Zoning for Coastal Flood Resiliency Chapter 23: Conceptual Analysis

A. INTRODUCTION

As detailed in Chapter 1, "Project Description," the New York City Department of City Planning (DCP) is proposing a zoning text amendment to update the Special Regulations Applying in Flood Hazard Areas (Article VI, Chapter 4) of the New York City Zoning Resolution (ZR), which includes the "Flood Resilience Zoning Text" (the "2013 Flood Text") and "Special Regulations for Neighborhood Recovery" (the "2015 Recovery Text"). These temporary zoning rules were adopted on an emergency basis to remove zoning barriers that were hindering the reconstruction and retrofitting of buildings affected by Hurricane Sandy and to help ensure that new construction there would be more resilient. The 2013 Flood Text provisions are set to expire with the adoption of new and final Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), which is anticipated to occur within the next few years. Applicability of the 2015 Recovery Text expired in July 2020. Therefore, DCP is proposing a citywide zoning text amendment, "Zoning for Coastal Flood Resiliency" (the "Proposed Action"), to improve upon and make permanent the relevant provisions of the existing temporary zoning rules of the 2013 Flood Text and 2015 Recovery Text. In addition, the Proposed Action includes special provisions to help facilitate the city's long-term recovery from the COVID-19 pandemic and its associated economic effects by providing more time for existing nonconforming uses to reopen and builders to undertake certain construction projects. The Proposed Action also includes updates to other sections of the ZR, including the Special Regulations Applying in the Waterfront Area (Article VI, Chapter 2) and provisions within various Special Purpose Districts. The Proposed Action would mostly affect New York City's current 1% annual and 0.2% annual chance floodplains. However, select provisions of the Proposed Action would be applicable citywide. To help the City prepare for or respond to other disasters, select provisions in the Proposed Action regarding power systems and other mechanical equipment, ramps and lifts, vulnerable populations, and disaster recovery rules, would be applicable citywide.

The Proposed Action would create a series of new discretionary approvals, including authorizations and special permits, as well as modifications to existing special permits, all of which may be sought at a later date. The Proposed Action would create a new special permit, ZR Section 73-72, "Special Permit for Ground-Floor Uses in Residence Districts," that can be granted by the New York City Board of Standards and Appeals (BSA). This special permit would allow the ground floor of buildings in residential zoning districts to be used as offices listed in Use Group 6B, if the space is dry-floodproofed according to flood-resistant construction standards and meets certain conditions. The Proposed Action would also modify ZR Section 64-81, "Special Permit for Modification of Certain Zoning Regulations," to allow buildings in the city's floodplains to have additional zoning flexibility in order to meet flood-resistant construction standards (and moving the text to ZR Section 73-71).

This chapter conceptually analyzes scenarios in which the above-referenced special permits are sought. The analysis is intended to present a conservative, cumulative assessment of potential significant adverse impacts that could occur as a result of the Proposed Action. The potential effects of these special permits are analyzed conceptually in this chapter, and preliminary conclusions are based specifically on the Conceptual Analysis Sites, detailed below.

If the proposed discretionary actions that are considered conceptually in this chapter are formally sought, they would require separate environmental review, conducted pursuant to $20\underline{20}14$ City Environmental

Quality Review (CEQR) Technical Manual guidance. If the environmental reviews were to find the potential for significant adverse impacts, the New York City Planning Commission (CPC) would have the authority to prescribe the necessary mitigation to offset and/or minimize those adverse effects.

Additionally, as detailed in **Chapter 1**, the Proposed Action would include modifications to the existing BSA special permit for eating or drinking establishments that are located within waterfront recreation districts (i.e., C3 and C3A zoning districts). Restaurants are currently only allowed in these districts through a BSA special permit, which must be renewed every five years. To reduce the time and cost burden of getting repeated BSA approvals, the Proposed Action would extend the special permit term from five to 10 years for new applicants. Additionally, for existing establishments that are pursuing renewals, the term would be established by the BSA. These changes would allow building owners to focus their investment in resiliency improvements and other partial resiliency strategies, thereby helping to decrease existing vulnerabilities, as most buildings are located at the waterfront and are therefore at high-risk of flooding. As the Proposed Action would not change use, density, or bulk regulations in this special permit modification, conceptual analysis is not warranted. Additionally, as discussed above, if a special permit for restaurants in waterfront recreation districts was formally sought, a separate environmental review would be required pursuant to CEQR.

Additionally, as detailed in **Chapter 1**, the Proposed Action would include rules that could be made available to facilitate the recovery process from future disasters, some of which would be implemented now to help address the COVID-19 pandemic and its associated economic effects. The Proposed Action would include a series of disaster recovery provisions that could be made available through a text amendment when a disaster occurs. Adding these provisions to the ZR would offer a useful roadmap for the public, planners, and decision-makers when working to recover from a disaster. Applicable recovery provisions would be selected based on the issues caused by the disaster and would be available for a limited time period (set at the time of the text amendment). The provisions could be limited to designated recovery areas whose extent would be determined based on the disaster's impacts and the City's recovery plans.

The recovery provisions would include a range of rules that could facilitate the recovery process from disasters which cause physical impacts. The 2013 Flood Text and the 2015 Recovery Text included a set of rules that facilitated the reconstruction and retrofit of Hurricane Sandy-damaged buildings, and therefore could also be useful after any other disasters that lead to a concentration of physical damage in the city. The Proposed Action would build upon this set of provisions and include modifications to the damage and destruction thresholds set forth in the underlying zoning rules to allow the reconstruction of non-complying buildings and non-conforming uses. It would also include modifications to building envelope rules to allow non-compliances to be increased, or even created, in the event new regulations would require damaged buildings be replaced in a slightly different shape and form. (For example, after Hurricane Sandy, new Building Code regulations were adopted and required buildings to elevate beyond the minimum level required prior to the storm.) These provisions would also include an allowance for property owners to use their tax lot as their zoning lot when applying zoning rules, which was found necessary in many waterfront communities. Lastly, it would allow the documentation process for obtaining DOB permits to be simplified for disaster-damaged buildings.

The recovery provisions would also facilitate the recovery process from a wider range of disasters including those that do not involve physical impacts, such as pandemics. This set of provisions is mostly drawn from the lessons learned during the COVID-19 pandemic response. The provisions would provide a framework to allow uses in zoning districts where they are not typically permitted to better respond to the situation then at hand. This framework would also allow possible relief from zoning rules that require permits to be sought with a specific timeframe, and those that require a certain level of construction and operation be completed to vest a project. It would also include possible relief from provisions that only allow nonconforming uses to remain inactive for a limited period of time (generally two years) before they can no longer legally reopen.

The Mayor's Executive Order No. 98 (March 12, 2020), which provided short-term relief from regulations hindering the pandemic recovery effort, included relief from construction timeframe and non-conforming use provisions. However, these allowances will cease when the Executive Order expires. Consistent with the general intent of the disaster recovery rules and the Mayor's Executive Order, the Proposed Action would extend the available timeframe for non-conforming uses to reactivate by an additional two years. In addition, the Proposed Action would allow for the extension of the timeframe required for substantial construction to take place under CPC special permits and authorizations for an additional term. These changes would provide greater certainty to residents, business and building owners, and therefore support the city's recovery from the ongoing pandemic.

As the geography of potential future events is unpredictable, potential conceptual impacts of the proposed disaster recovery rules cannot be analyzed at this time. Nevertheless, as discussed above, if they were formally sought after a future event, a separate environmental review would be required pursuant to CEQR.

B. PRINCIPAL CONCLUSIONS

The Proposed Action would not result in any significant adverse impacts to any CEQR technical area. As detailed below, the anticipated retrofitting work on the Conceptual Analysis Sites would require special permits subject to BSA approval. Detailed and site-specific analyses of the potential effects of the anticipated With-Action projects pursuant to the *CEQR Technical Manual* would be made at the time of the special permit applications in order to make an impact determination. In its reviews, BSA would be required to conclude that the proposed buildings meet Appendix G requirements and determine that the other required findings of the special permits are met. These future special permit applications, if determined to meet the findings, thereby would not result in significant adverse impacts to any CEQR technical area pursuant to *CEQR Technical Manual* guidance.

C. METHODOLOGY & ANALYSIS FRAMEWORK

Under the New York State Environmental Quality Review Act (SEQRA), a conceptual analysis is warranted if a proposal creates new discretionary actions that are broadly applicable, even when projects seeking those discretionary actions will trigger future, separate environmental reviews. SEQRA's goal is to incorporate environmental considerations into the decision-making process at the earliest possible opportunity. This conceptual analysis provides a qualitative assessment of development pursuant to the above-referenced special permits. While these discretionary approvals would trigger environmental review at the time they are sought, the environmental effects of these approvals were analyzed conceptually, as a means of disclosing future potential significant adverse impacts.

As the Proposed Action would modify and create new discretionary actions, an assessment of the potential environmental impacts that could result from these actions within the city's floodplains is warranted. However, because it is not possible to predict whether a discretionary action would be pursued on any one site in the future, the reasonable worst-case development scenario (RWCDS) for the Proposed Action does not include consideration of specific projects that would seek these actions. To produce a reasonable analysis of the likely effects of these discretionary actions, two representative Conceptual Analysis Sites were identified, as detailed below. These two Conceptual Analysis Sites are presented to understand how the new discretionary actions could be utilized and to assess generically the potential environmental impacts that could result. Nevertheless, all potential significant adverse impacts related to these future discretionary actions would be disclosed through separate environmental reviews pursuant to CEQR at the time of application.

Conceptual Analysis Site 1: R5 Residence District, 20-foot x 100-foot interior lot (2,000 sf) Three-Family Attached Residence, Existing Building Retrofit

The prototype utilizes a generic 20-foot by 100-foot interior lot in an R5 Residence District. These assumptions were made because they represent typical lot conditions in the city's floodplains. The prototype illustrates the opportunity to understand the potential effects of the proposed BSA ground-floor use special permit, detailed below (ZR Section 73-72, "Special Permit for Ground-Floor Uses in Residence Districts").

Existing Conditions

The existing condition on Conceptual Analysis Site 1 illustrates a three-unit attached residence with three stories and a cellar (see **Figure 23-1a**). The zoning lot is built with 2,460 square feet of zoning floor area (zsf), and has a floor area ratio (FAR) of 1.23, fitting within the maximum permitted FAR of 1.25 in R5 zoning districts (ZR 23-142). The building contains 3,280 square feet of gross floor area (gsf). The building was constructed prior to the 1961 Zoning Resolution and the lot does not contain any accessory parking spaces, therefore not meeting existing parking requirements of R5 zoning districts, where parking is required for 85 percent of dwelling units (DUs)¹ (ZR 25-23).

This existing building on Conceptual Analysis Site 1 does not meet the minimum Appendix G requirements, as it was constructed prior to the adoption of these regulations. The total building height is 29 feet above grade, fitting within the permitted building envelope of an R5 Residence District, which allows for a maximum building height of 40 feet and a maximum perimeter wall height of 30 feet (ZR 23-63). The building's mechanical, electric, and plumbing (MEP) equipment is located in the cellar.

No-Action Scenario

Under No-Action conditions, the proposed special permit would not be granted, and no changes to Conceptual Analysis Site 1 would occur (refer to **Figure 23-1a**).

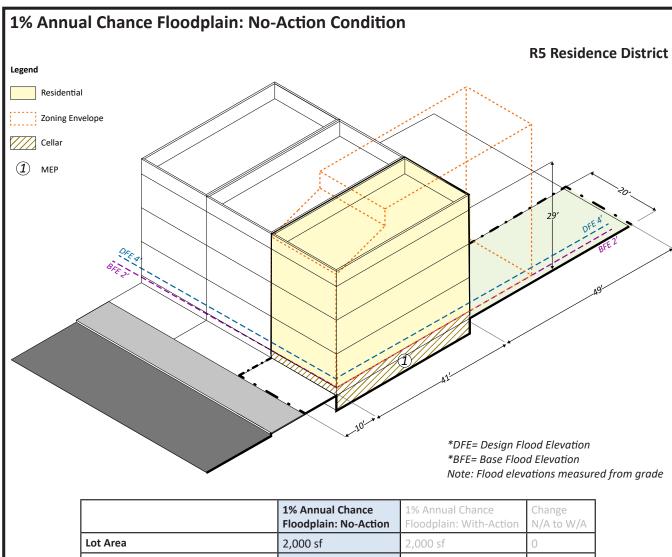
With-Action Scenario

Under With-Action conditions, the proposed special permit would be granted. Therefore, the existing building on Conceptual Analysis Site 1 would be retrofitted. As shown in **Figure 23-1b**, the With-Action scenario illustrates a retrofitted low-rise mixed-use professional office and residential building with four stories and three dwelling units. The ground floor is occupied by 720 zsf/gsf of professional office space and the residential floor area lost due to the office space is added as a partial story to the top of the building. As a result of the special permit, the zoning lot is built with a total of 2,980 sf, including 2,260 sf of residential zoning floor area and 720 sf of community facility zoning floor area. The site has a total FAR of 1.49, which is within the maximum permitted FAR of 1.85 in R5 zoning districts with community facilities. The building's gross floor area is 3,260 sf, and there would continue to be no parking spaces on the lot.

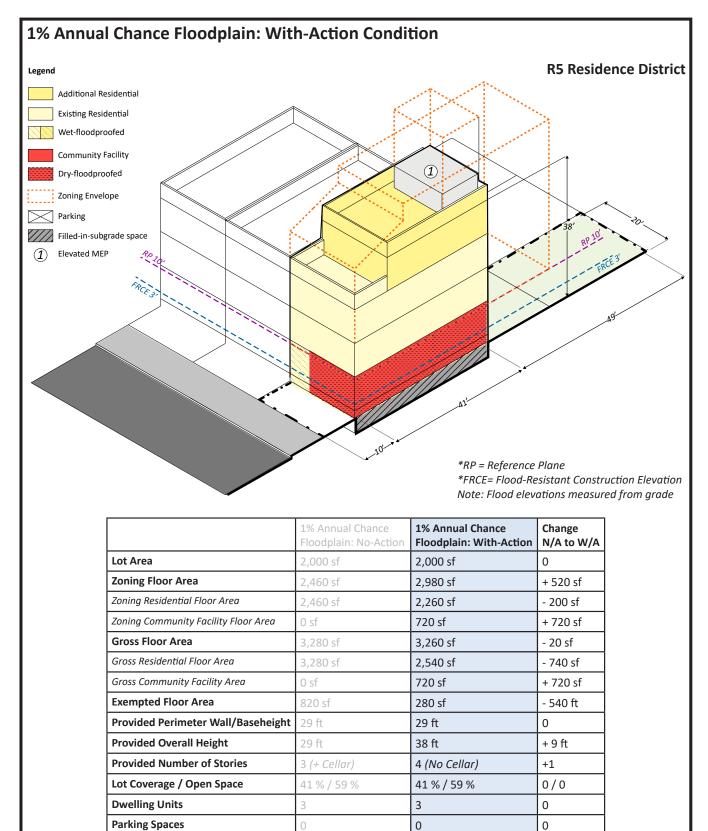
The lot is mapped with a Base Flood Elevation (BFE) of two feet above grade, according to FEMA's flood maps, resulting in a "flood-resistant construction elevation (FRCE) of three feet. In order to floodproof the building for the long term and exceed the minimum Appendix G requirements, the home is utilizing the "reference plane" allowance of 10 feet in the 1% flood zone, and the "first story above flood elevation" (FSAFE) is at 11 feet above grade to keep the existing building structure. The cellar is filled-in. The total building height is 38 feet with a perimeter wall of 29 feet, fitting within the permitted building envelope of

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¹ Per the Zoning Resolution, no existing #use# shall be deemed #non-conforming#, nor shall a #non-conformity# be deemed to exist, solely because of any of the following: (a) the existence of less than the required #accessory# off-street parking spaces.



	1% Annual Chance Floodplain: No-Action	1% Annual Chance Floodplain: With-Action	Change N/A to W/A
Lot Area	2,000 sf	2,000 sf	0
Zoning Floor Area	2,460 sf	2,980 sf	+ 520 sf
Zoning Residential Floor Area	2,460 sf	2,260 sf	- 200 sf
Zoning Community Facility Floor Area	0 sf	720 sf	+ 720 sf
Gross Floor Area	3,280 sf	3,260 sf	- 20 sf
Gross Residential Floor Area	3,280 sf	2,540 sf	- 740 sf
Gross Community Facility Floor Area	0 sf	720 sf	+ 720 sf
Exempted Floor Area	820 sf	280 sf	- 540 ft
Provided Perimeter Wall/Baseheight	29 ft	29 ft	0
Provided Overall Height	29 ft	38 ft	+ 9 ft
Provided Number of Stories	3 (+ Cellar)	4 (No Cellar)	+ 1
Lot Coverage / Open Space	41 % / 59 %	41 % / 59 %	0
Dwelling Units	3	3	0
Parking Spaces	0	0	0



an R5 District measured from a "reference plane" of 10 feet above grade. This allows for a maximum building height of 50 feet (40 feet plus 10 feet) and a maximum perimeter wall height of 40 feet (30 feet plus 10 feet). The portion of the first floor used for residential egress is wet-floodproofed and the portion used for a professional office is dry-floodproofed. The MEP equipment has been relocated from the basement to the roof of the building. The ground floor has a floor-to-floor height of 11 feet, while residential floors two through four have a floor-to-floor height of nine feet each.

Incremental Change

As a result of the With-Action scenario, there would be a net increase of 520 zsf and a net decrease of 20 gsf on Conceptual Analysis Site 1, allowing for an increase of nine feet in overall building height, not including MEP equipment. The With-Action scenario includes an incremental decrease of 200 zsf (740 gsf) of residential space and an incremental increase of 720 zsf/gsf of community facility space on the site. No additional DUs or parking spaces would be added as a result of the Proposed Action (refer to **Figure 23-1b**).

Conceptual Analysis Site 2: R4B Residence District, 20-foot x 100-foot interior lot (2,000 sf) Two-Family Attached Residence, Existing Building Retrofit

The prototype utilizes a generic 20-foot by 100-foot interior lot in an R4B Residence District. These assumptions were made because they represent typical lot conditions in the city's floodplains that would need additional flexibility to become resilient without losing existing floor area that was constructed prior to updated zoning regulations. The prototype illustrates the opportunity to understand the potential effects of the proposed modifications to the BSA resiliency special permit, detailed below (ZR Section 73-71, "Special Permit for Modification of Certain Zoning Regulations").

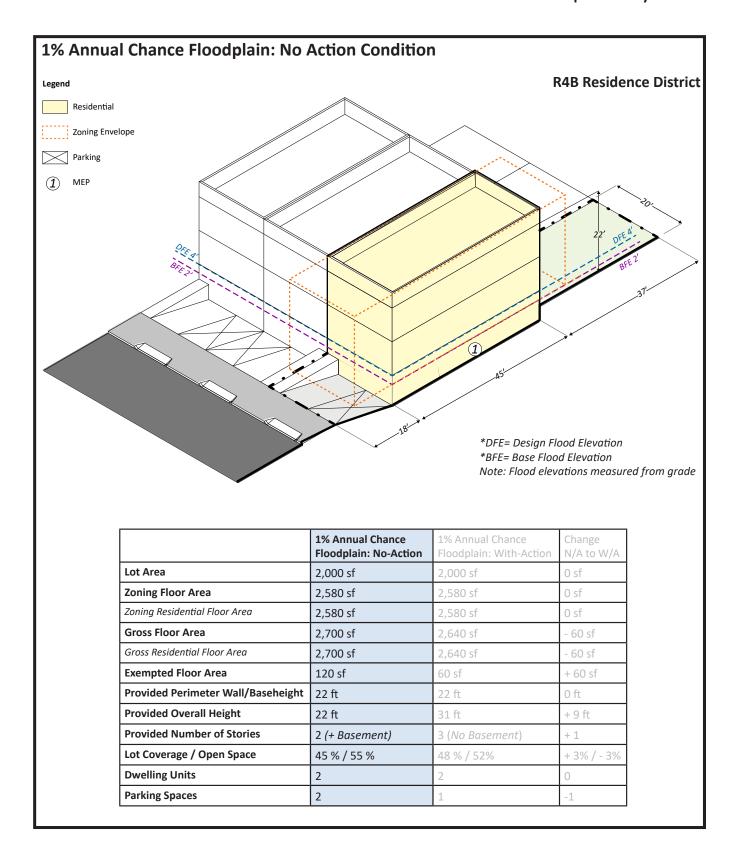
Existing Conditions

The existing condition on Conceptual Analysis Site 2 illustrates a two-unit attached residence with two stories and a basement, where one residential unit is partially located in the basement (see **Figure 23-2a**). The zoning lot is built with 2,580 sf of zoning floor area, and has an FAR of 1.29, exceeding the maximum permitted FAR of 0.90 in R4B zoning districts (ZR 23-142). The habitable space in the basement didn't count towards FAR when the building was built under the zoning regulations from 1961; however, in 1989, with modifications to the definition of floor area (ZR 12-10), the habitable space in the basement became non-compliant floor area. The building's gross floor area is 2,700 sf. The building contains one enclosed parking space in the basement of the building, and the lot contains an additional at-grade parking space in the front yard, complying with R4B zoning requirements (ZR 25-23).

This existing building on Conceptual Analysis Site 2 does not meet the minimum Appendix G requirements, as it was constructed prior to the adoption of these regulations. The total building height is 22 feet above grade, fitting within the permitted building envelope of an R4B Residence District, which allows for a maximum building height of 24 feet (ZR 23-631). The building's MEP equipment is located in the basement.

No-Action Scenario

Under No-Action conditions, the proposed special permit would not be granted, and no changes to Conceptual Analysis Site 2 would occur (refer to **Figure 23-2a**).



With-Action Scenario

Under With-Action conditions, the proposed special permit would be granted. Therefore, the existing building on Conceptual Analysis Site 2 would be retrofitted. As shown in **Figure 23-2b**, the With-Action scenario illustrates a retrofitted two-unit attached residence with three stories. In the With-Action scenario, the zoning lot would continue to be built with 2,580 sf of zoning floor area with an FAR of 1.29, above the maximum permitted FAR of 0.90 in R4B zoning districts. The proposed regulations would allow the existing floor area of habitable spaces to be relocated above the flood elevations. In the With-Action scenario, the building's gross floor area would be 2,640 sf. The lot would retain its at-grade parking space in the front yard, but would lose its garage, and therefore would not comply with underlying zoning requirements. However, the proposed regulations would allow flexibility in parking regulations for existing homes filling up their sub-grade parking spaces.

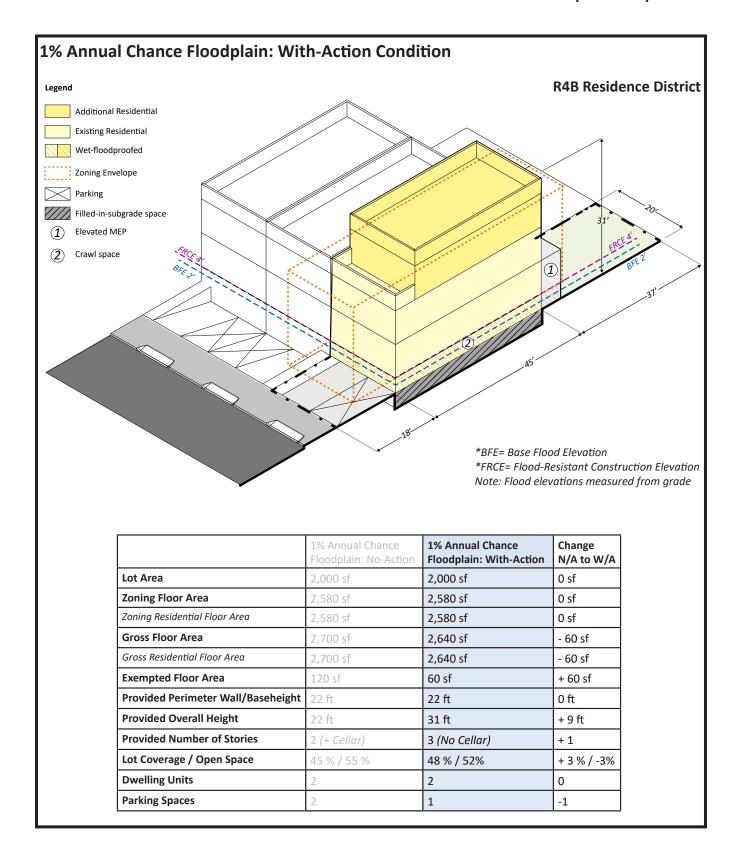
The lot of Conceptual Analysis Site 2 is mapped with a BFE of two feet above grade, according to FEMA's flood maps, resulting in a FRCE of four feet. In order to floodproof the building to meet the minimum Appendix G requirements in the With-Action scenario, the first occupiable floor would be four feet above grade and the sub-grade portion of the basement would be filled-in. The residential floor area lost due to the partially filled-in basement would be added as a partial story to the top of the building. The total building height would be 31 feet with a perimeter wall of 22 feet, fitting within the permitted building height allowance for the proposed special permit, which allows for a maximum building height of 38 feet (24 feet plus four feet FRCE plus 10 feet additional allowance). The MEP equipment would be relocated from the basement to above the FRCE in the rear yard addition. Additionally, the ground floor would have a four-foot crawlspace that would be wet-floodproofed, while residential floors two through four would have floor-to-floor heights of nine feet each.

Incremental Change

As a result of the With-Action scenario, there would be a net decrease of 60 gsf and a net increase of 60 sf of exempted floor area on Conceptual Analysis Site 2, allowing for an increase of nine feet in overall building height. The With-Action scenario would not include any changes to zoning floor area, uses, or number of DUs on the site. One parking space would be eliminated on the site as a result of the Proposed Action (refer to **Figure 23-2b**).

D. BSA GROUND-FLOOR USE SPECIAL PERMIT

The Proposed Action includes a new BSA special permit to allow buildings in residential zoning districts to use the ground-floor of the building for offices listed in Use Group 6B, if the space is dry-floodproofed according to Appendix G requirements and meets certain conditions (ZR Section 73-72, "Special Permit for Ground-Floor Uses in Residence Districts,"). This special permit would allow new and existing buildings in residential zoning districts to have extra floodproofing options beyond wet-floodproofing, while encouraging more active streetscapes. The BSA would have to find that the building complies with Appendix G requirements; that no access to such special permit use shall be from an entrance serving the residential portion of the building; that such use will generate a minimum of vehicular traffic and will not create traffic congestion; and that such use will not produce offensive noise, vibration or other objectionable effects. Additionally, the special permit would require such a use complies with applicable off-street parking regulations for ambulatory diagnostic or treatment health care facilities in Use Group 4, as set forth in Article II, Chapter 5 of the ZR. The office use would also have to follow accessory sign regulations for buildings with residences, as set forth in ZR Article II, Chapter 2.



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This proposed BSA ground-floor use special permit would provide a greater range of floodproofing options to buildings that today are only used as residential structures, considering how some existing structures face difficulties to wet-floodproof ground floors. The proposed special permit would also assist new buildings that want to provide uses other than parking, storage, or building access on the ground level. This framework can also benefit the streetscape of residential streets, as it allows for use options that go beyond parking, storage and building access, since these are currently the only uses that are allowed within wet-floodproofed ground floors.

As detailed above, Conceptual Analysis Site 1 is used as the basis for this conceptual analysis.

Land Use, Zoning, & Public Policy

As detailed above, as a result of the proposed BSA ground-floor use special permit, there would be a net increase of 520 sf of zoning floor area on Conceptual Analysis Site 1, increasing the site's FAR to 1.49, within the maximum permitted FAR of 1.85 in R5 zoning districts with community facilities. The Proposed Action would result in an incremental decrease of 200 zsf (740 gsf) of residential space and an incremental increase of 720 zsf/gsf of community facility space on the site. Additionally, in the future with the proposed special permit, Conceptual Analysis Site 1 would continue to have no parking.

The Proposed Action would allow for an increase of nine feet in overall building height, not including MEP equipment. As shown in **Figure 23-1b**, the anticipated With-Action building would have a perimeter height of 29 feet and a maximum building height of 38 feet, fitting within the permitted building envelope of an R5 Residence District measured from a "reference plane" of 10 feet, which allows for a maximum building height of 50 feet (40 feet plus 10 feet) and a maximum perimeter wall height of 40 feet (30 feet plus 10 feet).

The anticipated With-Action building on Conceptual Analysis Site 1 would require a special permit subject to BSA approval. In its review, BSA would be required to determine that the special permit use would not introduce an incompatible use or adversely conflict with zoning or applicable public policies, including New York City Waterfront Revitalization Program (WRP) consistency.

Detailed and site-specific analysis of the potential effect of the anticipated With-Action building on land use, zoning, and public policy would be made at the time of the special permit application in order to make an impact determination.

Socioeconomic Conditions

Conditions in the future with the BSA ground-floor use special permit on Conceptual Analysis Site 1 would not have the potential to significantly change the socioeconomic conditions of the area. Because the site is assumed to have an existing building that would be retrofitted in the future with the special permit, and no existing residents or employees would be displaced, an analysis of direct residential displacement or direct business displacement is not warranted. As the proposed retrofitting would not generate a net increase of more than 200 residential units or 200,000 sf of commercial space on Conceptual Analysis Site 1, it would not result in the indirect displacement of residents or businesses, or affect conditions within a specific industry. Therefore, the anticipated retrofitting work on Conceptual Analysis Site 1 in the future with the proposed special permit is not expected to result in changes to the area's socioeconomic conditions.

Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on socioeconomic conditions would be made at the time of the special permit application in order to make an impact determination.

Community Facilities & Services

The retrofitting of Conceptual Analysis Site 1 would not result in direct impacts on community facilities, as it would not displace or otherwise directly affect any public schools, libraries, childcare centers, health care facilities, or police or fire protection service facilities. Additionally, the retrofit of the site would not exceed the thresholds for a detailed analysis of schools, childcare facilities, libraries, police or fire services, or health care facilities. As such, further analysis of community facilities and services would not be warranted.

As detailed above, Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on community facilities and services would be made at the time of the special permit application in order to make an impact determination.

Open Space

The retrofitting of Conceptual Analysis Site 1 would not encroach on, cause a loss of, or limit public access to open space. Additionally, the retrofitting of the site would not exceed the thresholds for a detailed indirect analysis of open space resources. Therefore, further analysis of open space would not be warranted.

As discussed above, Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on open space would be made at the time of the special permit application in order to make an impact determination.

Shadows

As detailed above, as a result of the proposed BSA ground-floor use special permit, there would be a net increase of nine feet in overall building height, plus rooftop MEP equipment, on Conceptual Analysis Site 1. As shown in **Figure 23-1b**, the anticipated With-Action building would have a perimeter height of 29 feet and a maximum building height of 38 feet, fitting within the permitted building envelope of an R5 Residence District measured from a "reference plane" of 10 feet. However, if Conceptual Analysis Site 1 were located adjacent to sunlight-sensitive open space or historic resources, this increase in building height could have the potential to cast additional shadows on sunlight-sensitive resources.

The proposed special permit would require a separate environmental review, specific to the proposed retrofit. The review would consider the possibility of any significant adverse shadows impacts based on the unique nature of the project site location and proposed building orientation.

Historic & Cultural Resources

The retrofitting of the existing building on Conceptual Analysis Site 1 could affect historic architectural resources, although it is not expected to result in significant adverse archaeological resources as no additional in-ground disturbance would occur (refer to **Figure 23-1b**). Without specific development proposals, the location of project sites cannot be predicted. The proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on historic and cultural resources. If warranted, detailed and site-specific analysis of potential effects on historic and cultural resources would be made at the time of the special permit application in order to make an impact determination.

Urban Design & Visual Resources

As detailed above, as a result of the proposed BSA ground-floor use special permit, there would be a net increase of 520 sf of zoning floor area on Conceptual Analysis Site 1, increasing the site's FAR to 1.49, within the maximum permitted FAR of 1.85 in R5 zoning districts with community facilities. The Proposed Action would result in an incremental increase of 720 zsf/gsf of community facility space on the ground floor of the site and an incremental increase of nine feet in overall building height, not including MEP equipment. Therefore, the proposed With-Action building would result in physical alteration to the streetscape not allowed by zoning at the time of application, changing the pedestrian perspective in the vicinity of the site as compared to No-Action conditions.

The anticipated With-Action building on Conceptual Analysis Site 1 would require a special permit subject to BSA approval. In its review, BSA would be required to determine if the proposed use flood-resistant construction standards, access to the special permit use is not from an entrance serving the residential portion of the building, and the special permit use will not create traffic congestion, offensive noise, vibration, or other objectionable effects. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse urban design or visual resource impacts.

Detailed and site-specific analysis of the potential effect of the anticipated With-Action building on urban design and visual resources would be made at the time of the special permit application in order to make an impact determination.

Natural Resources

Conceptual Analysis Site 1 does not contain any natural resources. However, without specific development proposals, it is unknown if the site is located adjacent to natural resources. The proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on natural resources. If warranted, detailed and site-specific analysis of potential effects on natural resources would be made at the time of the special permit application in order to make an impact determination.

Hazardous Materials

The retrofitting of the existing building on Conceptual Analysis Site 1 is not expected to result in significant adverse hazardous materials impacts as no additional in-ground disturbance would occur (refer to **Figure 23-1b**). Nevertheless, the proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on hazardous materials.

Water & Sewer Infrastructure

The proposed With-Action building on Conceptual Analysis Site 1 would not result in more than 400 DUs or 150,000 sf of commercial space in a combined sewer area, or 25 DUs or 50,000 sf of commercial space in a separately sewered area. Therefore, further analysis of water and sewer infrastructure would not be warranted for the Proposed Action.

As discussed above, Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on water and sewer infrastructure would be made at the time of the special permit application in order to make an impact determination.

Solid Waste & Sanitation Services

The retrofitting of the existing building on Conceptual Analysis Site 1 is not expected to result in significant adverse solid waste and sanitation services impacts as the proposed With-Action building would not exceed the CEQR solid waste thresholds of 50 tons or 100,000 pounds per week. Nevertheless, the proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on solid waste and sanitation services.

Energy

The annual energy consumption for Conceptual Analysis Site 1 would be negligible compared to the overall demand within Con Edison's service area. Therefore, the retrofitting of the site would not result in significant adverse impacts on the City's energy system. The proposed special permit would require its own environmental review, requiring a site-specific energy impact assessment at the time of application.

Transportation

Although Conceptual Analysis Site 1 is not intended to represent a specific lot or location, for conservative analysis purposes, it is assumed to be located within CEQR Traffic Zone 5. Incremental changes to the site between the No-Action and With-Action scenarios would not trigger analysis as the development densities are less than the thresholds provided in Table 16-1 of the *CEQR Technical Manual*. Therefore, it is not expected that the proposed retrofit would result in significant adverse transportation impacts.

As discussed above, Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site, subject to BSA approval. In its review, BSA would be required to determine that the special permit use will generate a minimum of vehicular traffic to and through local streets and will not create traffic congestion. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse transportation impacts. If warranted, detailed and site-specific analysis of potential effects on transportation would be made at the time of the special permit application in order to make an impact determination.

Air Quality

The retrofitting of Conceptual Analysis Site 1 would result in a nominal increase in vehicular traffic volume, and would not exceed the applicable CO screening threshold of 170 auto trips per hour at an intersection, or the PM_{2.5} screening threshold of 12 heavy-duty diesel vehicles per peak hour. Therefore, a mobile source analysis would not be warranted, as no significant adverse mobile source air quality impacts would be expected.

The future environmental review of Conceptual Analysis Site 1 would include a stationary source screening assessment to determine the potential for emission from the heating, ventilation, and air condition (HVAC) systems of the building to affect nearby existing land uses of similar or greater height. Screening assessments for industrial and large/major emission sources would also be undertaken as part of the future environmental review effort. Depending on the screening results, a detailed analysis may be required.

As discussed above, Conceptual Analysis Site 1 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site, subject to BSA approval. In its review, BSA would be required to determine that the special permit use will generate a minimum of vehicular traffic to and through local streets and will not create traffic congestion; and that

such use will not produce offensive objectionable effects. Additionally, the special permit would require BSA to find that such a use conforms to all the other applicable off-street parking regulations as set forth in Article II, Chapter 5 of the ZR. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse air quality impacts.

Greenhouse Gas Emissions & Climate Change

Based on *CEQR Technical Manual* guidance, the retrofitting of Conceptual Analysis Site 1 would not warrant a greenhouse gas emissions (GHG) assessment because it would not result in development of 350,000 square feet or more.

As discussed above, the proposed special permit would require a separate environmental review, specific to the proposed project. Any future environmental review would consider the potential for significant adverse impacts with respect to GHG emissions and climate change.

Noise

Development of Conceptual Analysis Site 1 could result in stationary noise sources located near sensitive receptors or additional mobile noise sources that were not present previously. Approval of the proposed retrofit would require its own environmental review, specific to the proposed project and site, subject to BSA approval. In its review, BSA would be required to determine that the special permit use will not produce offensive noise or other objectionable effects. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse noise impacts. The review would assess any potential significant adverse noise impacts, including those related to new noise sources and/or sensitive receptors such as residential uses.

Public Health

As noted above, the retrofit of Conceptual Analysis Site 1 would be unlikely to result in significant adverse impacts related to air quality, water quality, hazardous materials, or noise. As such, development of the site is not expected to result in significant adverse effects on public health.

The proposed special permit would require a separate environmental review, specific to the proposed development, subject to BSA approval. In its review, BSA would be required to determine that the special permit use will generate a minimum of vehicular traffic to and through local streets and will not create traffic congestion; and that such use will not produce offensive noise, vibration, or other objectionable effects. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse public health impacts. The potential for significant adverse impacts on public health would be assessed as part of the site's future environmental review.

Neighborhood Character

As discussed above, the retrofit of Conceptual Analysis Site 1 may be required to provide detailed analyses of one of more of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise, in which case a screening assessment of neighborhood character would be necessary.

If warranted, detailed and site-specific analysis of potential effects of a proposed retrofit on neighborhood character would be made at the time of the special permit application in order to make an impact determination, subject to BSA approval. In its review, BSA would be required to determine that the special permit use will generate a minimum of vehicular traffic to and through local streets and will not create

traffic congestion; and that such use will not produce offensive noise, vibration, or other objectionable effects. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse neighborhood character impacts.

Construction

Construction work on Conceptual Analysis Site 1 in the future with the special permit would be required to follow regulations related to construction and would be expected to result in short-term conditions typical of construction sites in New York City. There are several screening thresholds potentially applicable to the proposed retrofitting work on the site. If the application is found to exceed any of these then a construction screening assessment would be necessary, and would be made at the time of the special permit application to BSA in order to make an impact determination.

E. BSA RESILIENCY SPECIAL PERMIT

The Proposed Action includes the modification of ZR Section 64-81, "Special Permit for Modification of Certain Zoning Regulations," and would move the text to ZR Section 73-71. This special permit modification would allow the BSA to modify a wider range of zoning regulations to assist buildings in meeting Appendix G requirements. This includes changing the existing regulations to height, by allowing buildings to exceed the maximum height allowed by the District by 10 percent or 10 feet, whichever is more. It would also allow the BSA to modify floor area, provided the total does not exceed the maximum allowed by the District by 20 percent or 10,000 square feet, whichever is more. In addition, the BSA would also be able to modify parking rules provided the applicant meets certain conditions. Lastly, the Special Permit would keep the allowance for the BSA to modify yards, permitted obstructions, and streetscape regulations, provided the applicant demonstrates that there would be a practical difficulty in complying with the Appendix G requirements without such modifications.

It is expected that this special permit modification would assist existing buildings with non-compliant yards, height, or floor area, as well as new buildings with constrained sites that are not eligible for a variance, but also cannot comply with as-of-right rules (i.e. porch issue, or reconstruction that cannot accommodate required parking).

As detailed above, Conceptual Analysis Site 2 is used as the basis for this conceptual analysis.

Land Use, Zoning, & Public Policy

As detailed above, as a result of the proposed BSA resiliency special permit, there would be an incremental decrease of 60 sf of gross floor area on Conceptual Analysis Site 2 and an increase of 60 sf of exempted floor area, allowing for an increase of nine feet in overall building height. The total building height would be 31 feet with a perimeter wall of 22 feet, fitting within the permitted building height requirements of R4B zoning districts, which permit a maximum building height of 36 feet (26 feet plus 10 feet). Additionally, the site would retain its at-grade parking space in the front yard, but would lose its garage, and therefore would not comply with underlying zoning requirements as a result of the special permit (refer to **Figure 23-2b**).

The anticipated With-Action building on Conceptual Analysis Site 1 would require a special permit subject to BSA approval. In its review, BSA would be required to determine that the site has a practical difficulty in complying with the Appendix G requirements without such modifications and that the building meets Appendix G requirements. Such an application, if determined to meet the findings, thereby would be

presumed to not introduce an incompatible use or adversely conflict with zoning or applicable public policies, including WRP consistency.

Detailed and site-specific analysis of the potential effect of the anticipated With-Action building on land use, zoning, and public policy would be made at the time of the special permit application in order to make an impact determination.

Socioeconomic Conditions

Conditions in the future with the BSA resiliency special permit on Conceptual Analysis Site 2 would not have the potential to significantly change the socioeconomic conditions of the area. Because the site is assumed to have an existing building that would be retrofitted in the future with the special permit, and no existing residents or employees would be displaced, an analysis of direct residential displacement or direct business displacement is not warranted. As the proposed retrofitting would not generate a net increase of more than 200 residential units or 200,000 sf of commercial space on Conceptual Analysis Site 2, it would not result in the indirect displacement of residents or businesses, or affect conditions within a specific industry. Therefore, the anticipated retrofitting work on Conceptual Analysis Site 2 in the future with the proposed special permit is not expected to result in changes to the area's socioeconomic conditions.

Conceptual Analysis Site 2 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on socioeconomic conditions would be made at the time of the special permit application in order to make an impact determination.

Community Facilities & Services

The retrofitting of Conceptual Analysis Site 2 would not result in direct impacts on community facilities, as it would not displace or otherwise directly affect any public schools, libraries, childcare centers, health care facilities, or police or fire protection service facilities. Additionally, the retrofit of the site would not exceed the thresholds for a detailed analysis of schools, childcare facilities, libraries, police or fire services, or health care facilities. As such, further analysis of community facilities and services would not be warranted.

As detailed above, Conceptual Analysis Site 2 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on community facilities and services would be made at the time of the special permit application in order to make an impact determination.

Open Space

The retrofitting of Conceptual Analysis Site 2 would not encroach on, cause a loss of, or limit public access to open space. Additionally, the retrofitting of the site would not exceed the thresholds for a detailed indirect analysis of open space resources. Therefore, further analysis of open space would not be warranted.

As discussed above, Conceptual Analysis Site 2 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on open space would be made at the time of the special permit application in order to make an impact determination.

Shadows

As detailed above, as a result of the proposed BSA resiliency special permit, there would be a net increase of nine feet in overall building height on Conceptual Analysis Site 2. As shown in **Figure 23-2b**, the anticipated With-Action building would have a perimeter wall height of 22 feet and a maximum building height of 31 feet, fitting within the permitted building envelope of an R4B Residence District. If Conceptual Analysis Site 2 were located adjacent to sunlight-sensitive open space or historic resources, this increase in building height could have the potential to cast additional shadows on sunlight-sensitive resources.

The proposed special permit would require a separate environmental review, specific to the proposed retrofit. The review would consider the possibility of any significant adverse shadows impacts based on the unique nature of the project site location and proposed building orientation.

Historic & Cultural Resources

The retrofitting of the existing building on Conceptual Analysis Site 2 could affect historic architectural and archaeological resources. As detailed in **Figure 23-2b**, three percent of additional lot area would be disturbed during construction of the proposed With-Action building. This additional in-ground disturbance could result in impacts to archaeological resources. However, without specific development proposals, the location of project sites cannot be predicted. The proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on historic and cultural resources. If warranted, detailed and site-specific analysis of potential effects on historic and cultural resources would be made at the time of the special permit application in order to make an impact determination.

Urban Design & Visual Resources

As detailed above, as a result of the proposed BSA resiliency special permit, there would be an incremental decrease of 60 sf of gross floor area and an increase of 60 sf of exempted floor area on Conceptual Analysis Site 2, allowing for an increase of nine feet in overall building height. The total building height would be 31 feet with a perimeter wall of 22 feet, fitting within the permitted building height requirements of R4B zoning districts, which permit a maximum building height of 36 feet (26 feet plus 10 feet). Additionally, the site would retain its at-grade parking space in the front yard, but would lose its garage, and therefore would not comply with underlying zoning requirements as a result of the special permit (refer to **Figure 23-2b**). Therefore, the proposed With-Action building would result in physical alteration to the streetscape not allowed by zoning at the time of application, changing the pedestrian perspective in the vicinity of the site as compared to No-Action conditions.

The anticipated With-Action building on Conceptual Analysis Site 2 would require a special permit subject to BSA approval. In its review, BSA would be required to determine that the site has a practical difficulty in complying with the Appendix G requirements without such modifications and that the building meets Appendix G requirements. Such an application, if determined to meet the findings, thereby would be presumed to not result in significant adverse urban design or visual resource impacts.

Detailed and site-specific analysis of the potential effect of the anticipated With-Action building on urban design and visual resources would be made at the time of the special permit application in order to make an impact determination.

Natural Resources

Conceptual Analysis Site 2 does not contain any natural resources. However, without specific development proposals, it is unknown if the site is located adjacent to natural resources. The proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on natural resources. If warranted, detailed and site-specific analysis of potential effects on natural resources would be made at the time of the special permit application in order to make an impact determination.

Hazardous Materials

The retrofitting of the existing building on Conceptual Analysis Site 2 may result in significant adverse hazardous materials impacts. As detailed in **Figure 23-2b**, three percent of additional lot area would be disturbed during construction of the proposed With-Action building. This additional in-ground disturbance could result in hazardous materials impacts. The proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on hazardous materials.

Water & Sewer Infrastructure

The proposed With-Action building on Conceptual Analysis Site 2 would not result in more than 400 DUs or 150,000 sf of commercial space in a combined sewer area, or 25 DUs or 50,000 sf of commercial space in a separately sewered area. Therefore, further analysis of water and sewer infrastructure would not be warranted for the Proposed Action.

As discussed above, Conceptual Analysis Site 2 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on water and sewer infrastructure would be made at the time of the special permit application in order to make an impact determination.

Solid Waste & Sanitation Services

The retrofitting of the existing building on Conceptual Analysis Site 2 is not expected to result in significant adverse solid waste and sanitation services impacts as the proposed With-Action building would not exceed the CEQR solid waste thresholds of 50 tons or 100,000 pounds per week. Nevertheless, the proposed special permit would require its own environmental review, specific to the proposed retrofit. Future environmental review would consider the possibility of any significant adverse impacts on solid waste and sanitation services.

Energy

The annual energy consumption for Conceptual Analysis Site 2 would be negligible compared to the overall demand within Con Edison's service area. Therefore, the retrofitting of the site would not result in significant adverse impacts on the City's energy system. The proposed special permit would require its own environmental review, requiring a site-specific energy impact assessment at the time of application.

Transportation

Although Conceptual Analysis Site 2 is not intended to represent a specific lot or location, for conservative analysis purposes, it is assumed to be located within CEQR Traffic Zone 5. Incremental changes to the site between the No-Action and With-Action scenarios would not trigger analysis as the development densities

are less than the thresholds provided in Table 16-1 of the *CEQR Technical Manual*. Therefore, it is not expected that the proposed retrofit would result in significant adverse transportation impacts.

As discussed above, Conceptual Analysis Site 2 would require a special permit and a separate environmental review in the future, specific to the proposed construction on the site. If warranted, detailed and site-specific analysis of potential effects on transportation would be made at the time of the special permit application in order to make an impact determination.

Air Quality

The retrofitting of Conceptual Analysis Site 2 could result in a nominal increase in vehicular traffic volume, and would not exceed the applicable CO screening threshold of 170 auto trips per hour at an intersection, or the PM_{2.5} screening threshold of 12 heavy-duty diesel vehicles per peak hour. Therefore, a mobile source analysis would not be warranted, as no significant adverse mobile source air quality impacts would be expected.

The future environmental review of Conceptual Analysis Site 2 would include a stationary source screening assessment to determine the potential for emission from the HVAC systems of the building to affect nearby existing land uses of similar or greater height. Screening assessments for industrial and large/major emission sources would also be undertaken as part of the future environmental review effort. Depending on the screening results, a detailed analysis may be required.

Greenhouse Gas Emissions & Climate Change

Based on *CEQR Technical Manual* guidance, the retrofitting of Conceptual Analysis Site 2 would not warrant a GHG assessment because it would not result in development of 350,000 square feet or more.

As discussed above, the proposed special permit would require a separate environmental review, specific to the proposed project. Any future environmental review would consider the potential for significant adverse impacts with respect to GHG emissions and climate change.

Noise

Development of Conceptual Analysis Site 2 is not expected to result in stationary noise sources located near sensitive receptors or additional mobile noise sources that were not present previously. Approval of the proposed retrofit would require its own environmental review, specific to the proposed project and site. The review would assess any potential significant adverse noise impacts, including those related to new noise sources and/or sensitive receptors such as residential uses.

Public Health

As noted above, the retrofit of Conceptual Analysis Site 2 could potential result in significant adverse impacts related to hazardous materials. Nevertheless, approval of the proposed retrofit would require its own environmental review, specific to the proposed project and site. The review would assess any potential significant adverse public health impacts.

Neighborhood Character

As discussed above, the retrofit of Conceptual Analysis Site 2 may be required to provide detailed analyses of one of more of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows;

transportation; and noise, in which case a screening assessment of neighborhood character would be necessary.

If warranted, detailed and site-specific analysis of potential effects of a proposed retrofit on neighborhood character would be made at the time of the special permit application in order to make an impact determination.

Construction

Construction work on Conceptual Analysis Site 2 in the future with the special permit would be required to follow regulations related to construction and would be expected to result in short-term conditions typical of construction sites in New York City. There are several screening thresholds potentially applicable to the proposed retrofitting work on the site. If the application is found to exceed any of these then a construction screening assessment would be necessary, and would be made at the time of the special permit application to BSA in order to make an impact determination.