with an electrical quick-connect that can handle, at a minimum, emergency power services. All new I-2 facilities that are hospitals with heating or cooling equipment located below the design flood elevation shall be

designed with a quick-connect that can allow temporary heating or cooling to be connected to such facility.

§ 4. This local law shall take effect immediately.

Int. No. 1100

By Council Member Ulrich

A LOCAL LAW

To amend the New York city building code, in relation to keeping residential stairwells and hallways lit during blackouts.

Be it enacted by the Council as follows:

Section 1. Section BC 1002 of the New York city building code is amended by adding a new definition to be placed in alphabetical order to read as follows:

LUMENS. The unit of luminous flux, equal to the luminous flux emitted in a unit solid angle by a point source of one candle intensity.

§ 2. Section BC 1006 of the New York city building code is amended by adding a new subdivision 1006.4 to read as follows:

1006.4 Backup lighting system. Exit access corridors, exit passageways, exit stairways, and interior exit discharge elements serving occupancies in Groups I-1, R-1, and R-2 shall be provided with a backup lighting system in accordance with Section 1006.4.1 and Section 1006.4.2.

Exceptions:

1. Buildings in Group R-2 occupancy that are four stories or less and do not contain more than three dwelling units per story.

2. Where the emergency power source for the illumination required in Section 1006.3 is an on-site generator utilizing natural gas from the public utility street main as a fuel supply, as permitted in Section 2702.

3. Any level of a stairwell that is provided with not less than 12 square feet of exterior glazed opening facing onto a public way, or onto a yard or court.

4. Public corridors that are provided with exterior glazed openings facing onto a public way, or onto a yard or court. The net glazed area shall not be less than 6 percent of the floor area of the corridor.

1006.4.1 Backup lighting system power source. The power supply from the backup lighting system power source shall be available no later than 10 seconds after the building's emergency power system fails and shall last for a duration of not less than 120 hours.

1006.4.2 Performance of backup lighting system. Not less than 60 lumens of light output shall be provided at each stairway entrance and discharge. Not less than 60 lumens of light output shall be provided at every 30 feet of public corridor. The backup lighting system shall be designed and installed so that the failure of any individual lighting element shall not leave in total darkness any space the requires emergency illumination.

§ 3. This local law shall take effect January 1, 2014.

Int. No. 1101

By Council Member Vacca

A LOCAL LAW

To amend the administrative code of the city of New York and the New York city building code, in relation to voluntarily installed emergency power systems and natural gas usage.

Be it enacted by the Council as follows:

Section 1. Section 700.12 of section 27-3025 of the administrative code of the city of New York, as added by local law number 39 for the year 2011, is amended to read as follows:

SECTION 700.12
Section 700.12 – Revise [the fourth paragraph, add a new Exception] Section 700.12 to read as follows and delete the FPNs:

700.12 General Requirements. Current supply shall be such that, in the event of failure of the normal supply to, or within, the building or group of buildings concerned, emergency power shall be available within the time required for the application but not to exceed 60 seconds except that, where power for emergency lighting shall not be available within 10 seconds, storage batteries shall be used to provide power for emergency lighting within 10 seconds of such failure. The supply system for emergency purposes, in addition to the normal services to the building and meeting the general requirements of this section, shall be one or more of the types of systems described in 700.12(A) through (E). Unit equipment in accordance with 700.12(F) shall satisfy the applicable requirements of this article.

In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building.

Equipment shall be designed and located so as to minimize the hazards that might cause complete failure due to flooding, fires, icing, and vandalism.

Fire, sprinkler, standpipe, smoke detection, oxygen, nitrous oxide and other alarm or extinguishing systems shall be connected to the line side of the service equipment and shall have separate overcurrent protection.

Exception: Such systems installed for local area protection only[,] *may connect ahead of the supply area protect.*

§2. Section BC 2702.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

2702.1 Installation. Emergency systems shall be installed in accordance with the New York City Electrical Code, NFPA 110 and NFPA 111[, and]. Systems relying on fuel supplies other than natural gas shall have an on-premises fuel supply sufficient for not less than 6-hour full-demand operation of the system. [However, for R-2 occupancies required to provide emergency power systems pursuant to the provisions of Section 403.11.2, and for voluntarily installed emergency power systems, natural] Natural gas from the public utility street main shall be permitted as fuel supply.

§3. Section BC 2702.1.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

2702.1.2 Capacity. The emergency power system shall have a capacity and rating that supplies all equipment required to be operational at the same time.

Exception: For buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access and at least one elevator serving all floors, voluntarily installed emergency power systems may comply with Section 2702.4 in lieu of this section.

§4. Section BC 2702 of the New York city building code, as added by local law number 33 for the year 2007, is amended by adding a new section BC 2702.4 to read as follows:

2702.4 Voluntarily installed emergency power systems. Voluntarily installed emergency power systems shall comply with Sections 2702.4.1 and 2702.4.2.

2702.4.1 Required loads. Voluntarily installed emergency power systems shall be capable of providing emergency power to the following systems, where such systems are required by this code or otherwise installed:

1. Emergency lighting;

2. Fire alarm systems; and

3. For buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, at least one elevator serving all floors.

2702.4.2 Manual transfer switch. For buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access and at least one elevator serving all floors, voluntarily installed emergency power systems may be equipped with a manual transfer switch for supplying power to at least one elevator serving all floors by shedding all other loads.

§5. This local law shall take effect immediately.

Int. No. 1086

By Council Member Fidler

A LOCAL LAW

To amend the New York city plumbing code, in relation to requiring that toilets and faucets be capable of operating without an external supply of electrical power.

Be it enacted by the Council as follows:

Section 1. Section PC 424 of the New York city plumbing code is amended to add a new Section PC 424.7 as follows:

424.7 Lavatory operation without power. The valves of at least one lavatory faucet in each bathroom or washroom shall be able to continue normal operation without an external supply of electrical power for a period of at least two weeks.

Exception: Only one lavatory faucet per dwelling unit shall be required to comply with this section.

§2. Section PC 425 of the New York city plumbing code is amended to add a new Section PC 425.5 as follows:

425.5 Water closet flushing without power. The flushing devices of at least one water closet in each bathroom or toilet room shall be able to continue normal operation without an external supply of electrical power for a period of at least two weeks.

Exception: Only one water closet per dwelling unit shall be required to comply with this section.

§3. This local law shall take effect on January 1, 2014.

Int. No. 1094

By Council Member Mendez

A LOCAL LAW

To amend the New York city plumbing code and the administrative code of the city of New York, in relation to requiring residential buildings to provide drinking water to a common area supplied directly through pressure in the public water main.

Be it enacted by the Council as follows:

Section 1.The New York city plumbing code is amended by adding a new section PC 614 to read as follows:

SECTION PC 614

EMERGENCY DRINKING WATER ACCESS

614.1 Buildings required to provide alternative potable water access. Buildings with residential occupancies that have a source of water supply other than the public water main, or that have a water pressure booster pump installed in accordance with Section 606.5, shall provide an emergency source of water supply for human ingestion in accordance with Sections 614.1.1 through 614.1.6.

614.1.1 Emergency source of water fixture. An emergency source of water fixture shall consist of a faucet for supplying drinking water for human ingestion conforming to Section 424 supplied only by street pressure from the public water main, and either:

1. a sink conforming to Section 418; or

2. a floor drain conforming to Section 412.

614.1.2 Number of fixtures required. One emergency source of water fixture for 75 residents as determined by the occupant load of in the building.

614.1.3 Accessibility. Emergency source of water fixtures shall be located indoors in an area that is accessible to all tenants of the building.

614.1.4 Signage. Required emergency source of water fixtures shall be designated by a legible sign stating: "EMERGENCY DRINKING WATER." Signs shall be readily visible and located near the emergency source of water fixture, and on the door to any room or closet in which the fixture is located.

614.1.5 Location. For any building that is located in a special flood hazard area and is in existence as of January 1, 2014, all emergency source of water fixtures shall be located on a story that is entirely above the design flood elevation specified in ASCE 24, Table 7-1, as modified by Appendix G of the New York City Building Code. Emergency source of water fixtures shall not be located in a bathroom or toilet room.

614.1.6 Applicability. On and after January 1, 2019, the requirements of this Section shall be required for all buildings with residential occupancies that have a source of water supply other than the public water main, or that have a water pressure booster pump installed in accordance with Section 606.5.

§ 2. Section 28-101.4.3 of the administrative code of the city of New York is amended by adding new item 14 to read as follows:

14. Emergency source of water supply for human ingestion shall be provided in accordance with section 614 of the New York city plumbing code.

§ 3. Chapter 3 of title 28 of the administrative code of the city of New York is amended by adding a new article 314 to read as follows:

ARTICLE 314

EMERGENCY DRINKING WATER

§28-314.1 Retroactive requirement for residential occupancies. On and after January 1, 2019, the provisions of section 614 of the New York city plumbing code requiring emergency source of water supply for human ingestion shall apply retroactively to all buildings in existence on January 1, 2014.

§ 4. This local law shall take effect on January 1, 2014.

Proposed Int. No. 990-A

By Council Members Ulrich, Oddo, Arroyo, Cabrera, Comrie, Gentile, Gonzalez, James, Nelson, Vallone, Wills, Rodriguez, Lappin and Halloran

A Local Law

To amend the New York city building code, in relation to the adoption of best available flood maps.

Be it enacted by the Council as follows:

Section 1. Section BC G102.2 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

> **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.]
>
> Federal Emergency Management Agency (FEMA) Preliminary Work Map (PWM).

§2. Section BC G102.3 of the New York city building code is REPEALED and a new section BC G102.3 is added to read as follows:

> **G102.3 Reserved.**

§3. Section BC G103.3 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

> **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] PWM, 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 <u>including the PWM</u>; 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 <u>including the PWM</u>.

§4. Section BC G103.5 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

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).]

§5. The definitions of "A-ZONE," "AREA OF SPECIAL FLOOD HAZARD," "BASE FLOOD ELEVATION," "PRE-FIRM DEVELOPMENT" and "V-ZONE" as set

forth in section BC G201.2 of the New York city building code, as added by local law number 33 for the year 2007, are amended to read as follows:

A-ZONE. An area of special flood hazard without high velocity wave action as delineated on the PWM. When not shown on the [FIRMs] PWM, 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)] PWM 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 ELEVATION. The elevation of the base flood, including wave height, as specified on [FEMA FIRMs 360497] the PWM or as determined in accordance with Section G103.3[, relative to the National Geodetic Vertical Datum (NGVD)].

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 or PWM.

V-ZONE. An area of special flood hazard subject to high velocity wave action, as delineated on the PWM.

§6. Section BC G201.2 of the New York city building code, as amended by local law number 8 for the year 2008, is amended by adding a new definition of

"PRELIMINARY WORK MAP (PWM)" in appropriate alphabetical order to read as follows:

PRELIMINARY WORK MAP (PWM). The preliminary work map, released by the Federal Emergency Management Agency (FEMA) in June 2013, which delineates the areas of special hazard, base flood elevations, flood boundaries and floodways for the city of New York.

§7. Section BC G402 of the New York city building code, as amended by local law 8 for the year 2008, is amended to read as follows:

SECTION BC G402 STANDARDS

ASCE 7-02	Minimum Design Loads for Buildings and Other Structures	G104.5.2, G201.2, G304.2
ASCE 24-05*	Flood Resistant Design and Construction	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
FEMA FIS 360497	Flood Insurance Study, Community Number 360497, Revised September 5, 2007; Federal Emergency Management Agency	G102.2
[FEMA FIRMs 360497]	[Flood Insurance Rate Map, Community Number 360496, Panels Numbers 1 through 0457, Revised September 5, 2007; Federal Emergency Management Agency]	[G102.2, G102.3, G102.3.1, G102.3.2, G103.3, G201.2]
FEMA PWM	Preliminary Work Map for the City of New York, New York, Issued June 2013; Federal Emergency Management Agency	G102.2, G103.3, G201.2
FEMA FORM 81-31	Elevation Certificate; Federal Emergency Management Agency	G105.3

FEMA FORM 81-65	Floodproofing Certification; Federal Emergency Management Agency	G105.3
HUD 24 CFR Part 3280-94	Manufactured Home Construction Safety Standards, 1994	G201.2

* As modified in Chapter G5.

§8. Section 1.1.1 of section BC G501.1 of the New York city building code, as added by local law number 33 for the year 2007, is amended to read as follows:

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] PWM as an A-Zone shall be classified as flood hazard areas that are "other than coastal high hazard area or coastal [A-Zones",] A-Zones," and shall comply with the applicable items in Section 1.1 as such.

§9. Section 1.2 of section BC G501.1 of the New York city building code, as amended by local law number 8 for the year 2008, is amended to read as follows:

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

Coastal A Zone—Reserved.

Coastal High Hazard Area (CHHA)—A V-Zone, as defined in Section G201 of the New York City Building Code, Appendix G.

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

Flood Hazard Area—An area of special flood hazard, as defined in Section G201 of the New York City Building Code, Appendix G.

High Risk Flood Hazard Area—An area designated as a coastal high hazard area, being those areas identified on the [FIRM] PWM 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.

Special Flood Hazard Area—As defined in Section G201 of New York City Building Code, Appendix G.

§10. This local law shall take effect immediately.

Int. No. 1085

By Council Member Chin

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to emergency plans for residential and commercial buildings and the posting of emergency information in certain residential buildings.

Be it enacted by the Council as follows:

Section 1. Chapter 1 of title 30 of the administrative code of the city of New York is amended by adding a new section 30-104 to read as follows:

§30-104 Weather emergencies and extended utility outage preparedness plans for residential and commercial buildings. a. In consultation with relevant agencies including the department of buildings and the department of housing preservation and development, the commissioner shall develop guidelines for how residential and commercial property owners shall prepare for and communicate certain information to the tenants of such buildings in the event of a weather emergency or extended utility outage. Such guidelines shall include, but shall not be limited to:

1. Providing information on the property's flood zone and evacuation zone;

2. What, if any, protective measures will be provided or may be installed to protect against flooding, including sandbags, jersey barriers or other protections;

3. How window air conditioning units, patio furniture flower boxes, windows, doors and other loose items should be secured;

4. Whether equipment such as elevators and boilers should be shut down or moved above flood risks;

5. The options available to a property owner to rent equipment, such as pumps and generators after a weather event or extended utility outage;

6. The methods that property owners can use to communicate with tenants during and after a weather event or extended utility outage and identifying relevant building contacts for emergencies; and

7. Guidelines for tenants sheltering in place, including tenants aged sixty-two and older and tenants with disabilities.

§ 2. Subchapter two of title 27 of the administrative code of the city of New York is amended by adding a new article 15 to read as follows:

ARTICLE 15

POSTING OF CERTAIN EMERGENCY INFORMATION

§27-2057 Posting of emergency information. The owner of a dwelling required to register pursuant to section 27-2097 of this chapter shall post the following information in the common area of the ground floor of the dwelling on a sign of sufficient size to be seen: (i) whether the building is located in a hurricane evacuation zone as defined by the office of emergency management and if applicable, which zone the building is located in; (ii) the address of the nearest designated evacuation center; (iii) when a person should contact 911 and 311 during a weather event or an extended utility outage; (iv) whether during an extended utility outage, service such as potable water, corridor, egress, and common area lighting, fire safety and fire protection, elevators, charging locations for cellular telephones, domestic hot water, or heating and cooling will be provided; (v) contact information for building personnel in the event of an emergency, including email addresses, phone numbers and other methods of communication; and (vi) instructions on

removing furniture from rooftops and balconies during high wind events and, for buildings that utilize pumps, instructions on reducing water consumption during extended power outages.

§3. This local law shall take effect immediately, provided however, section two of the bill shall take effect ninety days after its enactment.

Int. No.

By Council Member Gennaro (in conjuction with the Mayor)

A LOCAL LAW

To amend the New York city charter, in relation to planning for resiliency to climate change as a responsibility of the office of long-term planning and sustainability.

Be it enacted by the Council as follows:

Section 1. Section 20 of the New York city charter, as added by local law number 17 for the year 2008, is amended to read as follows:

§ 20. Office of long-term planning and sustainability. a. The mayor shall establish an office of long-term planning and sustainability. Such office may, but need not, be established in the executive office of the mayor and may be established as a separate office or within any other office of the mayor or within any department the head of which is appointed by the mayor. Such office shall be headed by a director who shall be appointed by the mayor or by the head of such department. For the purposes of this section only, "director" shall mean the director of long-term planning and sustainability.

b. Powers and duties. The director shall have the power and the duty to:

1. develop and coordinate the implementation of policies, programs and actions to meet the long-term needs of the city, with respect to its infrastructure, environment and overall sustainability citywide, including but not limited to the categories of housing, open space, brownfields, transportation, water quality and infrastructure, air quality, energy, and climate change; the resiliency of critical infrastructure, the built environment, coastal protection and communities; and regarding city agencies, businesses, institutions and the public;

2. develop measurable sustainability indicators, which shall be used to assess the city's progress in achieving sustainability citywide; and

3. take actions to increase public awareness and education regarding sustainability and sustainable practices.

c. Sustainability indicators. No later than December thirty-first, two thousand eight and annually thereafter, the director shall identify a set of indicators to assess and track the overall sustainability of the city with respect to the categories established pursuant to paragraph one of subdivision b of this section and any additional categories established by the director, and prepare and make public a report on the city's performance w ith respect to those indicators. Such report may be prepared and presented in conjunction with the mayor's management report required pursuant to section twelve of this chapter. The report shall include, at a minimum:

1. the city's progress in achieving sustainability citywide, which shall be based in part on the sustainability indicators developed pursuant to paragraph two of subdivision b of this section; and

2. any new or revised indicators that the director has identified and used or will identify and use to assess the city's progress in achieving sustainability citywide, including, where an indicator has been or will be revised or deleted, the reason for such revision or deletion.

d. Population projections. No later than April twenty-second, two thousand ten, and every four years thereafter, the department of city planning shall release or approve and make public a population projection for the city that covers a period of at least twenty-one years, with intermediate projections at no less than ten year

intervals. Where feasible, such projections shall include geographic and demographic indicators.

e. Long-term sustainability plan. 1. The director shall develop and coordinate the implementation of a comprehensive, long-term sustainability plan for the city. Such plan shall include, at a minimum:

i. an identification and analysis of long-term planning and sustainability issues associated with, but not limited to, housing, open space, brownfields, transportation, water quality and infrastructure, air quality, energy, and climate change; and

ii. goals associated with each category established pursuant to paragraph one of subdivision b of this section and any additional categories established by the director, and a list of policies, programs and actions that the city will seek to implement or undertake to achieve each goal by no later than April twenty-second, two thousand thirty.

2. No later than April twenty-second, two thousand eleven, and no later than every four years thereafter, the director shall develop and submit to the mayor and the speaker of the city council an updated long-term sustainability plan, setting forth goals associated with each category established pursuant to paragraph one of subdivision b of this section and any additional categories established by the director, and a list of policies, programs and actions that the city will seek to implement or undertake to achieve each goal by no later than twenty years from the date each such updated long-term sustainability plan is submitted. No later than two thousand fifteen, and no later than every four years thereafter, the plan shall also include a list of policies, programs and

actions that the city will seek to implement or undertake to achieve each goal relating to the resiliency of critical infrastructure, the built environment, coastal protection and communities.

Such updated plan shall take into account the population projections required pursuant to subdivision d of this section. An updated plan shall include, for each four-year period beginning on the date an updated plan is submitted to the mayor and the speaker of the city council, implementation milestones for each policy, program and action contained in such plan. An updated plan shall report on the status of the milestones contained in the immediately preceding updated plan. Where any categories, goals, policies, programs or actions have been revised in, added to or deleted from an updated plan, or where any milestone has been revised in or deleted from an updated plan, the plan shall include the reason for such addition, revision or deletion. The director shall seek public input regarding an updated plan and its implementation before developing and submitting such plan pursuant to this paragraph. The director shall coordinate the implementation of an updated long-term sustainability plan.

f. Review and reporting. 1. No later than April twenty-second, two thousand nine, and no later than every April twenty-second thereafter, the director shall prepare and submit to the mayor and the speaker of the city council a report on the city's long-term planning and sustainability efforts. In those years when an updated long-term sustainability plan is submitted pursuant to paragraph two of subdivision e of this section, such report may be incorporated into the updated long-term sustainability plan. The report shall include, at a minimum:

i. the city's progress made to implement or undertake policies, programs and actions included in the sustainability plan or updated sustainability plan required by subdivision e of this section, since the submission of the most recent plan or updated plan or report required by this paragraph; and

ii. any revisions to policies, programs or actions in the previous long-term sustainability plan, including the reason for such revision.

g. There shall be a sustainability advisory board whose members, including, at a minimum, representatives from environmental, environmental justice, planning, engineering, coastal protection, critical infrastructure, labor, business and academic sectors, shall be appointed by the mayor. The advisory board shall also include the speaker of the city council or a designee and the chairperson of the council committee on environmental protection or a designee. The advisory board shall meet, at a minimum, twice per year and shall provide advice and recommendations to the director regarding the provisions of this section.

h. The director shall post on the city's website, a copy of each sustainability plan required by subdivision e of this section, and all reports prepared pursuant to this section, within ten days of their completion.

i. Interagency green team. 1. There is hereby established within the office an interagency green team under the management of the director or the director's designee to facilitate the use of innovative technologies, design and construction techniques, materials or products that may have significant environmental and sustainability benefits and to assist innovative projects in addressing city agency regulatory requirements.

2. The interagency green team shall include as members the commissioners of buildings, environmental protection, transportation, design and construction, health and mental hygiene and the chairperson of the city planning commission, or their respective designees, and such other members as the director shall designate. The director shall also designate members from among the fire commissioner and the commissioners of parks and recreation, consumer affairs, emergency management, housing preservation and development, sanitation, and the chairperson of the landmarks preservation commission, or their respective designees, with respect to specific matters being considered by the interagency green team where the director determines it appropriate to do so.

§ 2. Section 20 of the New York city charter is amended by adding a new subdivision j to read as follows:

j. The mayor shall appoint a director of resiliency within the office of long-term planning and sustainability who shall report to the director of the office.

§ 3. This local law shall take effect immediately.

Res. No. 1708

Resolution calling upon the United States Congress to enact and the President to sign the Flood Victim Premium Relief Act of 2013.

By The Speaker (Council Member Quinn) and Council Members Recchia, Jr., Foster, Chin, Fidler, Garodnick, Gonzalez, Ignizio, Levin, Mendez, Nelson, Ulrich, Van Bramer, Oddo, Brewer, Cabrera, Comrie, Dromm, Eugene, Ferreras, Gennaro, Gentile, James, Koo, Koslowitz, Lander, Palma, Richards, Rose, Vann, Williams and Lappin

Whereas, In 1968 Congress passed, and has subsequently amended, the National Flood Insurance Act, which created a National Flood Insurance Program (NFIP) that provides flood insurance to homeowners, renters, and businesses in communities that participate in the NFIP by agreeing to adopt and enforce certain federally mandated requirements; and

Whereas, The NFIP was most recently extended and amended by the Biggert-Waters Flood Insurance Reform Act, which was signed into law by President Obama on July 6, 2012; and

Whereas, Under the NFIP, FEMA maps high-risk flood zones, labeling them as "A" if they face a 1% annual flood risk (i.e., are in the 100 year flood plain), "V" if they could be subjected to waves over three feet during such floods, and, on upcoming map revisions, as "Coastal A" for areas that would be subjected to waves of one-and-a-half to three feet; and

Whereas, Under many circumstances, such as when a building is backed by a federally regulated or insured loan, homeowners, renters, and businesses in the these flood zones are required to purchase flood insurance, the cost of which reflects the risk to their property based on the zone in which they are mapped, the elevation of the building relative to base flood elevation, and any flood mitigation property owners have

undertaken; and

Whereas, On October 29 and 30 of 2012, Superstorm Sandy struck the East Coast of the United States, with its center passing over New Jersey around 8pm on the 29th; and

Whereas, Sandy's devastation to the City of New York from high winds and a record tidal surge was catastrophic, causing 43 deaths in the City, destroying or extensively damaging thousands of homes and businesses, flooding tunnels and knocking out electricity and infrastructure, knocking down over 8,000 trees and over 1,200 branches, some of which also caused damage to property; and

Whereas, Through various programs, FEMA, other federal agencies, the city and state, and the private sector have responded with a massive cleanup effort, cleaning out flooded homes, relocating displaced persons into temporary housing, covering other storm-related personal costs, and cleaning and rebuilding infrastructure; and

Whereas, Well before Sandy, FEMA was working with the city to update the city's Flood Insurance Rate Maps (FIRM), which were last updated in 1983 and were based on data that is now out of date; and

Whereas, After Sandy, FEMA released Advisory Base Flood Elevation maps (ABFE) based on the analysis that they had conducted to date for their efforts to generate new FIRMs for the City of New York; and

Whereas, Such ABFEs will likely be substantially similar to the updated FIRMs expected to be released in the next two years, and they indicate that the number of structures that will be in the high-risk flood zones could more than double when the updated FIRMs are released; and

Whereas, To the degree that the FIRMs reflect the ABFE maps, many more

homeowners and business owners will be required to purchase flood insurance, and many others will require a greater amount of insurance than before if they are now in a V instead of an A zone or if their base flood elevation changes; and

Whereas, In the past, insurance premiums for many policy holders were lower than the amount that would be required based solely on their building's flood risk because, under many circumstances, FEMA granted premium reductions; and

Whereas, Some structures benefitted from "grandfathered" rates if they were built prior to 1975, were built before their community received a FIRM, or were built to meet an existing FIRM but would no longer be compliant because a new FIRM was issued that changed their flood zone; and

Whereas, The Biggert-Waters Flood Insurance Reform Act of 2012 phases out these premium reductions and ends grandfathered rates for most residents that live in flood zones, including persons that receive federal money to rebuild after a disaster, substantially improve their property, purchase properties after July 6, 2012, have a change in risk to a property such as from a change in flood zone category due to a new or revised FIRM, or that have allowed their insurance policy to lapse and need to repurchase insurance; and

Whereas, When triggered, the premiums for property owners who held flood insurance and benefited from a premium reduction or a grandfathered rate will rise by 20% per year for five years until they meet their risk-based premium; and

Whereas, Properties that are at or below base flood elevation for the zone they are in could face substantially higher insurance premiums due to these changes in the law; and

Whereas, The Flood Victim Premium Relief Act of 2013 (the Act) would extend the phase-in of the new insurance premiums that would go into effect after July 6, 2012, for "covered properties" from five to eight years, with the rate increasing by 5% for the first four years and 20% for the next four years; and

Whereas, The Act defines "covered properties" as residential properties in areas where a major disaster has been declared under the Robert T. Stafford Disaster Relief and Emergency Act, and where updated flood insurance maps take effect in the two years following such a declaration, or, at the time of enactment of the Act, the property is eligible for preferred risk rate method premiums, or had been eligible for such premiums at any time in the previous 12 months before an event occurred for which an emergency declaration is declared; is owned by the same person as when the disaster event occurred; and is and has been the owner's primary residence; and

Whereas, When FEMA releases updated FIRMs for the City of New York in about two years, a substantial number of homeowners will face sometimes significantly higher insurance premiums due to being in a higher-risk zone or to being placed in a high-risk zone for the first time; and

Whereas, The Act would thereby give homeowners more time to seek funding for and to take actions that would mitigate against future floods, thereby increasing the safety of their homes while lowering their new, unadjusted, risk-based premiums; now, therefore, be it

Resolved, That the Council of the City of New York calls upon the United States Congress to enact and the President to sign the Flood Victim Premium Relief Act of 2013.

Res. No. 1771

Resolution calling upon the New York State Legislature to pass and the Governor to sign S.3942/A.4380, the "Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act" which would protect from liability professional engineers, architects, landscape architects and land surveyors who render voluntary services at the scene of a natural disaster or catastrophe.

By Council Members Oddo, Arroyo, Comrie, Eugene, Fidler, Gentile, James, Koo, Palma, Rose, Wills and Ulrich

Whereas, Following Superstorm Sandy, the New York City Department of Buildings (DOB) was tasked with inspecting tens of thousands of properties in the floodplain in all five boroughs to determine their structural stability; and

Whereas, DOB used its teams of inspectors and contracted with engineers from a private firm to help with inspections as the demand for services exceeded the capacity of its staff; and

Whereas, DOB spent weeks assessing and tagging properties with placards to indicate whether it was safe for homeowners to reoccupy or where necessary to begin repairs to a property; and

Whereas, According to the American Institute of Architects, after Superstorm Sandy, at least 300 architects and engineers in the New York area indicated a willingness to volunteer to inspect damaged properties; and

Whereas, Currently, New York State does not provide immunity for engineers, architects, landscape architects and land surveyors from liability for volunteer services provided in response to a natural disaster or catastrophic event; and

Whereas, Without the assurance that their volunteer services would not expose them to future litigation or liability, volunteer architects and engineers were unable to assist DOB with Sandy-related inspections; and

Whereas, In 2013, Senator Kemp Hannon (R-NY) and Assembly Member Steven Englebright (D-NY) introduced S.3942 and companion bill A.4380; and

Whereas, This legislation would establish the " Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act," which would provide immunity for engineers, architects, landscape architects and land surveyors from liability for volunteer services rendered during or within 90 days of the termination of a declared natural disaster or catastrophic event when requested by or acting with approval from government officials; and

Whereas, Twenty-four other states have recognized this potential liability threat and to foster the use of these professionals after an emergency have enacted laws which provide immunity to certain professionals including engineers who provide voluntary services in response to a disaster; and

Whereas, In order to get homeowners back into their homes as quickly and safely as possible by avoiding lengthy home inspection processes in the aftermath of future disasters, engineers and architects should be protected from liability when contributing their professional services to recovery efforts; now, therefore, be it

Resolved, That the Council of the City of New York calls upon the New York State Legislature to pass and the Governor to sign S.3942/A.4380, the "Engineers', Architects', Landscape Architects' and Land Surveyors' Good Samaritan Act" which would protect from liability professional engineers, architects, landscape architects and land surveyors who render voluntary services at the scene of a natural disaster or catastrophe.

Res. No. 1808

Resolution calling upon the United States Congress to amend the Biggert-Waters Flood Insurance Reform Act of 2012.

By Council Member Ulrich, the Speaker (Council Member Quinn) and Chin

Whereas, In 1968, Congress passed the National Flood Insurance Act, which created the National Flood Insurance Program ("NFIP") to provide a means for property owners in flood-prone areas to financially protect themselves from floods; and

Whereas, Homeowners, renters and businesses in NFIP participating communities are able to, and in many cases required to, purchase flood insurance; and

Whereas, In order to participate in NFIP, communities must adopt and enforce federally mandated requirements, including the adoption of Flood Insurance Rate Maps ("FIRMs"); and

Whereas, FIRMs are the official maps, created by the Federal Emergency Management Agency ("FEMA"), used by a community to identify areas most prone to flooding and to set insurance rates and requirements accordingly; and

Whereas, Since its inception, the NFIP has offered lower premium rates to property owners under certain circumstances; and

Whereas, Properties with buildings that were constructed before their community adopted its first FIRM or that were in compliance with an existing FIRM at the time the building was constructed, but that now have an increased flood risk according to a current FIRM, formerly benefited from subsidized rates; and

Whereas, On July 6, 2012, President Obama signed into law the Biggert-Waters Flood Insurance Reform Act of 2012 (the "Act"), which reauthorizes the NFIP through September 30, 2017, and significantly alters the way flood insurance premium rates are

calculated; and

Whereas, The Act requires premium rates for all properties located in NFIP participating areas to accurately reflect the current actuarial risk to such property from floods; and

Whereas, Eventually, the Act will eliminate all subsidies and grandfathered rates, commonly referred to as Pre-FIRM subsidies; and

Whereas, FEMA recently released Preliminary Work Maps which are predictive of the new FIRMs expected to be adopted within the next two years; and

Whereas, The Preliminary Work Maps reflect current flood risk more accurately than the existing FIRMs, which were last updated in 2007; and

Whereas, According to the Preliminary Work Maps, the areas in the City at risk of flooding are expected to increase and the number of total properties in flood hazard areas is expected to nearly double from approximately 35,000 to 67,000 when the new FIRMs are adopted; and

Whereas, Under the Act, when FEMA adopts its new FIRMs, properties that had been receiving subsidized rates will now be required to pay actuarial-based premium rates that will be phased in over a five-year period at 20 percent per year, while newly mapped properties may be required to pay actuarial-based premium rates immediately; and

Whereas, The NYC Special Initiative for Rebuilding and Resiliency, an initiative created after Superstorm Sandy to consider how the City can be better protected against future natural disasters, estimates that premiums for buildings currently located in flood zones could increase by 2 to 10 times their current cost under a new FIRM; and

Whereas, For example, once the new premiums apply, a homeowner currently paying a premium of $1,410 per year whose home is four feet below the Base Flood Elevation ("BFE"), according to the new FIRM, would have an actuarial premium of $9,500 per year; and

Whereas, Under the five-year phase-in currently being proposed, the homeowner in that example would have to pay an annual increase of $1,618 per year until $9,500 is reached; and

Whereas, The Act requires that the Government Accountability Office ("GAO") conduct a study and report to Congress on Pre-FIRM structures and the options for eliminating the subsidy to such structures; and

Whereas, The GAO study has been delayed for as much as two years; and

Whereas, When the study is released, it may show that the elimination of Pre-FIRM subsidies was unnecessary and overly burdensome on the poor and middle class; and

Whereas, At the conclusion of the GAO study, if the elimination of subsidies is found to be necessary, the Act should be amended to reduce the 20 percent premium rate increase per year the bill imposes as it will rapidly increase premiums for property owners; and

Whereas, Further, the Act would remove subsidized rates upon the lapse of a policy, purchase of a new policy or the sale of a property; and

Whereas, For the approximately 32,000 properties that find themselves in the floodplain for the first time when the new FIRMs are adopted, actuarial rates may be effective immediately, as entering into a new policy after such date triggers actuarial

rates; and

Whereas, The Act should be amended to allow newly mapped properties to participate in the phase-in of the actuarial rate without requiring them to purchase a preferred-risk policy prior to the adoption of the final FIRM; and

Whereas, For buyers wishing to purchase a property in an NFIP participating area after the new FIRMs are adopted, actuarial rates will be effective immediately even if that home would have been eligible for a gradual phase in prior to its sale; and

Whereas, The Act should be amended to allow for current subsidized rates to continue upon the sale of a property, allowing the new buyer to participate in the phase-in of the actuarial rate, as prospective buyers will likely be deterred from purchasing homes in flood-prone areas when they factor in the monthly cost of flood insurance at an actuarial rate; and

Whereas, The NFIP should allow for higher deductibles; and

Whereas, Current baseline deductibles start at $1,000 and $2,000 depending on whether the building is a Post-FIRM or Pre-FIRM construction, respectively; and

Whereas, Allowing the deductible for 1 to 4 family homes to be raised to $4,000 could reduce premium rates up to 15 percent, and raising the deductible for 1 to 4 family homes to $50,000, as is permitted for other residential and non-residential buildings, could reduce their premiums rates up to 43.5 percent; and

Whereas, The NFIP should reduce premiums for partial mitigation and building type; and

Whereas, Currently, the only factors for determining flood premiums post-Biggert-Waters are the flood zone and the elevation of its lowest occupied floor relative

to BFE; and

Whereas, Elevating a building or vacating the ground floor are cost-prohibitive or, in some cases, impossible with the majority of NYC's building stock; and

Whereas, There are other factors which determine a building's actual risk for flood loss including construction materials, foundation type and whether the mechanicals have been elevated; and

Whereas, NFIP should give owners credit for the actual risk-mitigating alterations they make to their buildings; and

Whereas, The NFIP should treat cooperatives the same as condominiums; and

Whereas, Currently, condominium associations are able to receive separate policies for each of its units, however, cooperatives are only able to receive one policy for the entire building, leaving NYC cooperatives under-insured; and

Whereas, Unless the Act is amended, it will undoubtedly have huge implications for coastal areas in NYC by reducing property values in coastal communities and imposing economic hardships on property owners; now, therefore, be it

Resolved, That the Council of the City of New York calls upon the United States Congress to amend the Biggert-Waters Flood Insurance Reform Act of 2012.