25.0 Conceptual Analysis

Introduction

A conceptual analysis is warranted if a proposed project establishes new discretionary actions that are broadly applicable even when projects seeking those actions will trigger a future, separate environmental review. It is the lead agency's responsibility to consider all possible environmental impacts of the new discretionary actions at the time it creates them.

Though the Proposed Actions provide a future as-of-right framework to achieve the stated land use objectives, this conceptual projects analysis focuses on a new discretionary action that is a Zoning Authorization (the zoning mechanism) that may be pursued by applicants in the future:

- A City Planning Commission (CPC) Authorization to allow for the bonus of floor area and height modification with the provision of publicly accessible open space.

The With-Action condition presented in **Chapter 1, Project Description**, is based on several factors and assumptions regarding where new development could reasonably be expected under with the With-Action condition, as well as the type and density of that development. The With-Action condition does not consider specific sites that would be developed in accordance with the zoning mechanism described above. The number and location of sites that may use the zoning mechanism cannot be predicted with certainty, and approval of the discretionary zoning action would be uncertain.

This chapter provides a conceptual analysis to generically assess potential environmental impacts that would result from development under the zoning mechanism. Development that seeks to use this new zoning mechanism would be subject to future discretionary approval, and any environmental impacts associated with such action would be assessed and disclosed pursuant to that environmental review, with a project-specific analysis beyond that provided below. Since the development assumptions examined below are subject to future approvals, the actions that are examined below are referred to as the "zoning mechanism" at one analyzed site.

Principal Conclusions

Based on available information of the zoning mechanism, there would be no significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; community facilities; open space; historic and cultural resources; hazardous materials; water and sewer infrastructure; solid waste and sanitation services; energy; and greenhouse gas emissions and climate change. The following technical areas require either detailed analysis or additional review beyond an initial assessment to determine the potential for significant adverse impacts: shadows; urban design and visual resources; transportation; air quality; noise; public health; neighborhood character; and construction.

Description of the Zoning Mechanism

To create opportunities for passive publicly accessible open space, the Atlantic Avenue Mixed-Use Special District would include a CPC Authorization to allow development in R9 equivalent districts to access the floor area bonus for public plazas in the New York City Zoning Resolution (ZR). The underlying public plaza program (ZR 37-70) allows bonuses at the densities but not in the zoning districts being mapped as part of the Proposed Actions. These districts have street wall and maximum building height requirements. The typical 20 percent maximum floor area bonus would apply. The bonus ratio would be 4:1, like in equivalent zoning districts (C6-3). The zoning mechanism would be available for zoning lots greater than 25,000 square feet (sf) and would allow modification of street wall and maximum height requirements to accommodate the on-site plaza and bonus floor area. In addition, the zoning mechanism would allow modifications to the plaza design requirements to encourage spaces that reflect the mixed-use character of the area.

Conceptual Development Site 1 (Block 1126, Lots 7, 8, 13)

Conceptual Development Site 1 is Projected Development Site 9 in the reasonable worst-case development scenario (RWCDS) discussed in **Chapter 1, Project Description**. Conceptual Development Site 1 has a total lot area of approximately 30,775 sf. Under the Proposed Actions, it would have a maximum permitted floor area ratio (FAR) of 9.0, 6.0, and 7.5 for residential, commercial, and community facility uses, respectively.

Conceptual Development Site 1 is currently occupied by a gas station and a one-story auto warehouse with parking. It is assumed the site would be developed with a new residential building with retail on the first two floors and publicly accessible open space in accordance with the future zoning mechanism, a CPC Authorization. With the zoning mechanism, Conceptual Development Site 1 would be developed with up to 302,268 sf of residential floor area, 36,512 sf of local retail on the first and second floors, and 6,625 sf of publicly accessible open space. Compared with the With-Action condition, the zoning mechanism would result in a net increase of up to 38,801 sf of residential floor area (approximately 41 dwelling units [DUs]), and a net decrease of 9,232 sf of local retail floor area (refer to **Table 25-1**).

Under the With-Action condition, developments can reach a maximum base height of 125 feet or 12 stories, before setting back, and a maximum building height of 185 feet or

18 stories. Under the zoning mechanism, developments can reach a maximum base height of 135 feet or 12 stories, before setting back, and a maximum building height of 230 feet or 22 stories. Therefore, the zoning mechanism would result in a net increment of 10 feet in base height and 45 feet in maximum building height (refer to **Table 25-1**).

Table 25-1: With-Action Versus Future Zoning Mechanism Condition

Scenario	Conceptual Development Site	RWCDS Site	Residential (DUs)	Residential (25% Affordable DUs)	Residential (30% Affordable DUs)	Commercial (sf)	Open Space (sf)	Base Height / Building Height
With-Action	1	9	279	70	84	45,744	-	125' / 185'
Future Discretionary Action	1	9	320	80	96	36,512	6,625	135' / 230'
Increment:			**+41**	**+10**	**+12**	**-9,232**	**+6,625**	**+10'/45'**

Conceptual Environmental Impact Analysis

Land Use, Zoning, and Public Policy

Conceptual Development Site 1 is a 30,775-sf corner lot located at the southeast corner of the intersection of Atlantic Avenue and Classon Avenue. As described above, the site is currently occupied by a gas station and a one-story auto warehouse with parking. Under the With-Action condition, an 18-story, 185-foot-tall mixed-use residential building would be constructed on the site with approximately 279 DUs, up to 84 permanently affordable DUs pursuant to Mandatory Inclusionary Housing (MIH), and 45,744 sf of local retail on the first and second floors. Under the With-Action condition, the site would be zoned C6-3A (R9 equivalent).

As shown in **Table 25-1**, the zoning mechanism would facilitate the development of 41 incremental DUs, up to 12 of which would be permanently affordable pursuant to MIH; 6,625 sf of passive publicly accessible open space; and a decrease of 9,232 sf of local retail space.

The zoning mechanism would provide a CPC Authorization in the Atlantic Avenue Mixed-Use Special District zoned with a R9 equivalent to access the public plaza program (ZR 37-70) with a bonus ratio of 4:1, like in equivalent zoning districts (C6-3). The zoning mechanism would be available for zoning lots greater than 25,000 sf and would allow modification of street wall and maximum height requirements to accommodate the on-site plaza and bonus floor area. In addition, the zoning mechanism would allow modifications to the plaza design requirements to encourage spaces that reflect the mixed-use character of the area.

The zoning mechanism would increase the permitted density of developments in the Atlantic Avenue Mixed-Use Special District but would not allow new uses not previously permitted in the With-Action condition.

The proposed zoning mechanism would not result in significant adverse impacts to land use, zoning, and public policy. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Socioeconomic Conditions

Direct Residential Displacement

Per 2021 *CEQR Technical Manual* guidance, direct displacement of fewer than 500 residents is not expected to alter the socioeconomic characteristics of a neighborhood. The zoning mechanism would permit an additional 41 DUs at Conceptual Development Site 1. This would not involve any direct residential displacement. Therefore, the zoning mechanism would not result in any significant adverse impact related to direct residential displacement. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Direct Business Displacement

Per 2021 *CEQR Technical Manual* guidance, if a project would directly displace more than 100 employees, an assessment of direct business displacement is appropriate. The zoning mechanism would decrease commercial area at Conceptual Development Site 1 by 9,232 sf. This decrease in local retail commercial space would result in a decrease of approximately 27 employees. Therefore, the zoning mechanism would not result in any significant adverse impact related to direct business displacement. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Indirect Residential Displacement

Per 2021 *CEQR Technical Manual* guidance, the first step in determining whether an indirect residential displacement analysis is required is to determine whether the proposed project would add new population with higher average incomes compared to the average incomes of the existing populations and any new population expected to reside in the study area without the project.

As described above, the zoning mechanism would generate up to 41 additional DUs at Conceptual Development Site 1. Similar to the analysis presented in **Chapter 3, Socioeconomic Conditions**, it is assumed for analysis purposes that these additional 41 DUs would adhere to MIH Option 1. Under Option 1, 25 percent of DUs (10) would be affordable to households earning 60 percent of Area Median Income (AMI), with 10 percent of those DUs affordable to households earning 40 percent of AMI.

Based on the information presented in **Tables 3-7** and **3-15** of **Chapter 3, Socioeconomic Conditions**, the average income of the population occupying the additional 41 DUs would be $19,761 less than the Study Area average. These 41 DUs would not noticeably change the average household income of the incoming population under the With-Action condition.

As shown in **Tables 3-9** and **3-20** of **Chapter 3, Socioeconomic Conditions**, the Study Area has experienced rising rents. This conceptual project would not introduce or accelerate

a trend that would potentially displace a vulnerable population. Therefore, the zoning mechanism would not result in any significant adverse impact related to indirect residential displacement. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Indirect Business Displacement

Per 2021 *CEQR Technical Manual* guidance, indirect displacement of businesses occurs when a project would markedly increase property values and rents throughout the study area, making it difficult for some categories of businesses to remain in the area. Additionally, indirect displacement of businesses may occur if a project directly displaces any type of use that either directly supports businesses in the area or brings a customer base to the area for local businesses, or if it directly or indirectly displaces residents or workers who form the customer base of existing businesses in the area.

The zoning mechanism would introduce approximately 100 residents to the area. As discussed above, these residents would have a household income below the Study Area average. The small increase in households is not likely to create changes in local market conditions that could lead to increased commercial property values that may displace existing businesses. Therefore, the zoning mechanism would not result in any significant adverse impact related to indirect business displacement. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Adverse Impacts on Specific Industries

Per 2021 *CEQR Technical Manual* guidance, it may be possible for a given project to affect the operation and viability of a specific industry not necessarily tied to a specific location. An example would be new regulations that prohibit or restrict the use of certain processes that are critical to certain industries. If the following questions cannot be answered with a clear "no," then a detailed investigation is appropriate:

- Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?
- Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?

The additional floor area generated by the zoning mechanism would be residential floor area. The reduction in local retail space would not affect business conditions in any industry or any category of business. The zoning mechanism would not substantially reduce employment. As described above, under the zoning mechanism, 27 fewer local retail jobs would exist at Conceptual Development Site 1. Therefore, the zoning mechanism would not result in any significant adverse impact on specific industries. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Community Facilities and Services

Development on Conceptual Development Site 1 would not displace or otherwise directly affect any public schools, childcare centers, libraries, health care facilities, or police and fire protection service facilities. The zoning mechanism would result in 41 additional DUs, of which up to 12 would be permanently affordable pursuant to MIH at Conceptual Development Site 1.

Utilization of elementary/intermediate schools in Community School District (CSD) 17, Subdistrict 1, and high schools in Brooklyn would rise slightly compared to the With-Action condition. The addition of up to 12 affordable units facilitated by the zoning mechanism would also result in a slight increase in demand for publicly funded childcare services compared to the With-Action condition.

Therefore, the zoning mechanism would not result in any significant adverse impacts related to community facilities. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Open Space

A preliminary quantitative assessment of open space is performed if an action would have a direct effect on an open space (e.g., displacement of an existing open space resource) or an indirect effect through increased population size. Indirect effects may occur when the population generated by an action would be sufficiently large to significantly diminish the ability of an area's open space to serve the future population. An assessment of indirect effects is warranted if the Proposed Actions would generate more than 200 residents or 500 nonresidents, or a similar number of other nonresidential users (e.g., the population introduced by a new university or college).

The zoning mechanism would not cause any direct impacts (i.e., encroach on, or cause a loss of, open space). The zoning mechanism would create new open space on sites that obtain approval via the zoning mechanism. At Conceptual Development Site 1, the 41 DUs created via the zoning mechanism would result in approximately 100 additional residents, which is fewer than the 200-resident threshold for further analysis.

Therefore, the zoning mechanism would not result in any additional significant adverse impacts beyond those disclosed under the With-Action condition related to open space. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Shadows

Shadows analysis is required if an action would result in new structures or additions to buildings result in structure over 50 feet in height that could cast shadow on sunlight-sensitive resources.

Without the zoning mechanism, development on Conceptual Development Site 1 would reach 185 feet. Development using the zoning mechanism would result in an additional 45 feet of height (230 feet total). Detailed and site-specific analysis of a project using the zoning mechanism would be made in any future application and would consider the potential for significant adverse shadow impacts.

Historic and Cultural Resources

Development using the zoning mechanism at Conceptual Development Site 1 would result in the same, but no additional, significant adverse impacts to architectural resources that were identified for the With-Action condition. As discussed in **Chapter 7, Historic and Cultural Resources**, development of Projected Development Site 9 (Conceptual Development Site 1) would not result in direct or indirect impacts to architectural resources.

Development using the zoning mechanism would not result in additional ground disturbance compared to the With-Action condition.

Therefore, the zoning mechanism would not result in any additional significant adverse impacts related to historic and cultural resources. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Urban Design and Visual Resources

An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. When an action could obstruct view corridors, compete with icons in the skyline, or would result in substantial alterations to the streetscape of the neighborhood by noticeably changing the scale of buildings, a more detailed analysis of urban design and visual resources would be appropriate.

Development pursuant to the zoning mechanism would result in physical alterations to the streetscape not allowed by zoning at the time of application, which could alter the pedestrian perspective in the vicinity of the site. Any future applications to use the zoning mechanism would consider potential impacts to urban design and visual resources pursuant to the guidance of the 2021 *CEQR Technical Manual*.

Hazardous Materials

As discussed in **Chapter 9, Hazardous Materials**, all projected and potential development sites would be assigned an E-designation in connection with the Proposed Actions. The potential for exposure of hazardous materials at a development site would be assessed when an application is filed for a specific development, and remedial measures, if any, would be developed at that time.

Therefore, the zoning mechanism would not result in any significant adverse impacts related to hazardous materials. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Water and Sewer Infrastructure

A preliminary infrastructure analysis is needed for projects that result in exceptionally large demands for water (greater than 1,000,000 gallons/day), or that are in areas that experience low water pressure (areas at the end of the water supply distribution system). Depending on the results from the preliminary analysis, a detailed infrastructure analysis may be required. A preliminary assessment may be warranted if an action is expected to result in more than 400 residential units and over 150,000 sf of commercial space, the applicable thresholds for combined sewer areas in Brooklyn.

Water Supply

Incremental development facilitated by the zoning mechanism result an estimated 9,910 gallons per day (gpd) of water demand.

Adding this demand to that associated with the Proposed Actions generates a total demand of 1,704,414, or an increase of 1,441,467 gpd when compared to the No-Action condition. This total increment is approximately 0.17 percent of the City's daily water generation (1.2 billion of gallons).

Therefore, the zoning mechanism would not result in any significant adverse impacts related to water supply infrastructure. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Wastewater

Effluent from Conceptual Development Site 1 would be treated at the Red Hook Wastewater Resource Recovery Facility (WRRF), which currently treats an average dry weather flow of approximately 27 million gallons per day (mgd). The Red Hook WRRF has a permitted capacity of 60 mgd.

At Conceptual Development Site 1, the CPC Authorizations for Floor Area Bonus and Bulk Modifications are expected to generate 11,479 gpd of wastewater. Adding this figure to the demand associated with the Proposed Actions, the contributions of the development facilitated by the zoning mechanism would produce a total wastewater generation of 1,479,237 gpd (1.48 mgd). This increase is below the current available capacity of the Red Hook WRRF.

Therefore, the zoning mechanism would not result in any significant adverse impacts related to wastewater treatment. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Stormwater and Drainage Management

Any development using the zoning mechanism would need to meet New York City Department of Environmental Protection (NYCDEP) sewer connection requirements and control runoff to combined sewers. Peak stormwater runoff rates would be reduced with the incorporation of stormwater source control best management practices (BMPs) that could be

implemented on all project sites by the developer in accordance with the City's site connection requirements.

Therefore, the zoning mechanism would not result in any significant adverse impacts related to stormwater and drainage management. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Solid Waste and Sanitation Services

A solid waste assessment determines whether a project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the New York City Solid Waste Management Plan (SWMP) or with state policy related to the City's integrated solid waste management system. Few projects have the potential to generate substantial amounts of solid waste (50 tons per week or more) and, therefore, most projects would not result in a significant adverse impact. However, it is recommended that the solid waste and service demand generated by a project be disclosed.

Development using the zoning mechanism is not expected to exceed the CEQR threshold of 50 tons or 100,000 pounds per week. Therefore, the zoning mechanism would not result in any significant adverse impacts related to solid waste management. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Energy

Although significant adverse energy impacts are not anticipated for the majority of projects analyzed under CEQR, it is recommended that the projected amount of energy consumption during long-term operation be disclosed in the environmental documents.

The annual energy consumption of development using the zoning mechanism would be negligible compared to the overall demand serviced by Con Edison. Therefore, the zoning mechanism would not result in any significant adverse impacts related to energy. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Transportation

Conceptual Development Site 1 is located within CEQR Transportation Zone 2.[1] The screening threshold for further analysis within this zone is 200 DUs. Additional significant adverse impacts to transportation beyond those disclosed for the With-Action condition are unlikely because the zoning mechanism would not result in DUs that would exceed the CEQR

[1] Defined by the 2021 *CEQR Technical Manual* as "Manhattan north of 110th Street, including Roosevelt Island; Long Island City; Downtown Flushing; Fort Greene; Park Slope; Portions of Brooklyn Heights; Greenpoint-Williamsburg; Jamaica; all areas within 0.25 miles of subway stations (excluding Staten Island, Broad Channel and the Rockaways, Queens); South Bronx (south of 165th Street)."

screening thresholds. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Air Quality

Mobile Source

Per the 2021 *CEQR Technical Manual*, analysis of mobile sources is necessary when an action increases or causes a redistribution of traffic, creates any other mobile sources of pollutants, or adds new uses near existing atypical mobile sources. Mobile sources of air quality pollutants also include parking facilities or rail and marine facilities.

The 41 additional DUs and 9,232-sf decrease in local retail space at Conceptual Development Site 1 would result in a minimal increase in vehicle trips near the site. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Stationary Source

Development using the zoning mechanism would be subject to a separate discretionary approval process, with project-specific analysis that would address the potential impacts of stationary source emissions on air quality. Such analyses would include specific information regarding fuel type used, types and sizes of equipment, exhaust stack location and height. Like the Proposed Actions, air quality (E) designations for stationary sources (such as fossil fuel-fired heating and hot water systems) may be required to ensure that there are no significant adverse air quality impacts from the source.

Greenhouse Gas Emissions and Climate Change

Typically, only projects greater than 350,000 sf, projects directly related to the transmission of energy, or projects that change the solid waste management system are required to perform detailed analysis of greenhouse gas emissions and climate change. As mentioned in the 2021 *CEQR Technical Manual*, the most immediate threats in New York City are rising sea levels and increases in storm surge and coastal flooding—as such, the climate change assessment focuses on these areas. Most commonly, climate change is assessed by comparing the project's consistency with the Waterfront Revitalization Program.

At Conceptual Development Site 1, floor area created via the zoning mechanism would not exceed 350,000 sf and is not expected to warrant an analysis of greenhouse gas emissions. Therefore, the zoning mechanism would not result in any significant adverse impacts related to greenhouse gas emissions. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

New development in the 100-year or 500-year floodplains are required to comply with Appendix G of the New York City Building Code. The Project Area is not located in the 100-year or 500-year floodplain. Therefore, the zoning mechanism would not result in any significant adverse impacts related to climate change. Environmental analyses prepared for

any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Noise

Further analysis of noise is warranted if a project would (1) generate any mobile or stationary sources of noise; and/or (2) introduce a new receptor to an area with existing high ambient noise levels.

Development using the zoning mechanism would increase vehicular traffic to levels slightly higher than the With-Action condition but increases in noise would not be perceptibly higher. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Public Health

The 2021 *CEQR Technical Manual* states that a public health assessment is not necessary for most projects. Where no significant adverse unmitigated impacts are found in other CEQR analysis areas—such as air quality, water quality, hazardous materials, or noise—no public health analysis is warranted. If, however, an unmitigated adverse impact is identified in any of these other CEQR analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area.

Additional analyses would be required to determine the potential for impacts related to air quality and noise. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Neighborhood Character

A neighborhood character assessment is appropriate if the project has the potential to result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; community facilities; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise.

Development using the zoning mechanism is not expected to significantly alter neighborhood character. The proposed zoning mechanism would incentivize the development of open space plazas on sites zoned R9 greater than 25,000 sf in size. Additional analyses would be required to determine the potential for significant adverse impacts related to urban design and visual resources and noise. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.

Construction

According to the 2021 *CEQR Technical Manual*, a development with an overall construction period lasting two years or longer and that is near to sensitive receptors (i.e., residences, open spaces) should undergo an impact assessment. If construction of a development using the zoning mechanism would last more than two years, a detailed analysis of construction

may be necessary. Environmental analyses prepared for any future application will be conducted in accordance with the 2021 *CEQR Technical Manual*.