Recommendation on ULURP Application No. N210095ZRY
Zoning for Coastal Flood Resiliency
By the New York City Department of City Planning

PROPOSED ACTIONS

The New York City Department of City Planning (DCP) is seeking city-wide zoning text amendment primarily and heavily modifying text within Article VI, Chapter 4 of the Zoning Resolution, previously titled “Special Regulations Applying in Flood Hazard Areas” and proposed to be renamed “Special Regulations Applying in Flood Zones”. The text amendment would make permanent the 2013 Flood Text, while making modifications, driven by four main goals outlined by DCP. These goals, with text modifications attached to each, are as follows:

1. Encourage resiliency throughout the current and future floodplains.
   a. Expand available regulations beyond the 1 percent annual chance floodplain to the 0.2 percent annual chance floodplain.
   b. Expand applicability from buildings to zoning lots.
2. Support long-term resilient design of all building types.
   a. Utilize the flood-resistant construction elevation in zoning regulations.
   b. Define a reference plane from which buildings can measure height and setback.
   c. Provide various other envelope modifications deriving from the 2013 Flood Text.
   d. Provide floor area exemptions for wet-floodproofed ground floor spaces.
   e. Provide floor area exemptions for dry-floodproofed ground floor spaces along retail corridors.
   f. Amend certain cellar regulations for floodproofed buildings.
   g. Amend certain street wall regulations for floodproofed buildings.
   h. Elevate ground floor regulations and uses to accommodate resiliency.
   i. Expand the availability of the cottage envelope option in low-density districts.
   j. Encourage parking below buildings in low-density districts.
   k. Expand on the existing BSA resiliency special permit.
   l. Create a new BSA special permit for ground floor use variance.
3. Allow for adaption over time through incremental retrofits.
   a. Encourage placement of mechanical equipment within and on top of buildings.
   b. Encourage placement of mechanical equipment in open areas.
c. Allow for placement of other important spaces above ground level.
d. Allow flood protection measures as permitted obstructions.
e. Facilitate resilient construction and elevation on waterfront sites.

4. Facilitate future recovery by reducing regulatory obstacles.
   a. Allow power systems as permitted obstructions citywide.
   b. Allow ramps and lifts as permitted obstructions citywide.
   c. Limit the growth of nursing homes in the floodplain.
   d. Provide disaster recovery provisions accessible in declared emergencies.
   e. Facilitate resiliency in waterfront recreation districts.

BACKGROUND

Hurricane Sandy

New York City is home to 520 miles of shoreline, providing the city with unique advantages alongside significant risks to flood-related natural disasters. While flooding can come from events such as heavy rainfall, coastal storms and hurricanes present a unique danger to the city, as was clearly realized in the aftermath of Hurricane Sandy in 2012. The city’s vulnerability to such a storm was made evident, as historic storm surges flooded unprecedented swaths of the city, not only causing massive damages to buildings and infrastructure, but costing human lives as well.

The city has been a participant in the National Flood Insurance Program since 1983. This program grants assistance for property owners after floods, but more proactive measures are deemed necessary in the city’s resiliency strategy. In the case of Hurricane Sandy, flood-related damages occurred well beyond the 1 percent annual chance floodplain, illustrating the need for proactive strategies to prepare for future disasters like Sandy, and make New York a more resilient city.

2013 Flood Text

In 2013, DCP introduced a temporary Flood Resiliency Zoning Text Amendment, intending to facilitate resilient construction mandated by Appendix G of the New York City Building Code. Adopted by the City Council on October 9, 2013, this text amendment introduced many of the provisions included in the Zoning for Coastal Flood Resiliency text amendment. These provisions include: allowing the height of a building to be measured by the Design Flood Elevation rather than the curb or ground level; allowing greater height where flood elevations are moderate; exempting access elements from zoned floor area; exempting ground floors from zoned floor area; facilitating above-ground parking; facilitating above-ground mechanical equipment; and mitigating blank street walls. The 2013 Flood Text was implemented as an emergency measure to facilitate resilient reconstruction of properties damaged by Sandy, and is expected to expire within a year of the adoption of new flood maps by FEMA, which is expected in the next few years.
2015 Recovery Text

In addition to the 2013 Flood Text, DCP, with the Mayor’s Office of Housing Recovery (HRO) and the Department of Housing Preservation and Development (HPD), introduced the Special Regulations for Neighborhood Recovery text amendment in 2015 to further facilitate resilient construction in certain coastal areas of Staten Island, Queens, and Brooklyn. This text amendment, adopted by the City Council on July 23, 2015, included provisions that complemented the 2013 Flood Text by further facilitating resilient reconstruction through zoning changes targeting low-density residential areas, facilitating the documentation process for non-complying and non-conforming uses, and establishing a new zoning envelope for smaller lots to help preserve neighborhood character while incentivizing resiliency. Designed to work in conjunction with the 2013 Flood Text and the Build-It-Back program administered by HRO and HPD, the 2015 Recovery Text expired in 2020.

COMMUNITY BOARD RESOLUTIONS

Each Manhattan Community Board was briefed by DCP at relevant committee meetings at least once through the months of November and December of 2020. Each Manhattan Community Board was given a 45-day period, simultaneous with the Manhattan Borough President time frame, to opine and present a resolution recommending approval or disapproval of the application.

Of the 12 Manhattan Community Boards, seven passed resolutions by December 28, 2020, regarding this application. Manhattan Community Boards 4, 7, 9, 10, and 12 plan to pass resolutions at their respective full board meetings in January, 2021. Of the seven that passed resolutions, four voted in favor of the application, while three voted against it. Five of the seven included conditions in their resolutions. The most common conditions were:

- Modify the text to restrict permitted obstructions in required yards, courts, and open spaces. While some Community Boards recommended that permitted obstruction provisions in this text amendment should not apply in their districts, others recommended Community Board approval for such obstructions, particularly concerning mechanical equipment and diesel generators (requested by four Community Boards).
- Provide robust and transparent funding mechanisms accompanying this text amendment to facilitate resiliency retrofits for existing buildings, particularly targeting small property owners wishing to opt into resiliency design standards (requested by two Community Boards).
- Further study the correlation between resilient design for existing buildings and new construction, and predicted savings on flood insurance costs, to better inform those opting into or mandated to comply with such resiliency design standards (requested by two Community Boards).
• Consider, in addition to the restriction of new nursing homes in the floodplain, restricting other building uses housing vulnerable populations, such as hospitals (requested by two Community Boards).
• Modify the text to require prompt consultation with the local Community Board(s) once a proposed Designated Recovery Area is in effect in the event of a future disaster (requested by two Community Boards).

BOROUGH BOARD RECOMMENDATION

The Manhattan Borough Board received a presentation from DCP about this proposed text amendment at its November 19, 2020 meeting. Members raised questions and concerns which were fielded by representatives from the agency. Informed by these concerns, as well as by issues raised by individual Manhattan Community Boards during their public hearings, the Borough Board agreed at its December 17, 2020 meeting to postpone the final vote to January 2021.

The draft resolution as it stands on the date of this document recommends approval of the application with the following conditions:

• Within historic districts, require special permit approval from the City Planning Commission for any new building to utilize this text amendment, with proper notification to and review from relevant Community Boards and Borough Presidents, and require that any design and zoning changes pursuant to this text amendment be subject to approval from the Landmarks Preservation Commission;
• Within special zoning districts, require special permit approval from the City Planning Commission for any new building to utilize this text amendment, with proper notification to and review from relevant Community Boards and Borough Presidents;
• For new buildings along primary streets in commercial districts, require dry floodproofing without granting any zoning exemptions or changes;
• For existing buildings along primary streets in commercial districts, limit height increases due to exempted ground floor area related to dry floodproofing to one floor of no more than 15 feet above the existing building;
• For new buildings outside of primary streets in commercial districts, require wet floodproofing or dry floodproofing without granting any zoning exemptions or changes;
• For existing buildings, limit reference plane to equal the Flood Resistant Construction Elevation according to the New York City Building Code;
• For new buildings, eliminate the reference plane provision and instead continue to measure building height from the curb level or base plane as currently measured;
• For small property owners who are seeking or are required to comply with floodproofing provisions, DCP must work with other relevant agencies to create or identify sufficient funding streams for these property owners to properly implement such measures;
- Proposed ZR § 64-312(a)\(^1\) should only be applicable to residential districts R1 through R5;
- Clearly define “primary street frontages” in commercial districts where dry floodproofing provisions would apply, and restrict the definition of “severe disaster” to natural disasters related to flooding and the purposes of this text amendment;
- In relation to the concurrent Governors Island rezoning, both zoning actions must be coordinated in order to ensure that no information, briefing, or proposal be undermined or contradicted, that each proposal be as transparent as possible, and each be amended to be consistent with and to complement the other; and
- Include a maximum number of variances that can be allowed by the Board and Standards of Appeals for any single site.

BOROUGH PRESIDENT'S COMMENTS

Resiliency is an important and timely priority for New York City. The impact of climate change on a coastal city like New York includes our vulnerability to rising sea levels, increasingly frequent coastal storms, and other events related to a sea level rise. These necessitate a swift and proactive resiliency framework that is holistic, cohesive, and adaptable in response to climate change.

Hurricane Sandy devastated Manhattan and the city at large. With properties inundated and damaged beyond repair from immense flooding, and lives lost due to the city’s lack of a resiliency strategy, a citywide framework would have prevented these human, physical, and economic losses. Since 2012, the City has taken important steps toward increased resiliency, through zoning tools and funding mechanisms for reconstruction and retrofitting, large capital projects like the East Side Coastal Resiliency Project, and other initiatives. However, there is still more to do.

A resiliency framework must be multifaceted and will require a multitude of resources, the coordination of city agencies, and support from state and federal government. From Housing Preservation and Development, to Small Business Services, to City Planning, to Environmental Protection and the Human Resources Administration, each agency has a pivotal role in this effort. This text amendment is an example of the collaboration between agencies necessary to achieve such a citywide framework. As the New York City Building Code was amended to mandate resilient building design in the floodplain, zoning regulations were identified as conflicting with such resiliency initiatives, slowing and in some cases prohibiting intended results. This application intends to facilitate such resiliency goals put forth by the Building Code, allowing for property owners to maintain as-of-right floor area, move necessary facilities above ground and flood levels, and ensure that resiliency code requirements are feasible for new and existing buildings. Zoning is a key but not the sole tool required to achieve resiliency.

\(^1\) This section of the proposed text amendment is meant to allow for mechanical equipment to be a permitted obstruction in all required yards, courts, and open spaces.
A text amendment such as this is timely and necessary. However, the review process has revealed contention over the details. These must be addressed by the City in order to make our building stock resilient.

**Historic and special districts**

Manhattan is home to an array of historic and special zoning districts, each with its own regulations regarding height, bulk, street wall, design, and other elements of the built environment. Due to the risks inherent to a 1 percent annual chance floodplain, and the 0.2 percent floodplain, these districts would overlap significantly with those where this text amendment applies. These districts are very intentional in their zoning restrictions and allowances, meant to either preserve the historic character of the area, or allow for and facilitate certain uses, and in either case to promote a certain intended outcome within the built environment.

This text amendment would take precedent over many regulations that protect these districts. I am concerned that this change could compromise the character of these districts and the physical changes brought about by new construction. It is in the best interest of the city to implement measures to explicitly protect and preserve these districts as they exist.

**Maintaining a consistent and vibrant street wall**

A major component of this application is the facilitation of floodproofing, both dry and wet, for buildings within the floodplain. While a building can opt into either type of floodproofing, the two differ in their treatment of the street wall and frontage. Dry floodproofing promotes a consistent and accessible street wall, while wet floodproofing often results in elevated ground floors with little connection to the street and sidewalk, and an inconsistent street wall.

While both types should be implemented, dry floodproofing should be utilized as much as possible, particularly in high density residential and commercial areas, in order to maintain a vibrant and permeable ground floor without sacrificing resiliency standards. The text amendment incentivizes dry floodproofing along commercial corridors, but the City must require that building owners meet dry floodproofing standards in these areas.

**New construction and existing buildings**

This proposed text amendment does little to differentiate zoning provisions between new and existing buildings. Most of the language and provisions pertain to all buildings within the floodplain, arguably favoring new construction because the cost of incorporating resiliency standards into a new design is negligible compared to that of a retrofit. The Building Code stipulates much of the design framework articulated in the text amendment. New developments would already be required to apply such resiliency standards, and thus should not be given zoning incentives to do so.
Existing buildings should uniquely qualify for such zoning changes. This would incentivize retrofits that are not mandated, but would result in a much more resilient building stock. I believe that this higher degree of resiliency would be equal to or greater than the resiliency of new construction. Our planning must emphasize the resiliency of existing buildings, particularly small properties and their owners, and meeting the challenges that arise with such an effort.

Our efforts must also prioritize the resiliency of those communities most impacted by Hurricane Sandy because of their vulnerability to future storms. Our city’s resiliency framework must support these individuals, their homes, and their businesses through zoning or any other mechanism if we are to achieve a future that is truly resilient.

BOROUGH PRESIDENT’S RECOMMENDATION

I therefore recommend approval of the application with conditions. Such conditions, to be amended prior to adoption of the application, and to only apply within the floodplain, are as follows:

- Continue to have these provisions apply to buildings rather than zoning lots within the floodplain, so as to differentiate between new and existing buildings;
- Within historic districts, require proper notification to relevant Community Boards and Borough Presidents, and require that any design and building envelope changes pursuant to this text amendment be subject to the approval of the Landmarks Preservation Commission;
- Within special zoning districts, require proper notification to relevant Community Boards and Borough Presidents;
- For new buildings along primary streets in commercial districts, require dry floodproofing without granting any zoning exemptions or changes;
- For existing buildings along primary streets in commercial districts, limit height increases due to exempted ground floor area related to dry floodproofing to one floor of no more than 15 feet above the existing building;
- For existing buildings in commercial districts or R6 through R10 districts, apply the optional floor area exemption for dry floodproofing (proposed ZR § 64-322(c)(1)\(^2\)), to promote such resiliency measures in these areas;
- For new buildings outside of primary streets in commercial districts, require wet floodproofing or dry floodproofing without granting any zoning exemptions or changes;

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\(^2\) This section of the proposed text amendment is meant to incentivize dry floodproofing along primary streets in commercial districts through a floor area exemption up to the width of a building’s street wall and 30 feet deep into the lot.
• For existing buildings outside of primary streets in commercial districts, when wet floodproofing is applied, limit the floor area exemption (proposed ZR § 64-322(c)(2)³) to 10,000 square feet;
• For existing buildings, limit reference plane to equal the Flood Resistant Construction Elevation according to the New York City Building Code;
• For new buildings, eliminate the reference plane provision and instead continue to measure building height from the curb level or base plane as currently measured;
• For small property owners who are seeking or required to comply with floodproofing provisions, DCP must work with other relevant agencies to create or identify sufficient funding streams for these property owners to properly implement such measures; and
• Proposed ZR § 64-312(a) should only be applicable to residential districts R1 through R5.

³ This section of the proposed text amendment is meant to restore reimburse floor area of a building that has wet floodproofed its ground floor, by exempting such floor area.

Gale A. Brewer
Manhattan Borough President