Technical Memorandum for the One45 Project
CEQR Number 21DCP167M, Technical Memorandum 002
November 27, 2024

A. INTRODUCTION

On April 14, 2022, the New York City Department of City Planning (DCP) issued a Notice of Completion for the *One45-Museum of Civil Rights Final Environmental Impact Statement* (2022 FEIS). The One45 project analyzed in the 2022 FEIS—referred to here as the Analyzed Project—was a proposal to develop two new mixed-use buildings totaling approximately 940,921 gross square feet on the Development Site, which comprises Lot 29 on the block bounded by West 144th Street, West 145th Street, Lenox Avenue, and Adam Clayton Powell Jr. Boulevard (Block 2013) in the Central Harlem neighborhood of Manhattan, Community District (CD) 10 (see **Figure 1**).

The program for the Analyzed Project included residential, community facility (intended for a new Museum of Civil Rights), commercial office, banquet hall/event space, and retail uses and accessory parking. To allow the Applicant to respond appropriately to rapidly changing market conditions, both in the Central Harlem neighborhood and in the economy and real estate market at large due to COVID-19, the podium of the proposed development was planned to include either residential or commercial use, resulting in two different potential development scenarios: a Residential Podium Scenario and an Office Podium Scenario. The scenario that would result in the more conservative analysis was analyzed for each technical area of the 2022 FEIS.

The actions proposed to facilitate the Analyzed Project included:

- a zoning map amendment, to change the zoning on the Development Site to a C4-6 district across the entire Site;
- a special permit pursuant to ZR Section 74-743 to modify the height and setback regulations of Section 35-64;
- a special permit pursuant to ZR Section 74-744 to modify supplementary use regulations;
- a special permit pursuant to ZR Section 74-533 to modify the residential parking regulations of Section 36-33 and 25-33;
- a zoning text amendment to modify ZR Section 74-744(b), to permit, within a C4-6 zoning district in Manhattan CD 10, commercial uses to be located directly over a story containing any dwelling units if a demising floor-ceiling assembly that results in appropriate sound and vibration separation between such commercial uses and any dwelling units below is provided;
- a CPC certification pursuant to ZR Section 32-435(c), to modify certain retail continuity requirements;
- a CPC certification pursuant to ZR Section 26-15, to allow additional curb cuts;
- a CPC certification pursuant to ZR Section 26-17, to allow a curb cut on a wide street;
- a special permit pursuant to ZR Section 74-744(c) to modify the sign regulations of Sections 32-64 and 32-65; and
- a zoning text change to modify Appendix F of the ZR to designate the Development Site as included in the MIH program.

The land use application for the Analyzed Project was subsequently withdrawn by the Applicant from consideration by the New York City Planning Commission (CPC) and New York City Council.

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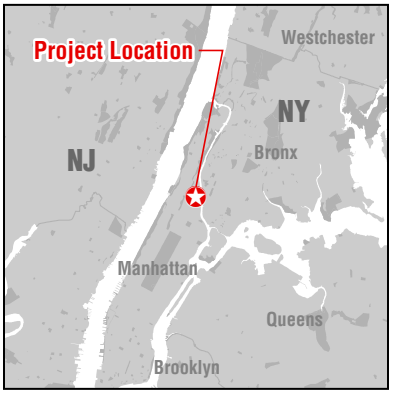
0 200 FEET

Development Site (Block 2013)

50 *Tax Lot in the Development Site*



Project Location

ONE 45

Figure 1

The Applicant for the One45 project now seeks to modify the land use application and the proposed program and design that were analyzed in the 2022 FEIS. Those proposed modifications are the subject of this Technical Memorandum.

As described in the New York State Department of Environmental Conservation's (NYSDEC) SEQRA regulations 6 NYCRR §617.9(a)(7)(i)(a), (b), and (c), and the 2021 *CEQR Technical Manual*, a lead agency may require the preparation of a supplemental EIS if there are significant adverse environmental impacts not addressed or inadequately addressed in the EIS that arise from changes proposed for the project; newly discovered information; or a change in circumstances related to the project. This Technical Memorandum describes proposed modifications to the program and design of the Analyzed Project, changes to the project's schedule, and changes in background conditions, in order to assess whether the project as currently envisioned would result in any new or different significant adverse environmental impacts not previously identified and addressed in the 2022 FEIS, and to assist the lead agency in determining whether the preparation of a supplemental EIS would be required.

As demonstrated below, this Technical Memorandum concludes that there would be no significant adverse impacts not previously identified in the 2022 FEIS in any of the analyzed CEQR technical areas as a result of the proposed modifications.

B. DESCRIPTION OF PROPOSED MODIFICATIONS

Since the 2022 FEIS, the Applicant has filed an application to modify the project. The project with the proposed modifications (the Modified Project) includes the actions described below.

PROPOSED ACTIONS

The actions required to facilitate the One45 development with the proposed modifications are substantially similar to those previously analyzed; however, some of the actions required for the Analyzed Project would not be required for the Modified Project. The zoning actions required for the Modified Project are as follows:

- a zoning map amendment, to change the zoning on the Development Site to a C4-6 district across the entire Site;
- a special permit pursuant to ZR Section 74-743 to modify the height and setback regulations of Section 35-64(b)(3);
- a special permit pursuant to ZR Section 74-533 to waive the residential parking regulations of Section 36-33 and 25-33;
- a CPC certification pursuant to ZR Section 26-15, to allow additional curb cuts; and
- a zoning text change to modify Appendix F of the ZR to designate the Development Site as included in the MIH program.

In addition, a DOB Commissioner Certification is required to reduce the loading berth requirement.

The following actions are no longer required:

- a special permit pursuant to ZR Section 74-744 to modify supplementary use regulations;
- a CPC certification pursuant to ZR Section 26-17, to allow a curb cut on a wide street;
- a special permit pursuant to ZR Section 74-744(c) to modify the sign regulations of Sections 32-64 and 32-65;

- a zoning text amendment to modify ZR Section 74-744(b), to permit, within a C4-6 zoning district in Manhattan CD 10, commercial uses to be located directly over a story containing any dwelling units if a demising floor-ceiling assembly that results in appropriate sound and vibration separation between such commercial uses and any dwelling units below is provided; and
- a CPC certification pursuant to ZR Section 32-435(c), to modify certain retail continuity requirements.

PROPOSED MODIFICATIONS

With the proposed modifications, the One45 project would no longer include museum or office uses and would include slightly less retail use (approximately 5,250 gsf less) and accessory parking. Instead, the Modified Project would include additional residential use—including additional affordable units—and a small amount of community facility use. See **Table 1** for a comparison of the program analyzed in the 2022 FEIS (both scenarios) and the program for the Modified Project.

The massing of the project has also been modified. The Analyzed Project had an approximately 85-foot-tall base and two towers, each rising to a height of approximately 363 feet, not including approximately 30 feet of mechanical bulkhead. The Modified Project also would have an approximately 85-foot base, and two towers. The western tower would rise to a height of approximately 380 feet and the eastern tower would rise to a height of approximately 420 feet, not including approximately 40 feet of mechanical bulkhead on each. The towers would be separated by approximately 60 feet on West 145th Street, consistent with the Analyzed Project. In the Modified Project, the western tower would be approximately 160 feet wide along its West 145th Street frontage, compared to approximately 270 feet for the Analyzed Project. See **Figures 2-7** for site plans, sections, and illustrative renderings of the Analyzed Project and the Modified Project.

The Analyzed Project assumed that the two proposed buildings would be constructed in one phase with a 38-month construction duration, anticipated to be complete in 2026. It is assumed that with the Modified Project, Buildings A and B (the two towers) would be constructed over a period of 40 months, starting in 2025. Construction of the two towers and their connecting base would begin first and would be complete by 2028; the connecting building to the west (Building C) would be constructed over a period of approximately 12 months, starting in 2031. Construction of Building C would commence when the gas station on that portion of the Development Site vacates the site upon expiration of its lease. Therefore, this Technical Memorandum assumes that the year by which all components of the Modified Project would be complete and operational is 2032.

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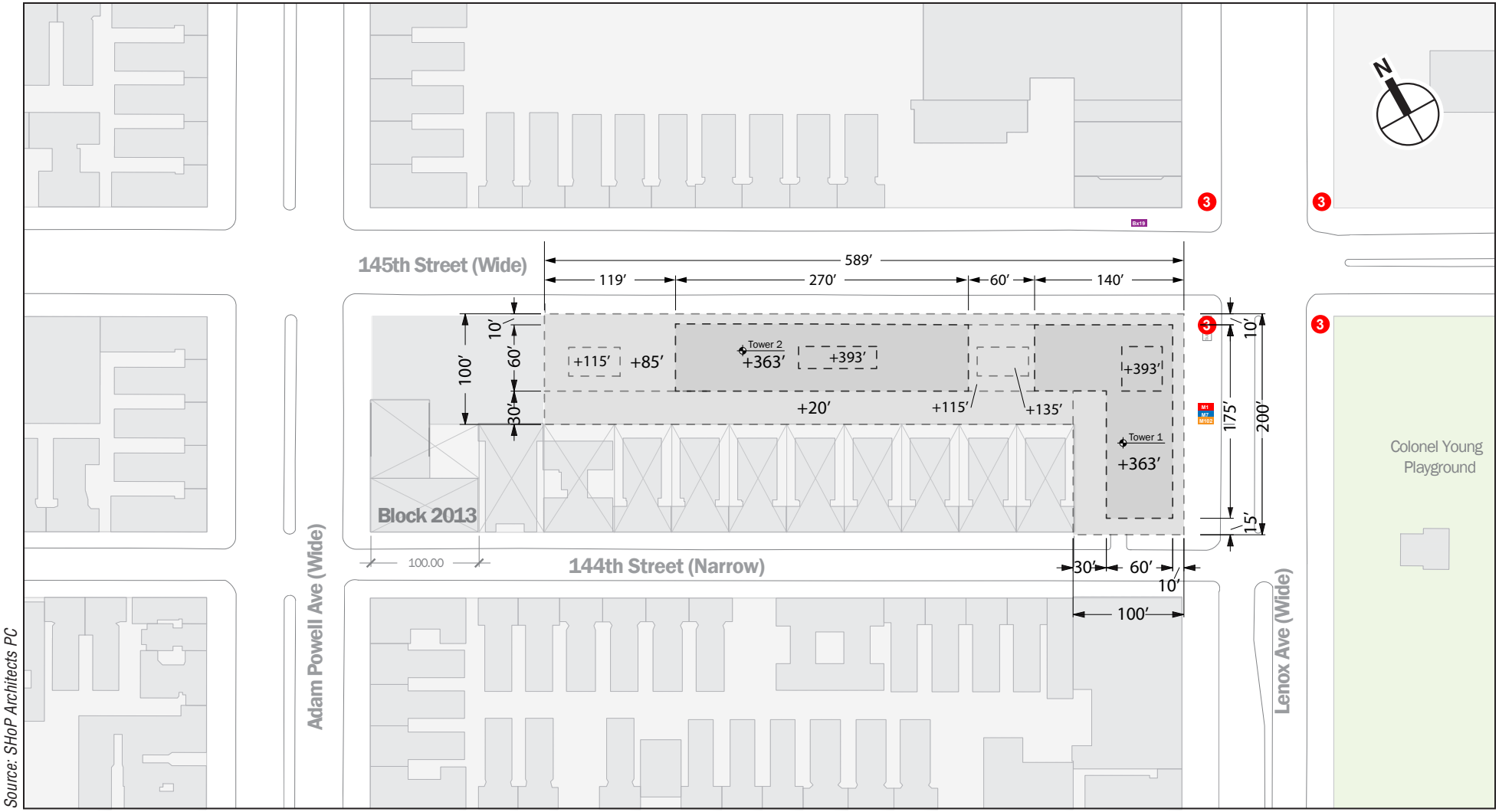
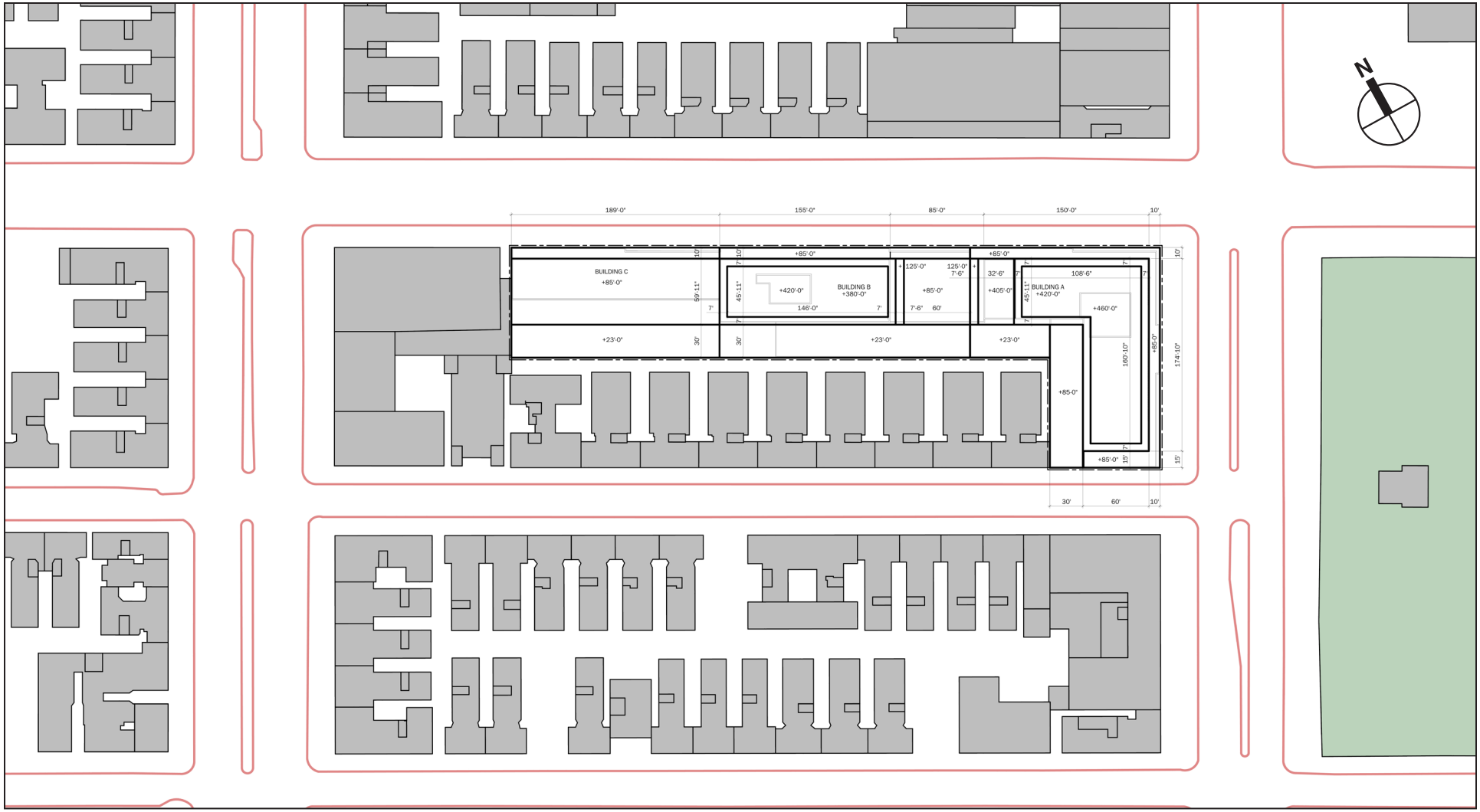


Source: SHoP Architects PC

Analyzed Project Site Plan

Figure 2

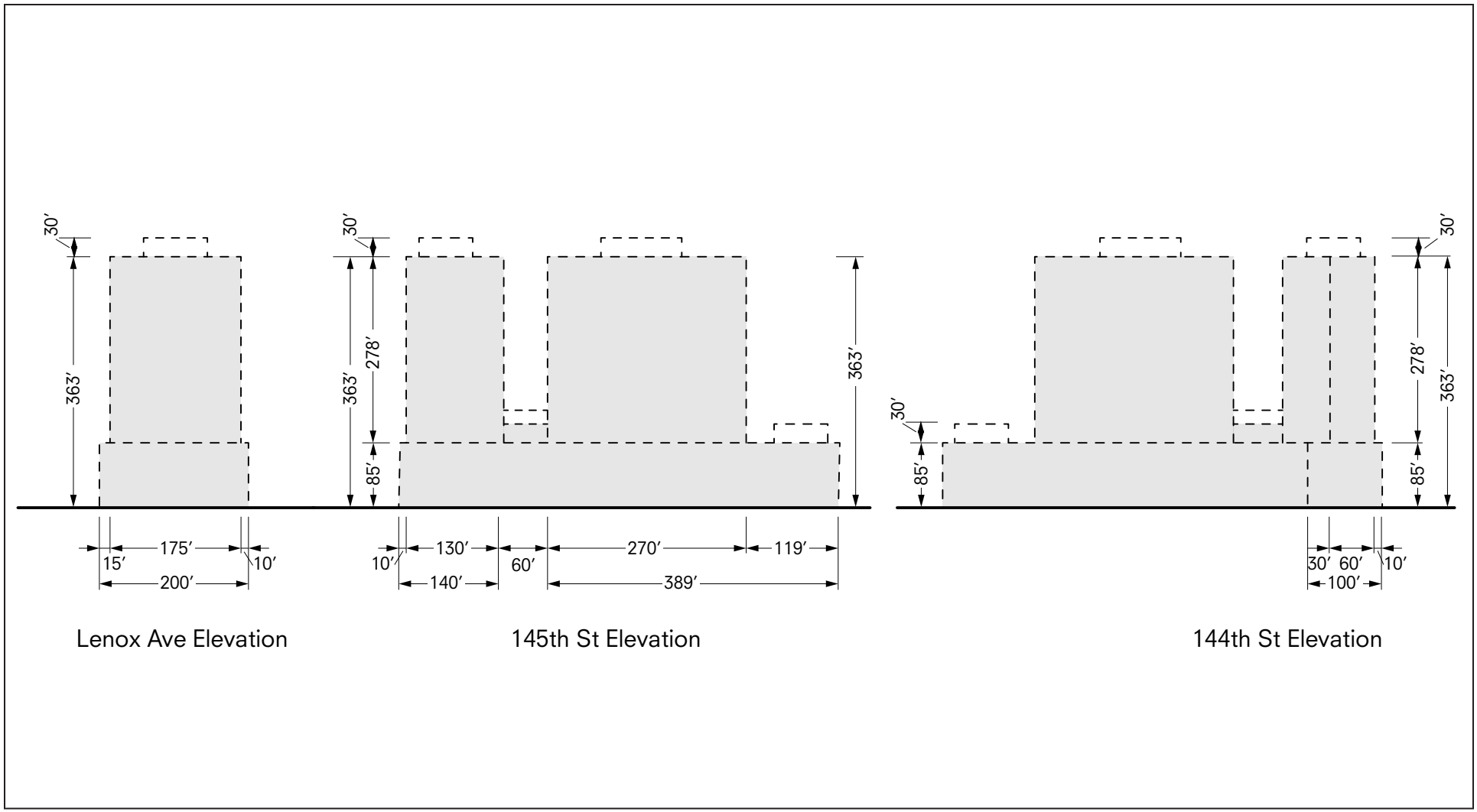
11.12.24



Modified Project Site Plan

ONE 45

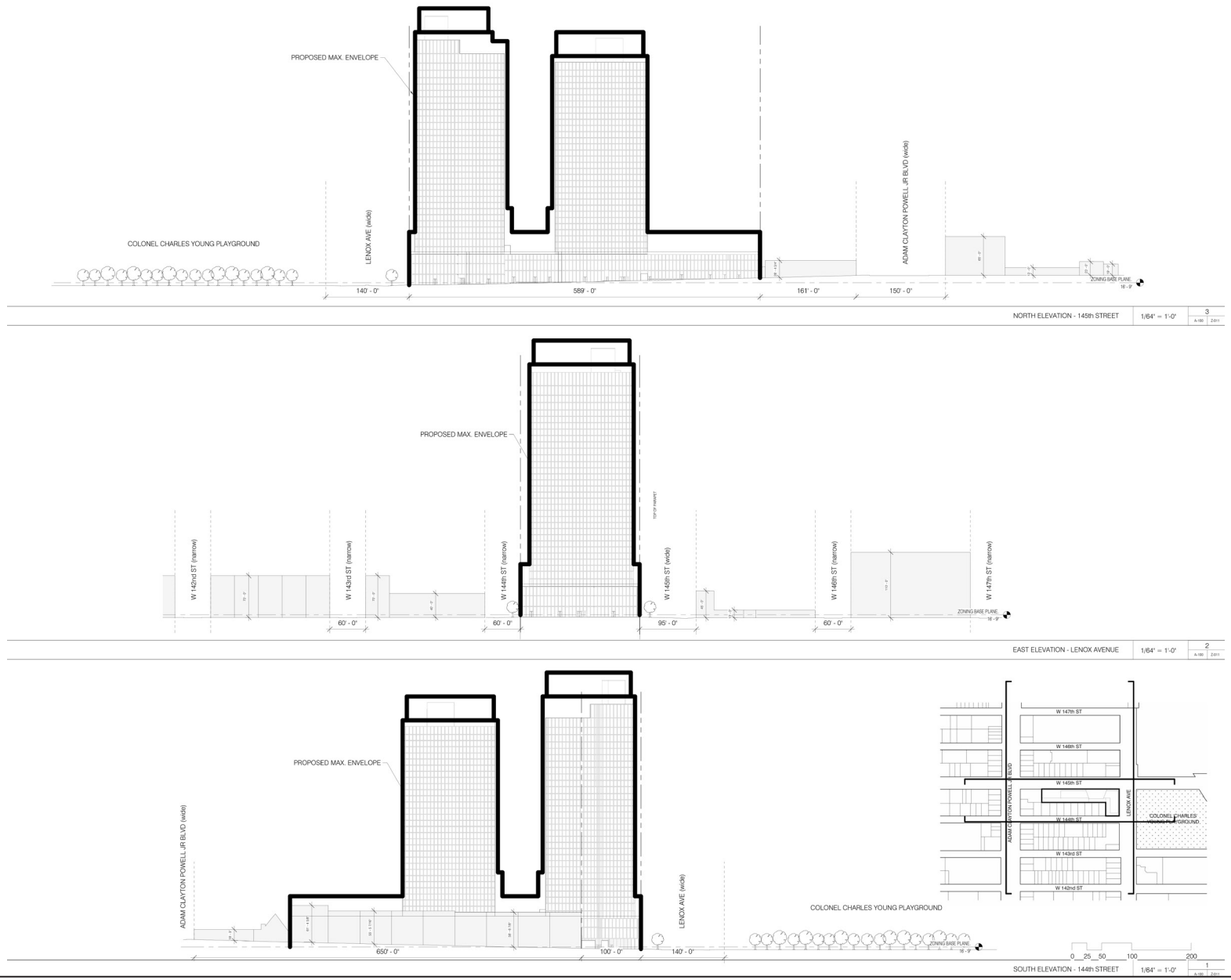
Figure 3



Source: SHoP Architects PC

Analyzed Project Section

Figure 4



Modified Project Section

Figure 5



Source: SHoP Architects PC

Analyzed Project Illustrative Rendering



Modified Project Illustrative Rendering

Figure 7

Table 1
Comparison of 2022 Analyzed Project and 2024 Modified Project Programs

Use	2022 FEIS No Action Scenario	2022 FEIS Analyzed Project: Office Podium Scenario	2022 FEIS Analyzed Project: Residential Podium Scenario	2024 Modified Project	Increment (from Office Podium Scenario)	Increment (from Residential Podium Scenario)
Residential	41,556 gsf (49 units)	684,358 gsf (866 units[1])	741,714 gsf (939 units[1])	783,307 gsf[3] (992 units[1])	98,949 gsf (126 units)	41,593 gsf (53 units)
Affordable	0	217-260 units[2]	235-282 units[2]	291 units[4]	31-74 units	9-56 units
Museum	0	48,015 gsf	48,015 gsf	0 gsf	-48,015 gsf	-48,015 gsf
Retail	26,104 gsf	41,991 gsf	41,991 gsf	36,741 gsf	-5,250 gsf	-5,250 gsf
Office	4,000 gsf	75,018 gsf	17,710 gsf	0 gsf	-75,018 gsf	-17,710 gsf
Banquet Hall / Event Space (UGVIII)	0	17,291 gsf[5] *200-person capacity*	17,291 gsf[5] *200-person capacity*	13,571 gsf *200-person capacity*	-3,720 gsf *No change in capacity*	-3,720 gsf *No change in capacity*
Community Facility	2,550 gsf	0 gsf	0 gsf	6,977 gsf[3]	6,977 gsf	6,977 gsf
Mechanical	Not calculated	26,292 gsf	26,292 gsf	17,012 gsf	-9,280 gsf	-9,280 gsf
Below-Grade / Back of House[7]	0	0 gsf	0 gsf	26,950 gsf	26,950 gsf	26,950 gsf
Vertical Circulation Space[6]	0	14,500 gsf	14,452 gsf	25,769 gsf	11,269 gsf	11,317 gsf
Parking (Accessory)	20	33,456 gsf 130 spaces	33,456 gsf 141 spaces	25,076 gsf 40 spaces	-8,380 gsf -90 spaces	-8,380 -101 spaces
Total	**32,654**	**940,921 gsf**	**940,921 gsf**	**935,403 gsf**	**-5,518 gsf**	**-5,518 gsf**

Notes: [1]The 2022 FEIS assumed an average unit size at 790 sf/unit. The Applicant intends to build up to 968 units in the Modified Project; however, for consistency with the 2022 FEIS, this Technical Memorandum assumes the same average unit size as the 2022 FEIS.

[2]Assumed 25-30 percent of units would be affordable, consistent with MIH options.

[3]Does not include 18,790 sf residential space or 8,251 sf community facility space exterior to the buildings.

[4]The Applicant intends to build up to 968 units in the Modified Project. This Technical Memorandum assumes 30 percent of those units (291) would be affordable, consistent with MIH Option 2.

[5]Of this total, approximately 9,000 gsf was intended for a banquet hall or catering establishment with a 200-person capacity. 3,000 gsf was intended as a conference and lounge area accessory to the commercial office use (UG6B). The remainder of the total was back-of-house and support space.

[6]Elevators, stair cores, and egress pathways related to UGVIII use.

[7]Retail storage and residential mechanical and storage.

The No Action scenario assumed for the site is unchanged from what was analyzed in the 2022 FEIS. The No Action scenario analyzed in the 2022 FEIS assumed that in the future without the proposed actions, the existing buildings on the Development Site would be demolished and replaced with five new as-of-right buildings containing a total of approximately: 70,486 gsf of retail use, 180,075 gsf of commercial office use, 41,556 gsf of residential use (approximately 49 units, at an average size of 850 sf/unit), and 33,238 gsf of community facility (medical office/ambulatory care) use. The new buildings would total approximately 325,355 gsf of new development, for a built FAR of approximately 4.40 (built FAR within the C8-3 portion of the Development Site would be 3.45, and the built FAR within the R7-2 portion of the Development Site would be 6.5). The new buildings would rise to a base height of approximately 59 feet along West 145th Street, with

upper stories rising to between 70 and 98 feet (without mechanicals), with the exception of the building at the corner of Lenox Avenue and West 145th Street, which could rise to a maximum roof height of approximately 124 feet (without mechanicals). The No Action scenario is projected to require approximately 165 parking spaces accessory to the retail, office, and community facility medical office uses, which would be accommodated below grade within the proposed buildings. Two curb cuts, for the parking facility and loading areas, would be located on West 145th Street. It is assumed that all of the residential units would be market-rate in the No Action scenario.

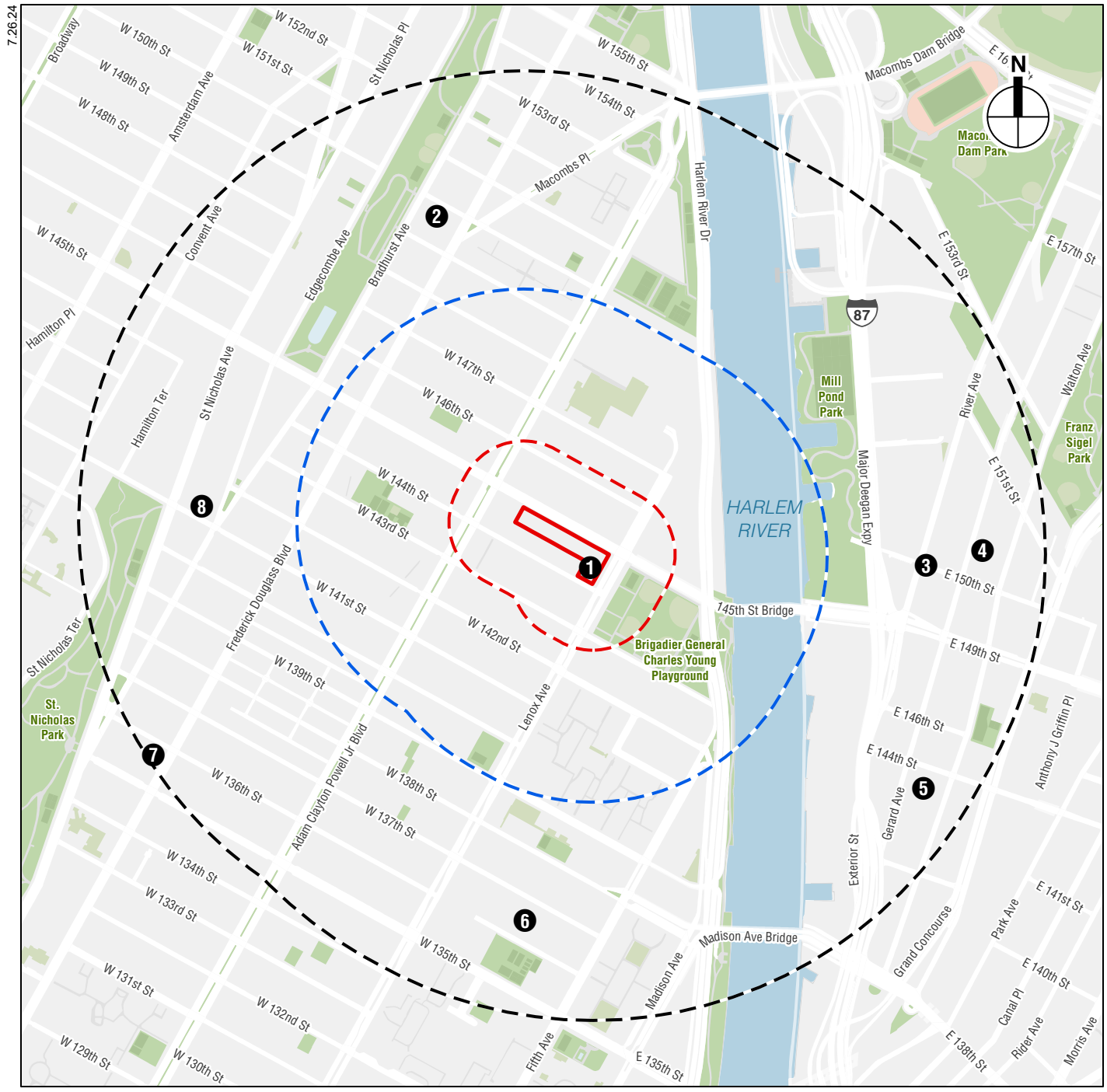
PROJECT PURPOSE AND NEED

The Modified Project described in this Technical Memorandum is intended to further the same goals as the Analyzed Project. The Development Site is located at a prominent intersection in Central Harlem with excellent subway and bus access; however, the existing zoning of the Development Site does not support dynamic, mixed-use development that would encourage services for the existing neighborhood residents and enhance the streetscape at this prominent intersection. Within the C8-3 zoning district, residential uses are not permitted—precluding the possibility of the kind of multi-use development that benefits existing residents and the neighborhood at large. The increased allowable residential FAR would maximize the opportunity for new affordable units, while the special permit modifications would support a superior site plan, better urban design, and an improved streetscape. The proposed development as a whole as envisioned by the Applicant will be an iconic, transit-oriented, mixed-use complex that will enliven the streetscape and contribute significantly to the built environment of this prominent Central Harlem location. The Applicant believes the Modified Project, like the Analyzed Project, would be consistent with the latest City housing policy. In June 2022, the Adams administration released *Housing Our Neighbors: A Blueprint for Housing and Homelessness*, a city-wide housing plan that focuses strategies and investment on the creation and preservation of high-quality, affordable housing for all New Yorkers, including households experiencing homelessness. The affordable housing to be created by the Modified Project would help alleviate the affordable housing deficit within CD 10, and the City at large. The Applicant also believes the proposed modification to reduce parking regulations would be appropriate to reflect usage patterns in this transit-rich area and would be consistent with the City of Yes for Housing Opportunity (CHO), discussed below.

C. ANALYSIS FRAMEWORK

CHANGES IN BACKGROUND CONDITIONS AND BUILD YEAR

As noted above, this Technical Memorandum assumes a build year of 2032 for completion of the Modified Project. In connection with the preparation of this Technical Memorandum, background conditions anticipated for completion by the Project's build year have been updated. Updates to the 2022 FEIS No Build list were made through review of publicly available information and consultation with DCP. See **Table 2** and **Figure 8**.



Development Site

400-foot Boundary

Quarter-mile Boundary

Half-mile Boundary

1 *No Build Project*

No Build Projects

ONE 45

Figure 8

Table 2
Projects Planned for Study Area by 2032

Map No.	Project	Build Years	Description
1	687-689 Lenox Avenue (Block 2013/Lot 29)	2032	Two residential buildings, 12 DUs total
2	304 West 150th Street (Block 2045/Lot 98)	2032	Residential building with 31 Dus
3	101 East 150th Street (Block 2354/Lot 1)	2026	K-12 School with 2,400 seats
4	586 Gerard Avenue (Block 2353/Lot 1)	2032	Mixed-use development with 200 DUs, 4,576 sf retail, 80 parking spaces
5	120 East 144th Street (Block 2344/Lot 112)	2026	Residential building with 450 DUs
6	Harlem Hospital, 506 Lenox Avenue (Block 1734/Lot 2)	2026	230,000 sf public health lab
7	2535 Frederick Douglass Boulevard (Block 1960/Lot 15)	2032	Mixed-use development with 52 DUs, 2,007 gsf retail, 19,067 gsf community facility
8	349 West 141st Street (Block 2051/Lot 6)	2032	Residential building with 20 Dus

Sources: DOB, DCP

D. ANALYSIS OF PROPOSED MODIFICATIONS

LAND USE, ZONING AND PUBLIC POLICY

This analysis assesses whether any changes in background conditions or the anticipated build year for the Analyzed Project, or the difference between the Analyzed Project program and Modified Project program, would result in any significant adverse impacts to land use, zoning, or public policy that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to land use, zoning and public policy. The 2022 FEIS concluded that the Analyzed Project's proposed residential, commercial, and community facility uses would be comparable to existing and planned developments in Central Harlem. Overall, the 2022 FEIS concluded that the Analyzed Project would create new mixed-use development in an area well-served by mass transit, and the proposed zoning would increase the density of the Development Site through the addition of buildings that in the opinion of the Applicant would be compatible in terms of use and scale to existing development in the study area, which includes three tower-in-a-park residential complexes interspersed with shorter tenement and apartment buildings as well as low-scale buildings for institutional, transportation, and industrial uses. The Analyzed Project was found to be consistent with relevant public policies and was anticipated to directly support City policies aimed at ensuring all New Yorkers have access to safe, secure, and affordable housing through the affordable housing to be provided by the Analyzed Project and growing the economy with the additional commercial space that would draw new employees and shoppers to the area.

Since the 2022 FEIS was prepared, the land uses on the Development Site and in the surrounding study area have remained substantially the same. A small portion of the building on the Development Site fronting on West 144th Street has been demolished, and the site of the vacant gas station is currently in use for truck storage. The Mobil gas station on the western edge of the Development Site is still in operation and is anticipated to remain on site until its lease expires in 2031. The Timbuktu Islamic Center, which occupies approximately 2,550 sf of the building at 103

West 144th Street, is in the process of relocating to another site within the neighborhood. One of the NYCHA residential buildings west of the Development Site on the project block is currently vacant. The 2022 FEIS identified seven No Build projects anticipated to be completed within the ¼-mile land use study area by the Build year for the Analyzed Project (2026). Of those projects, three have been completed and four are not moving forward at this time. The three completed projects have brought self storage, retail, and community facility uses to the study area. There are no other No Build projects anticipated to be completed within the ¼-mile land use study area by the Build year for the Modified Project (2032). There are no anticipated changes to zoning or public policy specific to the study area by 2032.

As with the Analyzed Project, the Modified Project would bring new residential, commercial, and community facility uses to the Development Site. The community facility use is anticipated to be a community center or similar facility, rather than a museum as anticipated in the Analyzed Project. The Modified Project would not include commercial office use. The commercial uses would include ground-floor retail and a banquet hall/event space, as in the Analyzed Project. In total, the Modified Project would be approximately 935,403 gsf in size, in comparison to 940,900 gsf for the Analyzed Project. The built FAR of the Development Site would be approximately 12 for the Modified Project, as with the Analyzed Project. The retail and community facility uses would be consistent with the existing uses on the Development Site, and the proposed residential use would be consistent with land uses within the surrounding area. The proposed banquet hall/event space would not exist in the future without the proposed actions. The Modified Project, Analyzed Project, and No Action development all would replace the vacant land that currently exist on the Development Site.

As with the Analyzed Project, the increased density of uses on the Development Site with the Modified Project would be appropriate to its location on two wide streets with excellent access to public transit and would maximize the number of affordable units to be created. As with the Analyzed Project, the Modified Project would not result in any land use changes in the study area because the actions for the Modified Project are targeted to respond to conditions on the Development Site.

As detailed above, the zoning actions required to facilitate the One45 development with the proposed modifications are substantially similar to those previously analyzed; however, some of the actions required for the Analyzed Project would not be required for the Modified Project. The actions required for the Modified Project are: a zoning map amendment, to change the zoning on the Development Site to a C4-6 district across the entire Site; a special permit pursuant to ZR Section 74-743 to modify the height and setback regulations of Section 35-64(b)(3); a special permit pursuant to ZR Section 74-533 to waive the residential parking regulations of Section 36-33 and 25-33; a CPC certification pursuant to ZR Section 26-15, to allow additional curb cuts; and a zoning text change to modify Appendix F of the ZR to designate the Development Site as included in the MIH program. In addition, a DOB Commissioner Certification is required to reduce the loading berth requirement.

The following actions are no longer required: a special permit pursuant to ZR Section 74-744 to modify supplementary use regulations; a CPC certification pursuant to ZR Section 26-17, to allow a curb cut on a wide street; a special permit pursuant to ZR Section 74-744(c) to modify the sign regulations of Sections 32-64 and 32-65; a zoning text amendment to modify ZR Section 74-744(b), to permit, within a C4-6 zoning district in Manhattan CD 10, commercial uses to be located directly over a story containing any dwelling units if a demising floor-ceiling assembly that results in appropriate sound and vibration separation between such commercial uses and any dwelling

units below is provided; and a CPC certification pursuant to ZR Section 32-435(c), to modify certain retail continuity requirements. As with the Analyzed Project, the Modified Project would not result in any changes to zoning within the study area.

In June 2022, the City announced *City of Yes,* its plan to modernize and update the City's zoning regulations to support small businesses, create affordable housing, and promote sustainability. Two of the three *City of Yes* initiatives (Carbon Neutrality and Economic Opportunity) have already been implemented. The *City of Yes for Housing Opportunity* (CHO) is part of an inclusive, city-wide approach to expanding and diversifying the housing supply, in which every neighborhood does its part to help meet housing needs and provide equitable access to opportunity for New Yorkers. The proposal would help meet New Yorkers' housing needs with small changes city-wide, including in the highest density areas as well as in its low density areas. This initiative advances key recommendations for fair housing and equity in the *Where We Live NYC Plan*.[1] The *Where We Live NYC Plan* identified goals, strategies, and actions to expand housing opportunities for everyone. The *City of Yes for Housing Opportunity* is currently in public review. As part of CHO, most housing units would be exempt from parking requirements.

The Modified Project would be consistent with the *City of Yes'* updates to the City's zoning regulations with respect to sustainability, affordable housing, and economic development. The Modified Project would promote a dynamic, mixed-use development including affordable housing in a transit-oriented neighborhood that is easily accessible. Sustainable building measures would include compliance with the City's emissions intensity limits. With the provision of approximately 291 affordable housing units, the Modified Project would help to diversify available housing at a range of eligible incomes. The Modified Project would provide opportunities for jobs and economic development and would expand the City's tax base. The Modified Project would provide less on-site parking than the Analyzed Project; however, the Applicant believes the proposed modification to waive parking regulations would be appropriate to reflect usage patterns in this transit-rich area and would be consistent with CHO. If the City of Yes Housing Opportunity text amendment, which was referred into public review on April 29, 2024, is adopted as currently proposed by the Department of City Planning, a C4-6 district would allow up to 12 FAR for a building(s) with "qualifying affordable housing," the same mix of uses, and a maximum height of 443.75 feet or development as a tower. Parking would not be required. The Applicant plans to voluntarily provide parking as part of the Modified Project. However, the Applicant would still need the special permit to waive certain provisions of the height and setback regulations, so it is expected that development on the Development Site would still be governed by the special permit plans.

As described above, the Modified Project, like the Analyzed Project, would be consistent with the latest City housing policy. In June 2022, the Adams administration released *Housing Our Neighbors: A Blueprint for Housing and Homelessness*, a city-wide housing plan that focuses strategies and investment on the creation and preservation of high-quality, affordable housing for all New Yorkers, including households experiencing homelessness.[2] The affordable housing to be created by the Modified Project would help alleviate the affordable housing deficit within CD 10, and the City at large. The Modified Project, like the Analyzed Project, would be consistent with the goals of the OneNYC plan, including the goal of ensuring all New Yorkers have access to safe, secure, and affordable housing through the affordable housing to be provided by the

[1] https://wherewelive.cityofnewyork.us/

[2] The City's affordable housing policy as of the 2022 FEIS was *Housing New York*, a plan released in 2014 with updated goals in 2017.

Proposed Project; and growing the economy through the additional retail space that would draw new employees and shoppers to the area. As the Modified Project would expand the range and scope of economic activity on the Development Site and would provide new uses and amenities anticipated to improve the quality of life for the neighborhood, it would be consistent with the policy objectives of the Upper Manhattan Empowerment Zone.

The Modified Project, like the Analyzed Project, would not displace any grocery stores or preclude the establishment of grocery stores within the Development Site or the study area. It is possible that a grocery store could be one of the tenants of the future retail space within the Proposed Project. Therefore, the Modified Project would be consistent with the goals of the FRESH program. The FRESH Program zoning and tax incentives are discretionary; therefore, if the Applicant wanted to utilize such incentives for the Modified Project, additional action(s) by CPC or the New York City Industrial Development Agency (IDA) would be required.

The 2022 FEIS included a WRP Consistency Assessment that was reviewed by DCP's Waterfront and Open Space Division. That assessment concluded that the Analyzed Project would be consistent with and would support the applicable policies of the City's WRP. Specifically, the assessment concluded that the Analyzed Project would promote Policies 1.1, 1.3, 1.5, 5.4, 6.2, 7.1, 7.2, 7.3, 8.2, 10.1, and 10.2. The proposed modifications would not change the conclusions of that assessment. The Modified Project, like the Analyzed Project, would encourage residential and commercial development in an appropriate Coastal Zone area and would not result in a significant adverse impact to community facilities or infrastructure (Policies 1.1, 1.3). The potential for the Modified Project to result in significant adverse impacts related to hazardous materials would be avoided through compliance with existing regulatory requirements and with the placement of an (E)-Designation on the Development Site (Policies 5.4, 7.1, 7.2, 7.3). The Development Site has been approved to be enrolled into the New York State Department of Environmental Conservation's (DEC) Brownfield Cleanup Program (BCP) as two sites. Since the preparation of the 2022 FEIS, the Applicant has submitted a Remedial Investigation Report (RIR) for one site and is preparing an RIR for the second. If dewatering in the Development Site is required, groundwater testing would be performed to ensure that the discharge would meet the New York City Department of Environmental Protection (DEP) sewer discharge requirements. If necessary, pretreatment would be conducted prior to discharge to the City's sewer system, as required by DEP permit/approval requirements. The Modified Project, like the Analyzed Project, would incorporate public access into new private development through the creation of a banquet hall/event space, community facility space, ground-floor retail space, and residential units (Policy 8.2). The Modified Project, like the Analyzed Project, would not result in adverse impacts to architectural or archaeological resources (Policies 10.1 and 10.2).

Lastly, the Modified Project, like the Analyzed Project, would integrate consideration of climate change and sea level rise into its planning and design (Policies 1.5 and 6.2). By the end of the Modified Project's design life in 2100, the projected 1 percent annual chance flood elevation with sea level rise, based upon an estimated base flood elevation (BFE) of +11 NAVD88, would range from 12.25 feet under the Low scenario to 17.25 feet under the High scenario. Approximately half of the Development Site would be within the 1 percent annual chance floodplain. The Modified Project is not predicted to be affected by mean higher high water (MHHW) by the end of the century, and the Development Site is not within Zone VE and thus would not be expected to be affected by storm impacts due to waves, high winds, or debris. The Modified Project, like the Analyzed Project, would be constructed outside the current 1 percent annual chance floodplain, as indicated in the FEMA Preliminary FIRM. By the 2050s, the eastern portion of the Development Site would be within the 1 percent annual floodplain in the High Scenario. As such, portions of the

tower bases may be susceptible to flooding under High Scenario projections. Residential dwelling units would begin on the second floor at an elevation of at least 31 feet and would remain above the future floodplain elevation under the High Scenario projections. The first floors of the Modified Project buildings, which would contain commercial, community facility, and residential lobby uses, would be located at 13 feet. If required in the future, adaptive measures such as dry floodproofing could be implemented to protect first floor uses. Adapting or retrofitting the building with dry floodproofing may consist of adding such measures as: watertight enclosures, flood panels or barriers, flood-damage resistant materials, or other measures. In addition, the Applicant is locating certain mechanical and electrical equipment above the cellar, including the generator, boiler, and electrical service equipment.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to land use, zoning and public policy, consistent with the findings of the 2022 FEIS.

SOCIOECONOMIC CONDITIONS

This analysis assesses whether any changes in background conditions or the anticipated build year for the Analyzed Project, or the difference between the Analyzed Project program and Modified Project program, would result in any significant adverse impacts to socioeconomic conditions that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to socioeconomic conditions.

DIRECT RESIDENTIAL DISPLACEMENT

As with existing conditions for the 2022 FEIS, the Development Site does not contain any residential dwelling units (DUs). Therefore, like the Analyzed Project, the Modified Project would not directly displace any residents.

DIRECT BUSINESS DISPLACEMENT

As assumed in the 2022 FEIS, in the future without the Modified Project, the existing uses on the Development Site—including retail and restaurant uses, a gas station, and non-profit office space (NAN)—would be displaced to accommodate as-of-right development. Because the displacement of these uses would occur irrespective of the proposed actions, no further assessment of this issue is warranted. As detailed above, the Timbuktu Islamic Center is relocating to a new location in the near future.

INDIRECT RESIDENTIAL DISPLACEMENT

The 2022 FEIS found that that Analyzed Project would not result in significant adverse impacts due to indirect residential displacement. While the overall average household income of the Analyzed Project's DUs was above the average household income of the existing study area population, the assessment identified a readily observable trend toward higher incomes and new market-rate residential development in the study area, with average and median gross rents in the study area increasing since 2010. The Modified Project would introduce up to 992 total DUs, of which 291 would be permanently affordable housing for low- and moderate-income residents, slowing the existing trends of increasing rents and maintaining a more diverse mix of incomes as

compared to the future without the proposed actions.[3] Given the increase in total units under the Modified Project, a preliminary assessment of indirect residential displacement was conducted.

Existing Conditions

According to the *CEQR Technical Manual*, socioeconomic study area boundaries depend on project size and characteristics. The *CEQR Technical Manual* states that a ¼-mile study area is appropriate for a project which produces a small (below 5 percent) increase to the ¼-mile area population. The Analyzed Project would introduce an estimated 2,171 residents, which is an approximately 8.5 percent increase to the ¼-mile area population. Therefore, a ½-mile study area is appropriate for this analysis. The census tracts that constitute the "socioeconomic study area," or "study area," are shown in **Figure 9** and include Census Tracts 212, 214, 221.02, 227, 228, 230, 231, 232, 234, 235.02, 236, and 259.

In 2024, the study area contained an estimated 66,737 residents.[4] This analysis uses average and median household incomes to describe the household income characteristics of the study area population. As reported in the 2018–2022 ACS and shown in **Table 3**, in 2022 the average annual household income within the study area was $85,123 (in 2022 dollars). Since 2010, the study area's average household income has increased.

Table 3
Average Annual Household Income (2006–2010, 2018–2022 ACS)

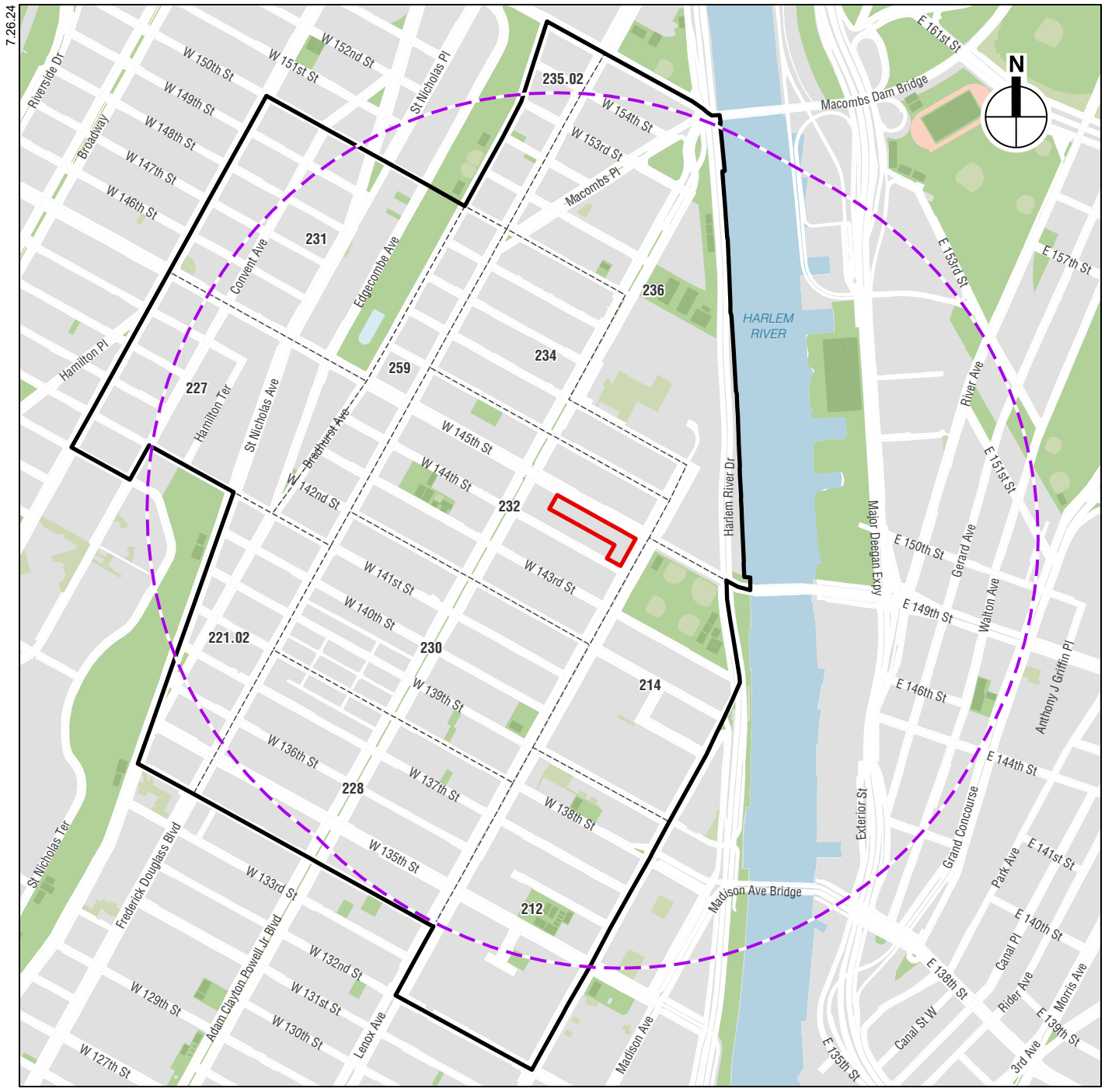
Area	2006–2010 ACS[1]	2018–2022 ACS[1]	Change or Direction of Change
Study Area	$71,884	$85,123	Increase[2]
Manhattan	$165,451	$184,058	11.2%
New York City	$105,106	$122,667	16.7%

Notes:
[1] All dollar figures have been adjusted to 2022 dollars based on the U.S. Department of Labor Consumer Price Index (via Social Explorer and DCP's FactFinder).
[2] The margin of error (MOE) of the difference is greater than one third of the difference, so the percentage change cannot be estimated with confidence and only the direction of the change can be reported (i.e. Increase/Decrease).
Sources: U.S. Census Bureau, 2006–2010 and 2018–2022 ACS 5-Year Estimates; DCP's NYC Population Factfinder; Social Explorer.

As average income can be heavily influenced by outliers (both high and low), the median household income is also presented. As shown in **Table 4**, in 2022 the median annual household income within the socioeconomic study area was $58,084. The study area median income has increased since 2010.

[3] The 2022 FEIS assumed an average unit size at 790 sf/unit. The Applicant intends to build up to 968 units in the Modified Project; however, for consistency with the 2022 FEIS, this Technical Memorandum assumes the same average unit size as the 2022 FEIS. This Technical Memorandum assumes 30 percent of the 968 units would be affordable, consistent with MIH Option 2.

[4] Year 2024 study area population is estimated based on a 2020 U.S. Census population estimate of 66,403, supplemented by New York City Department of Buildings (DOB) permit data from the DCP Housing Database, which estimated 159 newly constructed study area DUs completed between April 2020 and December 2023.



Socioeconomic Study Area

ONE 45

Figure 9

Table 4
Median Annual Household Income (2006–2010, 2018–2022 ACS)

Area	2006–2010 ACS[1]	2018–2022 ACS[1]	Change or Direction of Change
Study Area	$46,692	$58,084	Increase[2]
Manhattan	$87,665	$99,880	13.9%
New York City	$67,850	$76,607	12.9%

Notes:
[1] All dollar figures have been adjusted to 2022 dollars based on the U.S. Department of Labor Consumer Price Index.
[2] The margin of error (MOE) of the difference is greater than one third of the difference, so the percentage change cannot be estimated with confidence and only the direction of the change can be reported (i.e. Increase/Decrease).
Sources: U.S. Census Bureau, 2006–2010 and 2018–2022 ACS 5-Year Estimates; DCP's NYC Population Factfinder; Social Explorer.

In terms of existing residential rents and trends, as shown in **Table 5**, within the socioeconomic study area, median gross rent in 2022 was approximately $1,400 per month. Median gross rents have increased by 30.4 percent in the study area since 2010. Over the same time period median gross rents also increased in Manhattan (by approximately 21.5 percent) and in New York City (by 18.6 percent). For the study area, Manhattan, and New York City, average rent mirrors the trends in median rent.

Table 5
Average and Median Gross Rent

Area	2006–2010 ACS		2018–2022 ACS		Change or Percent Change	
	Average[1]	Median[1]	Average[1]	Median[1]	Average	Median
Study Area	$1,123	$1,074	$1,543	$1,400	Increase[2]	30.4%
Manhattan	$1,915	$1,665	$2,287	$2,024	19.4%	21.5%
New York City	$1,542	$1,445	$1,841	$1,714	19.4%	18.6%

Notes:
[1] All dollar figures have been adjusted to 2022 dollars based on the U.S. Department of Labor Consumer Price Index (via Social Explorer and DCP's FactFinder).
[2] The MOE of the difference between 2006–2010 ACS and 2018–2022 ACS data for the study area is greater than one third of the estimated difference. Therefore, a change cannot be estimated with statistical confidence and only the direction of the change can be reported.
Sources: U.S. Census Bureau, 2006–2010 and 2018–2022 ACS 5-Year Estimates; DCP's NYC Population Factfinder; Social Explorer.

U.S. Census data paints a general picture about whether housing costs are changing in a neighborhood, but the data does not provide specific rent information according to regulation status or unit size. Market comparables were therefore used to provide a fuller understanding of where the study area market is today. **Table 6** summarizes online listings for apartments in the study area from StreetEasy.com. The median monthly asking rents in the study area ranged from $1,995 for studio units to $3,638 for three- or more bedroom units.

Table 6
Monthly Rental Asking Rates within the Socioeconomic Study Area

Unit Type	Number of Listings	Median	Average	Upper Quartile
Studio	59	$1,995	$2,017	$2,198
One Bedroom	104	$2,600	$2,547	$2,800
Two Bedroom	101	$3,075	$3,274	$3,795
Three+ Bedroom	48	$3,638	$4,145	$4,000

Source: StreetEasy.com, accessed in June 2024 based on sampling of 312 active and recent listings within the study area.

No Action Condition

In the future without the proposed modifications, new residential developments are expected to add approximately 115 new dwelling units to the study area by 2032, and approximately 49 new dwelling units would be constructed on the Development Site. These projects will add approximately 359 new residents to the study area, bringing the estimated residential population to 67,096. It is assumed that all of the residential units would be market-rate in the No Action condition. Overall, the future No Action condition will add new population with higher average incomes than the average incomes of the existing populations.

Future with the Modified Project

Because the future with the Modified Project would increase the number of units as compared to the two scenarios analyzed in the 2022 FEIS, a preliminary indirect residential displacement analysis was conducted. The Modified Project would introduce up to 992 total units, of which 291 units (30 percent) would be affordable under MIH Option 2.[5] The remaining 701 units would be listed at market rate rent levels. Given that this would be a new housing product, the market rate units would be expected to rent on the higher end of the range of market-rate asking rents in the study area. For the purposes of this analysis, the upper quartile of listed asking rents were utilized to estimate market-rate renters' incomes (see **Table 6**). It was assumed that households would pay 30 percent of their income toward rent. **Table 7** presents the projected household incomes for the market rate renters.

Table 7
Annual Household Income Projections for Market-Rate Units under the Proposed Modifications

Number of Bedrooms	Monthly Rent	Estimated Gross Monthly Income[1]	Estimated Gross Yearly Income	Units[2]	Aggregate Income by Number of Bedrooms (Yearly Income x Units)
Studio	$2,198	$7,327	$87,920	120	$10,550,400
One Bedroom	$2,800	$9,333	$112,000	276	$30,912,000
Two Bedroom	$3,795	$12,650	$151,800	213	$32,333,400
Three bedroom or larger	$4,000	$13,333	$160,000	92	$14,720,000
			Total	**701**	**$88,515,800**
Weighted Average Income of Market Rate Units (Aggregate Income ÷ Total Units)					**$126,271**

Notes: Numbers may not sum to totals due to rounding.

[1] Monthly income was estimated using the assumption that renters spend 30 percent of their gross monthly income on rent.

[2] The unit breakdown was estimated using the existing unit distribution within the study area according to the 2018-2022 ACS.

Sources: Monthly rents from Street Easy Listings, accessed June 2024; US Census Bureau American Community Survey (ACS) 2018-2022.

The overall average income for market-rate households would depend on the unit mixes on the Development Site, which is not currently known. As such, the weighted average income was

[5] The Applicant intends to build up to 968 units in the Modified Project. This Technical Memorandum assumes 30 percent of those units (291) would be affordable, consistent with MIH Option 2.

calculated based on the proportional unit mix of renter-occupied units in the study area,[6] resulting in an average household income of $126,271, which is greater than the study area's average household income in 2022 ($85,123).

As with the Analyzed Project, the Modified Project would adhere to the proposed MIH Area zoning. For the purposes of the analysis, it is assumed that MIH Option 2 would be applicable. Under MIH Option 2, at least 30 percent of the residential floor area would be set aside for persons making no more than 80 percent AMI on average, and no AMI bands shall exceed 130 percent AMI. New York City AMIs are calculated yearly by the U.S. Department of Housing and Urban Development (HUD) and are shown in **Table 8** below.

Table 8
2024 New York City Area Median Income (AMI)

Family Size	30% AMI	40% AMI	50% AMI	60% AMI	70% AMI	80% AMI	100% AMI	120% AMI	130% AMI
1	$32,610	$43,480	$54,350	$65,220	$76,090	$86,960	$108,700	$130,440	$141,310
2	$37,290	$49,720	$62,150	$74,580	$87,010	$99,440	$124,300	$149,160	$161,590
3	$41,940	$55,920	$69,900	$83,880	$97,860	$111,840	$139,800	$167,760	$181,740
4	$46,590	$62,120	$77,650	$93,180	$108,710	$124,240	$155,300	$186,360	$201,890
5	$50,310	$67,080	$83,850	$100,620	$117,390	$134,160	$167,700	$201,240	$218,010

Source: U.S. Department of Housing and Urban Development (HUD)

Assuming MIH Option 2, approximately 291 units would be permanently affordable to households with incomes averaging up to 80 percent AMI. The estimated average household size for the income-restricted units under the Modified Project is assumed to be 2.19 residents per household. Because the household size estimates for the proposed units fall between two whole numbers, as recommended in the *CEQR Technical Manual*, this analysis splits the difference between the AMI 2- and 3-person households for all affordable units. The average household income would be $101,796 for units reserved for households making 80 percent AMI (see **Table 9**).

Table 9
Average Household Income Based on Average Household Size
MIH Option 2

AMI Level	Avg. Household Size	2-Person Household Income	3-Person Household Income	Adjusted for Avg. Household Size[1]
80%	2.19	$99,440	$111,840	$101,796

Note: 1. Because the household size estimates for the proposed units falls between two whole numbers, as recommended in the *CEQR Technical Manual*, this analysis splits the difference between the AMI for 2- and 3-person households for the MIH DUs.
Sources: Average household size of 2.19 for the socioeconomic study area as of the 2020 U.S. Decennial Census.

Table 10 shows the projected average household income for the residents introduced as a result of the proposed modifications, when considering both the affordable and market-rate units. To derive this estimate, the average income of market-rate units was multiplied by the total number of incremental market rate units, and the average income of affordable units was multiplied by the total number of incremental affordable units. These two numbers were then added together to

[6] Based on the U.S. Census Bureau 2018-2022 American Community Survey. The rental housing units in the study area consist of 17.1 percent studios, 39.4 percent one-bedrooms, 30.4 percent two-bedrooms, and 13.1 percent three-or-more-bedrooms.

determine the aggregate income for all the units, and the result was divided by the total number of incremental units to determine an estimated average income for all units of $119,091.

Table 10
Weighted Average Income of Incremental With Action Population

Income		Units	Aggregate Income (Income x Units)
Market Rate[1]	$126,271	701	$88,515,800
MIH Affordable[2]	$101,796	291	$29,622,636
Total		**992**	**$118,138,436**
Weighted Average Income of the With Action Population (Aggregate Income ÷ Total Units)			$119,091

Note: [1]See **Table 7**.
[2]Household income for MIH DUs is based on 80 percent AMI for a family of 2.19 (see **Table 9**).
Source: HUD

Based on the above-described analysis, similar to the Analyzed Project, the Modified Project's weighted average income $119,091 would exceed the average for the existing study area ($85,123). Similar to the Analyzed Project, the Modified Project could add a new population with a higher average household income as compared with the existing study area households. However, as was found in the 2022 FEIS, the study area is experiencing a readily observable trend toward higher incomes and rents. Since the 2022 FEIS, study area median market rate rents for a studio have increased by $345 (from $1,650 to $1,995), while market-rate two-bedroom units rent for $3,075 (compared to $2,250 in the 2022 FEIS). The Modified Project would increase the total number of proposed units, including more permanently affordable units which would help to ensure there is a range of household incomes maintained with the study area. Therefore, as with the 2022 FEIS, the Modified Project would not result in any significant adverse impacts due to indirect residential displacement.

INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED RENTS

With the proposed modifications, the One45 project would no longer include a museum or office use, and would include slightly less retail use (approximately 4,345 gsf less) and accessory parking. Instead, the Modified Project would include additional residential use and a small amount of community facility use. Similar to the Analyzed Project, the Modified Project would not result in significant adverse impacts due to increased rent.

The Modified Project would introduce uses similar to those found throughout the study area, which is predominately a mixed-use residential neighborhood with public facilities and institutions, such as schools and community centers. Compared to the Analyzed Project, the Modified Project would reduce the overall building size by approximately 5,000 gsf. While the Modified Project would still introduce a banquet hall/event space, which would be a new use for the Development Site, it would introduce approximately 1,000 gsf less of this use than previously analyzed in the 2022 FEIS, which ultimately determined that the space would not be considered large enough to alter market conditions in the neighborhood.

Under the proposed modifications, the One45 project would introduce approximately 36,700 gsf of retail space and 7,000 gsf of community facility space, neither of which are considered to be a new economic activity in the study area. Overall, the commercial and community facility space

would not add a concentration of a particular sector to the local economy and therefore would not significantly alter or accelerate existing economic patterns.

Compared to the Analyzed Project, the Modified Project would introduce a greater share of residential space, increasing the total number of units to 992, including 291 permanently affordable units. The study area is a well-established residential neighborhood and the Modified Project would ensure that there is a range of household incomes maintained. The Modified Project would add an incremental 5 percent more units above the Analyzed Project—Residential Podium Scenario and 15 percent more than the Analyzed Project—Office Podium Scenario. However, the indirect residential displacement analysis found that the Modified Project would not result in significant adverse impacts.

The Modified Project would not displace any uses that directly support other businesses or bring customers to the study area. The Modified Project's new residential and worker population would add to the customer base of local businesses, and the banquet hall/event space would draw new visitors to the study area, increasing economic activity. Therefore, similar to the Analyzed Project, the Modified Project would not result in significant adverse impacts from indirect business displacement due to increased rents.

INDIRECT BUSINESS DISPLACEMENT DUE TO RETAIL MARKET SATURATION

Similar to the Analyzed Project, the Modified Project would not result in significant adverse impacts from indirect business displacement due to market saturation. As compared with the Analyzed Project, the Modified Project would result in a greater reduction in retail space at the Development Site as compared to conditions in the future without the proposed actions.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Similar to the Analyzed Project, the Modified Project would not result in significant adverse impacts due to adverse effects on specific industries. Like the Analyzed Project, the Modified Project would not result in the direct displacement of any businesses, nor would the Modified Project introduce substantial new commercial uses that could indirectly displace businesses through increased rents or retail market saturation.

CONCLUSION

Consistent with the findings of the 2022 FEIS, when accounting for the changes in background conditions and the anticipated build year, the Modified Project would not result in any significant adverse impacts due to direct or indirect displacement or adverse effects on specific industries. The proposed modifications would reduce the commercial uses present on the Development Site, removing office and museum uses entirely, and would increase the residential uses, thereby increasing the amount of affordable units. In summary, accounting for the changes in background conditions and the anticipated build year, the Modified Project would not result in any significant adverse impacts to socioeconomic conditions, consistent with the findings of the 2022 FEIS.

COMMUNITY FACILITIES AND SERVICES

This analysis assesses whether any changes in background conditions or the anticipated build year for the Analyzed Project, or the difference between the Analyzed Project program and the Modified Project program, would result in any significant adverse impacts on community facilities and services that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a

significant adverse impact related to community facilities and services. Although the methodology for a schools impact has changed since the 2022 FEIS, there would not be a significant adverse impact to schools under either the old or the new criteria.

The updated information on background conditions presented above and updated information regarding school enrollment, school enrollment projections, and early childhood programs could affect the analyses of public schools and publicly-funded early childhood programs. Therefore, this section presents updated analyses of public schools and publicly-funded early childhood programs.

PUBLIC SCHOOLS

The updated information on background conditions and the anticipated build year was reviewed to determine whether the potential effects on public schools of the Modified Project would remain consistent with the conclusions in the 2022 FEIS for the Analyzed Project. The analysis was also updated to account for current information on school enrollment and enrollment projections as well as the new *CEQR Technical Manual* methodology for elementary and intermediate schools.[7] School enrollment data and enrollment projections for up to 10 years into the future are regularly updated by the New York City School Construction Authority (SCA). This analysis uses the most recent data available, which includes school enrollment for the 2022-2023 school year and enrollment projections for the 2032-2033 school year. (The 2022 FEIS analysis used the most recent data available at the time of publication, which included school enrollment for the 2019-2020 school year, and enrollment projections for the 2026-2027 school year.)

According to the guidance of the *CEQR Technical Manual*, a significant adverse impact may occur for elementary or intermediate schools if a proposed action would result in both of the following conditions: a utilization rate of the elementary and/or intermediate schools in the subdistrict study area, that is equal to or greater than 100 percent in the With Action condition; and 100 or more new students generated from the proposed development past the 100 percent utilization point.

SCA's Projected Public School Ratio is used to calculate the minimum number of residential units that could yield at least 50 elementary/middle school students or 150 high school students, depending on the Community School District of the project area. Senior housing units are excluded from this calculation. The current student generation rates for CSD 5 are 0.09 elementary school students per unit, 0.03 intermediate school students per unit, and 0.02 high school students per unit. Using these student generation rates, the Modified Project would be expected to generate approximately 89 elementary students, 33 intermediate students, and 20 high school students by 2032. Therefore, the analysis below considers elementary and intermediate schools.

Table 11 provides updated information on the elementary and intermediate schools that serve the project area and provides the most current enrollment and capacity data for these schools. No new schools have opened since the completion of the 2022 FEIS. Elementary schools in Subdistrict 2/CSD 5 are currently operating at 66.8 percent utilization, and intermediate schools are currently operating at 57.3 percent utilization.

[7] The prior *CEQR Technical Manual* methodology, as reflected in the 2022 FEIS, examined an impact after 100% utilization was reached and the percentage change between No Action and With Action conditions exceeded five percentage points. Under current *CEQR Technical Manual* methodology, a significant adverse impact can occur after 100% utilization is reached and 100 or more elementary or intermediate students are generated by a project.

Table 11
Public School Enrollment, Capacity, and Utilization: Existing Conditions

Map No.[1]	Name	Address	Enrollment	Target Capacity	Available Seats	Utilization
Elementary Schools in Subdistrict 2/CSD 5						
1	P.S. 046 Arthur Tappan	2987 Frederick Douglass Boulevard	282	425	143	66.4%
2	P.S. 046 Arthur Tappan (mini-school)[2]	2987 Frederick Douglass Boulevard	16	0	-16	0.0%
3	P.S. 123 Mahalia Jackson	301 West 140th Street	232	328	96	70.7%
4	P.S. 194 Countee Cullen	244 West 144th Street	156	223	67	70.0%
5	P.S. 197 John B. Russwurm	2230 Fifth Avenue	203	352	149	57.7%
6	P.S. 200 The James McCune Smith School	2589 Seventh Avenue	289	520	231	55.6%
7	P.S. 371	276 West 151st Street	174	175	1	99.4%
Elementary Schools Subdistrict 2 Total			**1,352**	**2,023**	**671**	**66.8%**
Intermediate Schools in Subdistrict 2/CSD 5						
8	P.S. 046 Arthur Tappan	2987 Frederick Douglass Boulevard	127	194	67	65.5%
9	P.S. 046 Arthur Tappan (mini-school)[2]	2987 Frederick Douglass Boulevard	7	0	-7	0.0%
10	P.S. 123 Mahalia Jackson	301 West 140th Street	169	240	71	70.4%
11	Eagle Academy for Yong Men of Harlem I.S. 136	6 Edgecombe Avenue	52	204	152	25.5%
12	Frederick Douglass Academy I.S. 10	2581 Seventh Avenue	171174	286	112	60.8%
Intermediate Schools Subdistrict 2 Total			**529**	**924**	**395**	**57.3%**

Notes: [1] See **Figure 10**.
[2] Capacity from transportable classroom units and mini-schools are excluded from analysis.
Source: DOE *Utilization Profiles: Enrollment/Capacity/Utilization*, 2022-2023.

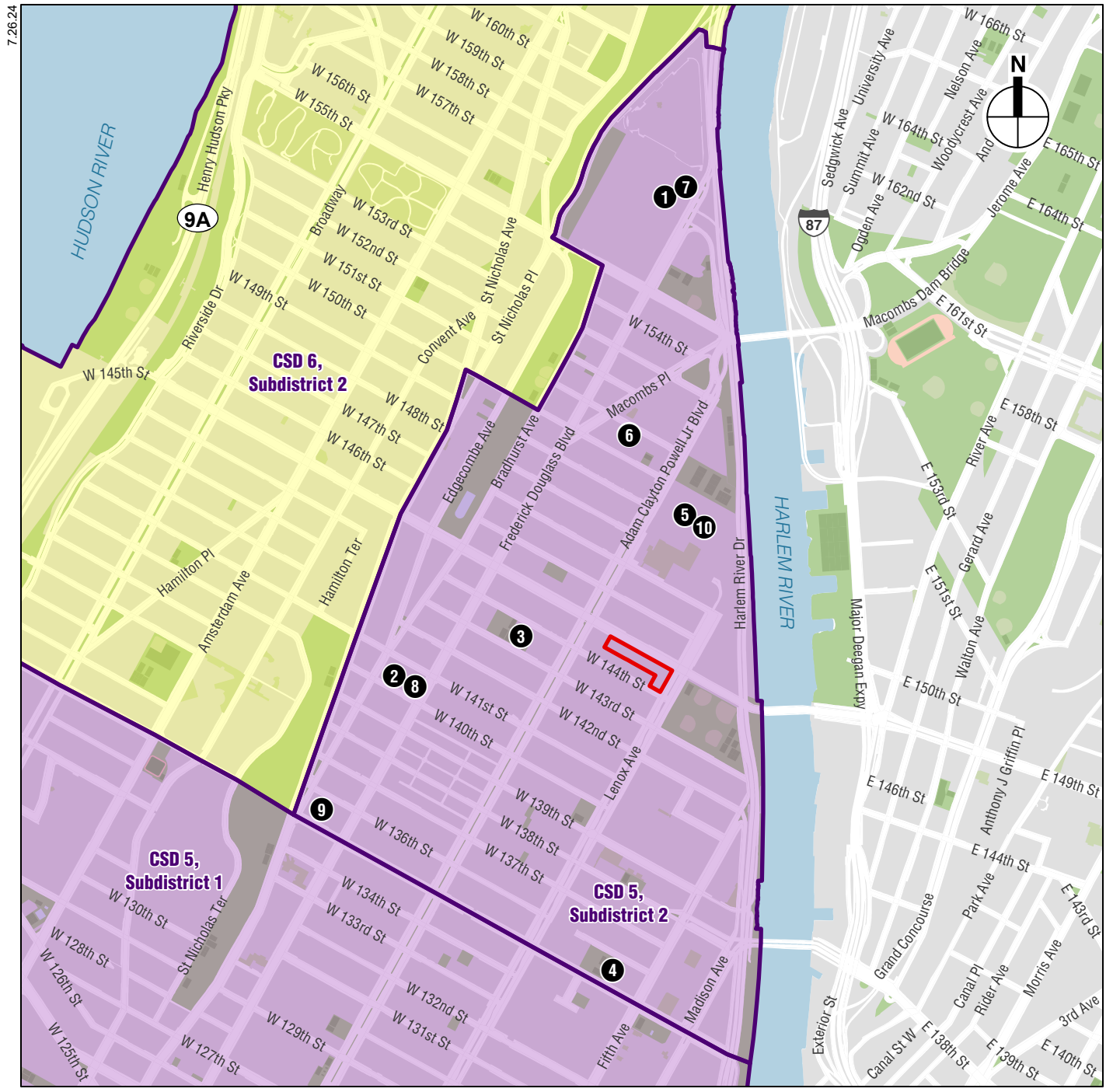
Table 12 shows school enrollment, capacity, and utilization in the 2032 No Action condition. The SCA enrollment projections currently extend from 2023 through 2032; therefore, the 2032 projections form the baseline enrollment for the 2032 No Action condition. As noted above, the students introduced by anticipated residential projects in the schools' study area (derived from SCA Capital Planning Division's *Projected New Housing Starts*) are added to this baseline projected enrollment using the SCA student numbers for Subdistrict 2/CSD 5. DOE's 2025-2029 Five-Year Capital Plan Proposed Amendment (February 2024) identifies no capacity-increasing projects within CSD 5 by the 2032 Build year.

Table 12
Estimated Public School Enrollment, Capacity, and Utilization
2032 No Action Scenario

Study Area	Projected Enrollment in 2032	Students Introduced by Residential Projects in the 2032 No Action Condition	Total 2032 Enrollment	Capacity	Available Seats	Utilization
Elementary Schools						
Subdistrict 2/ CSD 5	1,405	154	1,559	2,023	464	77.1%
Intermediate Schools						
Subdistrict 2/ CSD 5	293	60	353	924	571	38.2%

Sources: *Enrollment Projections 2023-2032 New York City Public Schools by Statistical Forecasting; DOE, Utilization Profiles: Enrollment/Capacity/Utilization 2022–2023 School Year;* DOE 2025–2029 *Proposed Five-Year Capital Plan;* SCA.

Table 13 shows school enrollment, capacity, and utilization in the 2032 With Action condition. As shown in **Table 13**, elementary and intermediate schools in Subdistrict 2 would continue to operate with available capacity in both the 2032 No Action and With Action condition; Elementary school utilization rates within Subdistrict 2 would increase from 77.1 percent in the 2032 No Action condition to 81.5 percent in the 2032 With Action condition (a 4.45 percent increase in utilization),



Public Elementary and Intermediate Schools Serving the Development Site

Figure 10

and intermediate school utilization rates would increase from 38.2 percent in the 2032 No Action condition to 41.5 percent in the 2032 With Action condition (a 3.25 percent increase in utilization). Therefore, the Modified Project would not result in a significant adverse schools impact in the 2032 With Action condition, as the utilization rates would increase compared to the 2032 No Action condition but utilization would remain below 100 percent.

Table 13
Estimated Public School Enrollment, Capacity, and Utilization
2032 With Action Scenario

Study Area	No Action Enrollment	Students Introduced by the Proposed Actions	Total 2032 With Action Enrollment	Capacity	Available Seats	Utilization	Change in Utilization Compared with 2032 No Action
Elementary Schools							
Subdistrict 2/ CSD 5	1,559	90	1,649	2,023	374	81.5%	4.45%
Intermediate Schools							
Subdistrict 2/ CSD 5	353	30	383	924	541	41.5%	3.25%

Sources: *Enrollment Projections 2023–2032 New York City Public Schools by Statistical Forecasting; DOE, Utilization Profiles: Enrollment/Capacity/Utilization 2022–2023 School Year;* DOE 2025–2029 *Proposed Five-Year Capital Plan;* SCA.

EARLY CHILDHOOD PROGRAMS

The updated information on background conditions and the anticipated build year was reviewed to determine whether the potential for effects on early childhood programs in the future with the Modified Project would remain consistent with the conclusions in the 2022 FEIS. As detailed above, the 2022 FEIS concluded that the Analyzed Project would not result in a significant adverse impact on early childhood programs.

Under current *CEQR Technical Manual* methodology, if a proposed project would add more than 20 eligible children to the study area's early childhood program facilities; a detailed analysis of the proposed project's impact on those facilities is warranted. The threshold is based on the number of low- and moderate-income units within a proposed project, which in Manhattan is 139 units. The Modified Project would create up to 992 housing units by 2032 (198 affordable units, assuming that 20 percent of all units would be affordable at 80 percent of Area Median Income [AMI] and below), which would generate approximately 23 children under the age of six who could be eligible for publicly funded early childhood programs.

According to the *CEQR Technical Manual's* current methodology for early childhood program analyses, in general the locations of publicly funded group early childhood programs within 1.5 to 2 miles[8] of a project site should be shown, reflecting the fact that the centers closest to a given site are more likely to be subject to increased demand. Current enrollment data for the early childhood programs closest to the Development Site were gathered from DOE. Child care enrollment in the future without the Modified Project (2032) was estimated by multiplying the number of new affordable housing units expected in the study area by the CEQR multipliers for estimating the number of children under age six eligible for publicly funded child care services. For Manhattan, the multiplier estimates 0.115 public child care-eligible children under age six per affordable housing unit. The child care-eligible population expected to be introduced to the study

[8] A 2-mile radius was used, consistent with the 2022 FEIS.

area by the Modified Project was also estimated using the *CEQR Technical Manual* child care multipliers.

EXISTING CONDITIONS

There are currently 148 publicly funded early childhood programs within the study area (see **Figure 11**), with a total capacity of 7,814 slots and a surplus of 2,730 slots (51 percent utilization). **Table 14** shows the current capacity and enrollment for these facilities. Family-based early childhood programs and informal care arrangements provide additional slots in the study area, but these slots are not included in the quantitative analysis.

Table 14
Publicly Funded Early Childhood Programs Serving the Study Area

Map No.[1]	Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
1	P.S. 076 A. Philip Randolph	220 West 121st Street	24	35	11	68%
2	P.S. 149 Sojourner Truth	41 West 117th Street	17	25	8	68%
3	P.S. 165 Robert E. Simon	234 West 109th Street	33	49	16	68%
4	P.S. 180 Hugo Newman	370 West 120th Street	50	74	24	68%
5	The Locke School of Arts and Engineering	20 West 112th Street	39	57	18	68%
6	Stem Institute of Manhattan	240 West 113th Street	12	18	6	68%
7	P.S. 242 The Young Diplomats Magnet Academy	20 West 112th Street	9	13	4	68%
8	P.S. 007 Samuel Stern	160 East 120th Street	18	26	8	68%
9	River East Elementary	2351 First Avenue	24	35	11	68%
10	James Weldon Johnson	176 East 115th Street	34	50	16	68%
11	P.S. 083 Luis Munoz Rivera	219 East 109th Street	17	25	8	68%
12	P.S. 096 Joseph Lanzetta	216 East 120th Street	16	24	8	68%
13	P.S. 102 Jacques Cartier	315 East 113th Street	15	22	7	68%
14	P.S. 108 Assemblyman Angela del Toro Educational C	1615 Madison Avenue	19	28	9	68%
15	P.S. 112 Jose Celso Barbosa	535 East 119th Street	23	34	11	68%
16	P.S. 155 William Paca	319 East 117th Street	15	22	7	68%
17	The Bilingual Bicultural School	219 East 109th Street	16	24	8	68%
18	Mosaic Preparatory Academy	141 East 111th Street	19	28	9	68%
19	Central Park East	1573 Madison Avenue	32	47	15	68%
20	P.S. 030 Hernandez/Hughes	144-176 East 128th Street	16	24	8	68%
21	P.S. 036 Margaret Douglas	123 Morningside Drive	27	40	13	68%
22	P.S. 046 Arthur Tappan	2987 Frederick Douglas Boulevard	28	41	13	68%
23	P.S. 092 Mary McLeod Bethune	222 West 134th Street	16	24	8	68%
24	P.S. 123 Mahalia Jackson	301 West 140th Street	23	34	11	68%
25	P.S. 125 Ralph Bunche	425 West 123rd Street	35	51	16	68%
26	P.S. 129 John H. Finley	425 West 130th Street	28	41	13	68%
27	P.S. 133 Fred R. Moore	2121 Fifth Avenue	18	26	8	68%
28	P.S. 154 Harriet Tubman	250 West 127th Street	25	37	12	68%
29	P.S. 175 Henry H. Garnet	175 West 134th Street	36	53	17	68%
30	P.S. 194 Countee Cullen	244 West 144th Street	14	21	7	68%
31	P.S. 197 John B. Russwurm	2230 Fifth Avenue	17	25	8	68%
32	P.S. 200 The James McCune Smith School	2589 Seventh Avenue	41	60	19	68%
33	Teachers College Community School	168 Morningside Avenue	19	28	9	68%
34	P.S. 004 Duke Ellington	500 West 160th Street	53	78	25	68%
35	P.S. 008 Luis Belliard	465 West 167th Street	34	50	16	68%
36	P.S. 028 Wright Brothers	475 West 155th Street	35	51	16	68%
37	P.S. 115 Alexander Humboldt	586 West 177th Street	23	34	11	68%
38	P.S. 128 Audubon	560 West 169th Street	54	79	25	68%

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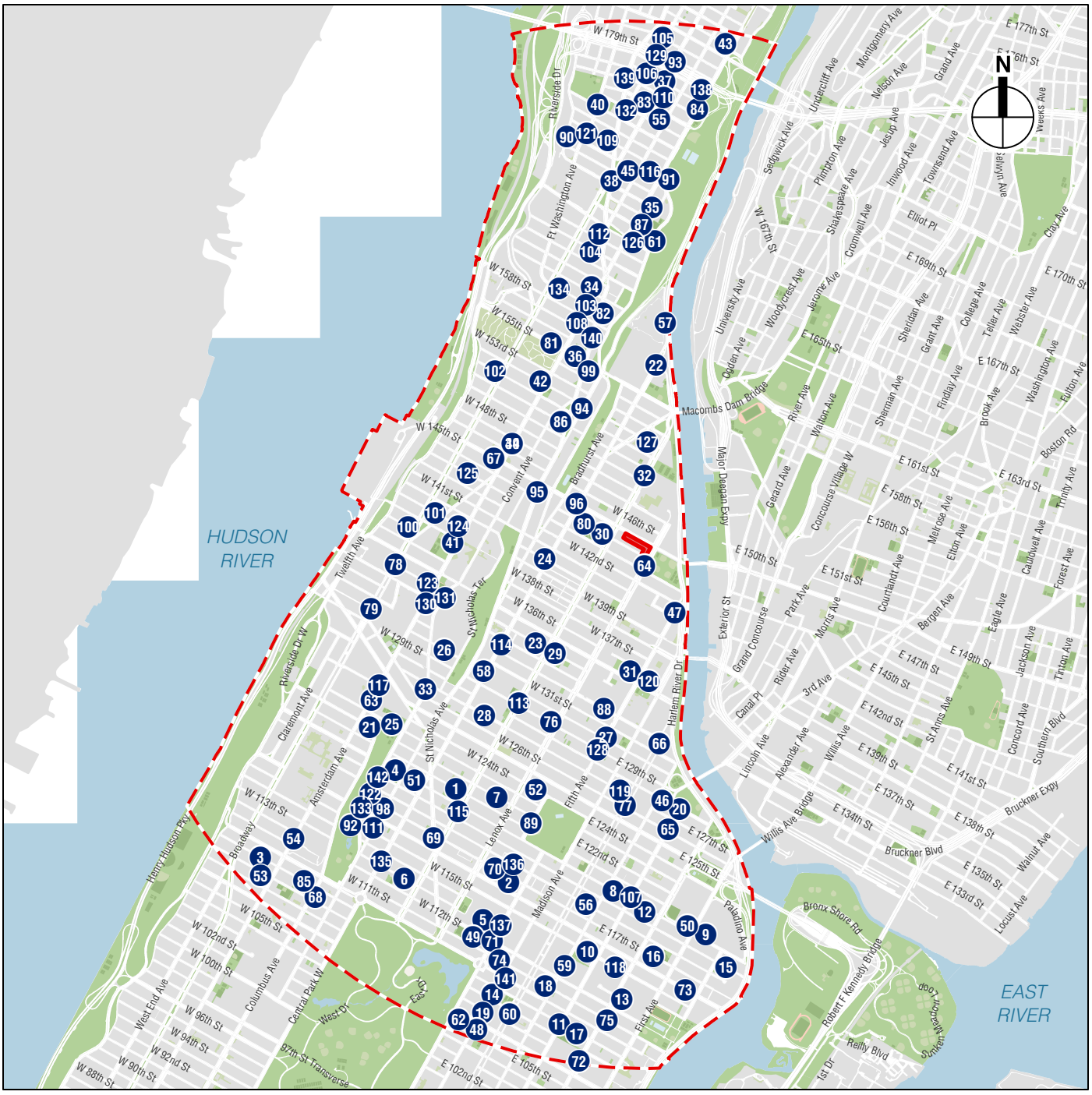

Publicly Funded Early Childhood Programs

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Figure 11

Table 14 (cont'd)
Publicly Funded Early Childhood Programs Serving the Study Area

Map No.[1]	Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
39	P.S. 153 Adam Clayton Powell	1750 Amsterdam Avenue	43	63	20	68%
40	P.S. 173	306 Fort Washington Avenue	55	81	26	68%
41	P.S. 192 Jacob H. Schiff	500 West 138th Street	18	26	8	68%
42	P.S./I.S. 210 21st Century Academy for C	501-503 West 152nd Street	18	26	8	68%
43	Washington Heights Expeditionary Learning School	511 West 182nd Street	34	50	16	68%
44	The William Lynch School	1750 Amsterdam Avenue	18	26	8	68%
45	Castle Bridge School	560 West 169th Street	18	26	8	68%
46	P.S. 138	144-176 East 128th Street	17	25	8	68%
47	Global Community Charter School	2350 Fifth Avenue	32	47	15	68%
48	East Harlem Scholars Academy Charter School II	1573 Madison Avenue	17	25	8	68%
49	Harlem Link Charter School	20 West 112th Street	41	60	19	68%
50	Harlem Village Academy East Charter School	2351 First Avenue	51	75	24	68%
51	New York French-American Charter School	311 West 120th Street	36	53	17	68%
52	Harlem Village Academy West Charter School	74 West 124th Street	73	107	34	68%
53	Ascension School	220 West 108th Street	36	53	17	68%
54	Cathedral Church of Saint John the Divine	1047 Amsterdam Avenue	14	21	7	68%
55	Incarnation School	570 West 175th Street	60	88	28	68%
56	St. Paul School	114 East 118th Street	25	37	12	68%
57	Prince Hall Colonial	159-30 Harlem River Drive	11	16	5	68%
58	**UCNY Round-the-Clock Nursery**	**301B West 130th Street**	**18**	**25**	**7**	**72%**
59	**Union Johnson**	**1829 Lexington Avenue**	**7**	**48**	**41**	**15%**
60	**Therapeutic Early Childhood Center**	**1475 Park Avenue**	**21**	**24**	**3**	**88%**
61	**Rena Day Care Centers, Inc.**	**639 Edgecombe Avenue**	**42**	**114**	**72**	**37%**
62	**Union Carver**	**1565 Madison Avenue**	**5**	**72**	**67**	**7%**
63	**Grant Day Care / East Harlem Block Nursery 3**	**1299 Amsterdam Avenue**	**14**	**39**	**25**	**36%**
64	Mother Hale Learning Center	669 Lenox Avenue	22	32	10	68%
65	**Addie Mae Collins Community Services III**	**2322 Third Avenue, Ground Floor**	**17**	**66**	**49**	**26%**
66	**Early Life East Harlem**	**1957 Park Avenue**	**19**	**45**	**26**	**42%**
67	**LSSMNY: Early Life Children's Center 14**	**510 West 145th Street**	**37**	**139**	**102**	**27%**
68	**Bloomingdale Project Hope**	**987 Columbus Avenue**	**27**	**33**	**6**	**82%**
69	**Citizens Care Daycare Center 1**	**131 St. Nicholas Avenue**	**5**	**35**	**30**	**14%**
70	Harlem Gems	60 West 117th Street	40	59	19	68%
71	**East Calvary Day Care Center**	**1 West 112th Street**	**11**	**35**	**24**	**31%**
72	**Franklin Plaza**	**2081 Second Avenue**	**15**	**45**	**30**	**33%**
73	**East Harlem Council for Human Services, Inc. Bilingual Head Start Site I**	**440 East 116th Street**	**30**	**135**	**105**	**22%**
74	**East Harlem Council for Human Services, Inc. Bilingual Head Start Site II**	**30 East 111th Street**	**25**	**66**	**41**	**38%**
75	Susan Patricof Head Start	302-306 East 111th Street	25	37	12	68%
76	Harlem Gems North	381 Lenox Avenue	80	118	38	68%
77	**ABC / Echo Park ECDC**	**1841 Park Avenue**	**20**	**40**	**20**	**50%**
78	Urban Concepts of New York, Round-the-Clock Nursery, Inc.	3333D Broadway	27	40	13	68%
79	**Citizens Care Daycare Center 3**	**3240 Broadway, Apt. 5G**	**18**	**59**	**41**	**31%**

Table 14 (cont'd)
Publicly Funded Early Childhood Programs Serving the Study Area

Map No.[1]	Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
80	**ECDO Child Start Center**	**249 West 144th Street**	**20**	**69**	**49**	**29%**
81	**Northern Manhattan Head Start 1**	**529-531 West 155th Street**	**85**	**206**	**121**	**41%**
82	**United Federation of Black Community Organization, Inc.**	**474 West 159th Street**	**14**	**132**	**118**	**11%**
83	Washington Heights Child Care Center	610 West 175th Street	27	40	13	68%
84	Mama Tingo Childcare & Education Center	2346 Amsterdam Avenue	37	54	17	68%
85	Cathedral Parkway Towers Pre-School, Inc.	125 West 109th Street	9	13	4	68%
86	Nasry Michelen Day Care Center, Inc.	415 West 150th Street	21	31	10	68%
87	**P.S. 8 Luis Belliard**	**465 West 167th Street**	**13**	**17**	**4**	**76%**
88	**ECDO ACP Early Learn**	**25 West 132nd Street**	**8**	**39**	**31**	**21%**
89	**Community Life Center, Inc.**	**15 Mt. Morris Park West**	**16**	**79**	**63**	**20%**
90	Bright Horizons New York Presbyterian Hospital Uptown	61 Haven Avenue	13	19	6	68%
91	Rosa Family Daycare at 2224 Amsterdam Ave	2224 Amsterdam Avenue	52	76	24	68%
92	Amanda Burgos Group Family Daycare at 20 Morningside Ave	20 Morningside Avenue	52	76	24	68%
93	Idonka Daycare at 1365 St. Nicholas Ave	1365 St. Nicholas Avenue	52	76	24	68%
94	Robelis M. Frances Tavarez at 34 St. Nicholas Place	34 St. Nicholas Place	52	76	24	68%
95	Norma's Family Group Daycare at 695 St. Nicholas Ave	695 St. Nicholas Avenue	52	76	24	68%
96	**UCNY Round-the-Clock Nursery**	**300 West 145th Street**	**14**	**50**	**36**	**28%**
97	Bright Beginnings Early Learn at 140 Vermilyea Ave	140 Vermilyea Avenue	16	24	8	68%
98	Ingrid Familia Day Care at 369 W 116th St	369 West 116th Street	16	24	8	68%
99	Sugar Hill Museum Preschool	898 St. Nicholas Avenue, 1st Floor	29	43	14	68%
100	Miriam Castro at 606 W 137th St	606 West 137th Street	16	24	8	68%
101	Happy Kids at 571 W 139th St	571 West 139th Street	52	76	24	68%
102	Rena at 609 W 151st St	609 West 151st Street	52	76	24	68%
103	**Moreau LMSW Children and Family Services**	**1996 Amsterdam Avenue**	**15**	**48**	**33**	**31%**
104	Jardin Infantil Day Care at 548 W 163rd St	548 West 163rd Street	52	76	24	68%
105	Sugeirys Pena Group Family Daycare at 111 Wadsworth Ave	111 Wadsworth Avenue	52	76	24	68%
106	Deyanira Corporation at 111 Wadsworth Ave	111 Wadsworth Avenue	52	76	24	68%
107	Sunshine LC of 3rd Ave LLC	2205 Third Avenue	26	38	12	68%
108	Patricia Colon at 498 W 158th St	498 West 158th Street	52	76	24	68%
109	Dreams 4 the Kidz at 632 W 171st St	632 West 171st Street	16	24	8	68%
110	Liliana Group Family Daycare at 580 W 176th St	580 West 176th Street	52	76	24	68%
111	Zoraida Santos Group Family Daycare at 369 W 116th St	369 West 116th Street	52	76	24	68%
112	Family Group Day Care Baby Blue at 545 W 164th St	545 West 164th Street	52	76	24	68%
113	Heaven's Tiny Tots, Inc.	2185 Adam Clayton Powell Boulevard	11	16	5	68%
114	Stephanie Harris at 2480 8th Ave	2480 Eighth Avenue	16	24	8	68%

Table 14 (cont'd)
Publicly Funded Early Childhood Programs Serving the Study Area

Map No.[1]	Contractor Name	Address	Enrollment	Capacity	Available Slots	Utilization Rate
115	Bright Little Stars Group Family Daycare at 1990 Adam Clayton Powell Jr Blvd	1990 Adam Clayton Powell Jr. Boulevard	16	24	8	68%
116	Little Smiles Group FDC at 2224 Amsterdam Ave	2224 Amsterdam Avenue	52	76	24	68%
117	Yalides Collado Group Family Day Care at 1315 Amsterdam Ave	1315 Amsterdam Avenue	52	76	24	68%
118	Union Settlement at 230 E 115th St	230 East 115th Street	16	24	8	68%
119	Ronda Dalrymple at 78-80 E 127th St	78-80 East 127th Street	16	24	8	68%
120	Toni Sunshine Daycare at 2235 5th Ave	2235 Fifth Avenue	8	12	4	68%
121	Nueva Amanecer Group Day Care Corp at 260 Fort Washington Ave	260 Fort Washington Avenue	52	76	24	68%
122	Ada Gonzalez at 20 Morningside Ave	20 Morningside Avenue	16	24	8	68%
123	Loving Your Family Daycare at 504 W 134th St	504 West 134th Street	8	12	4	68%
124	Jhoanna Ortiz at 508 W 139th St	508 West 139th Street	9	13	4	68%
125	Claudette Barnaby at 523 W 143rd St	523 West 143rd Street	52	76	24	68%
126	HappyCare Family Day Care at 476 W 165th St	476 West 165th Street	16	24	8	68%
127	**Bethany Day Nursery, Inc.**	**224 West 152nd Street**	**8**	**33**	**25**	**24%**
128	Paradise Child Care, Inc. at 2 W 129th St	2 West 129th Street	16	24	8	68%
129	Laly Group Family Daycare at 111 Wadsworth Ave	111 Wadsworth Avenue	52	76	24	68%
130	Imagine Early Learning Center @ City College	119 Convent Avenue	12	18	6	68%
131	**Universal Pre-K C.B.O.**	**119 Convent Avenue**	**63**	**7**	**-56**	**900%**
132	Carla J. Guzman de Gomez at 15 Wadsworth Ave	15 Wadsworth Avenue	8	12	4	68%
133	Altagracia Rojas at 20-23 Morningside Ave	20-23 Morningside Avenue	52	76	24	68%
134	The Small Idea at 570 W 159th St	570 West 159th Street	8	12	4	68%
135	Heaven's Tiny Tots, Child Development Center, Inc.	2094 Frederick Douglass Boulevard	5	7	2	68%
136	The Learning Well of NY, LLC at 37 W 118th St	37 West 118th Street	8	12	4	68%
137	The Explorers Daycare at 1365 5th Ave	1365 Fifth Avenue	52	76	24	68%
138	Rita Perez Daycare at 508 W 178th St	508 West 178th Street	16	24	8	68%
139	Fior Maria Disla de Espinal at 701 W 176th St	701 West 176th Street	52	76	24	68%
140	Tot's Palace Daycare at 938 St Nicholas Ave	938 St. Nicholas Avenue	16	24	8	68%
141	Jody's Shining Stars, Inc. at 1660 Madison Ave	1660 Madison Avenue	8	12	4	68%
142	Mary Tarawaley Family Daycare at 50 Morningside Ave	50 Morningside Avenue	52	76	24	68%
143	Union Settlement Association, Inc.	114 East 122nd Street	N/A	165	N/A	N/A
144	Rena Day Care Center, Inc	1854 Amsterdam Avenue	N/A	525	N/A	N/A
145	West Harlem Community Organization	121 West 128th Street	N/A	251	N/A	N/A
146	Utopia Childrens' Center	236 West 129th Street	N/A	30	N/A	N/A
147	Jefferson	2211 First Avenue	N/A	33	N/A	N/A
148	Community Life Center, Inc. Lenox Avenue Site	258 West 153rd Street	N/A	57	N/A	N/A
Total			**4,023**	**7,814**	**2,730**	**51%**

Note: See **Figure 11.**
Where capacity data was not provided (projects not in **Bold**), the average percentage of available capacity within the study area (approximately 68 percent) was used so that enrollment was assumed to equal 68 percent of capacity.
Source: DOE, December 2023

FUTURE WITHOUT THE PROPOSED MODIFICATIONS

By 2032, four residential No Build projects in the child care study area will introduce approximately 141 new affordable housing units and approximately 17 children under age 6 who would be eligible for publicly-funded child care programs, based on current CEQR generation rates.[9]

FUTURE WITH THE PROPOSED MODIFICATIONS

The Modified Project is estimated to introduce approximately 198 affordable housing units to the study area. Although the Applicant intends to pursue MIH Option 2 (30 percent affordable), in order to ensure a reasonably conservative analysis, it is assumed 20 percent of the 992 housing units in the Modified Project would meet the criteria for publicly funded child care, which specifies units affordable for households earning 80 percent (or below) of the AMI. Based on the current *CEQR Technical Manual* child care multipliers, the Modified Project would result in approximately 23 children under the age of six who would be eligible for publicly funded child care programs. As detailed in **Table 15**, in the 2032 future with the proposed modifications, early childhood programs in the study area would operate at 53.58% percent utilization with a surplus of 3,627 slots.

The *CEQR Technical Manual* guidelines indicate that a demand for slots greater than the remaining capacity of early childhood programs and an increase in demand of 5 percentage points of the study area capacity could result in a significant adverse impact. In the 2032 future with the proposed modifications, early childhood programs in the study area would operate under capacity and would exhibit an increase in the utilization rate of less than 5 percentage points as compared with the future without the proposed modifications. Therefore, consistent with the findings of the 2022 FEIS, the Modified Project would not result in a significant adverse impact on early childhood programs.

Table 15
Estimated Public Child Care Facility Enrollment, Capacity, and Utilization

	Enrollment	Capacity	Available Slots	Utilization Rate	Change in Utilization
2032 Future Without the Proposed Modifications	4,164	7,814	3,650	53.29%	N/A
2032 Future With the Proposed Modifications	4,187	7,814	3,627	53.58%	0.29%

Sources: DOE, December 2023; AKRF, Inc.

OTHER COMMUNITY FACILITIES

The headquarters of the National Action Network (NAN), a civil rights organization, are located on the Development Site. In the event NAN does not relocate its headquarters in the future without the proposed modifications, it would be directly displaced in both the No Action and With Action scenarios. NAN could also return to the site once developed, subject to agreement on lease terms.

The Timbuktu Islamic Center is also currently located on the Development Site. The Center occupies approximately 2,550 sf of the building at 103 West 144th Street and serves Harlem's Malian community. The Center's lease expired in June 2021, and the Center is in the process of relocating to another site within the neighborhood. That process is expected to be complete in the near future.

[9] Affordable units reflect units between extremely low income to low income (80 percent AMI or below).

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to community facilities, consistent with the findings of the 2022 FEIS.

OPEN SPACE

This analysis assesses whether any changes in background conditions or the anticipated build year for the Analyzed Project, or the difference between the Analyzed Project program and Modified Project program, would result in any significant adverse impacts to open space that were not addressed in the 2022 FEIS. The 2022 FEIS identified a significant adverse impact related to open space.

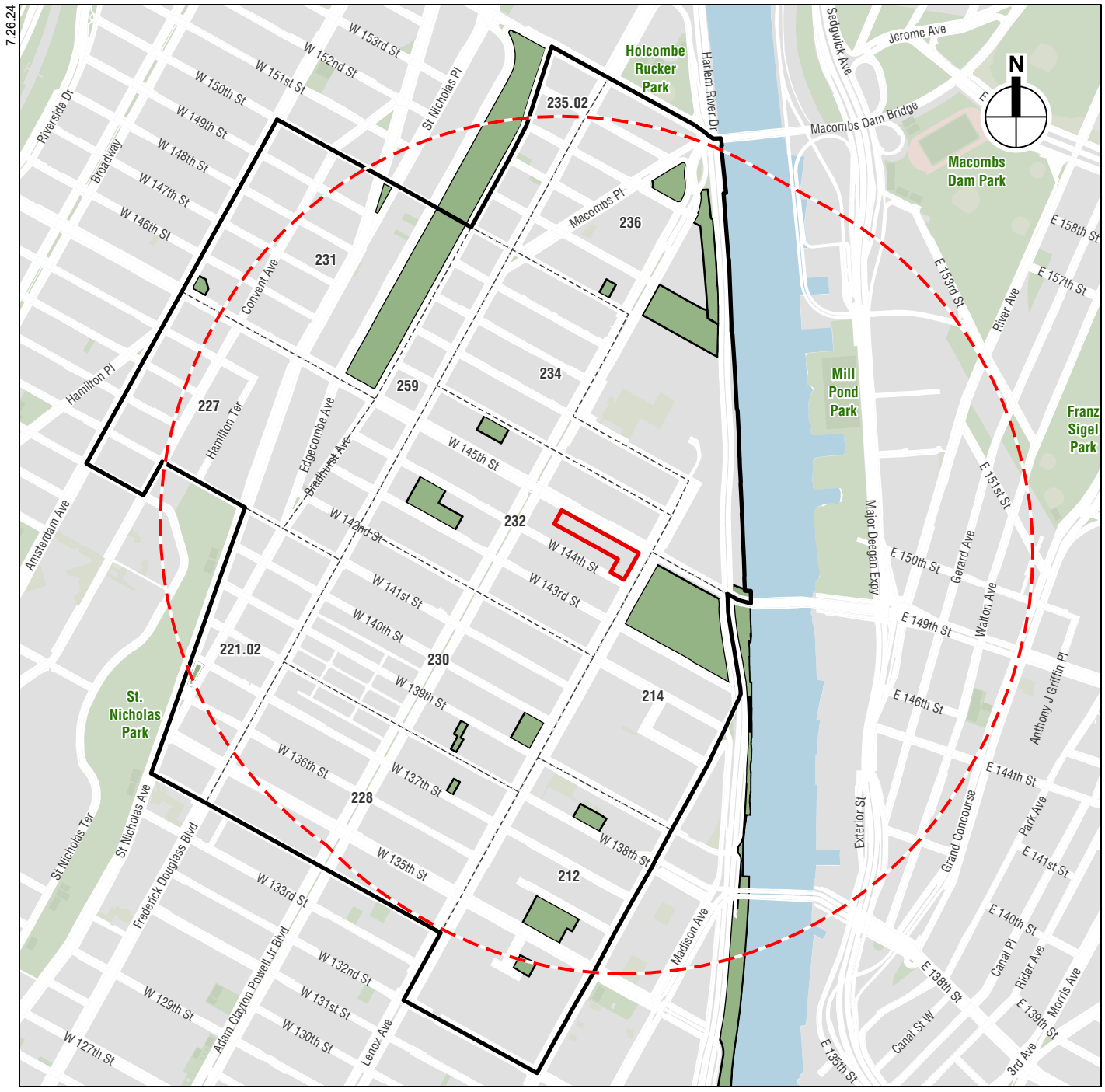
The 2022 FEIS concluded that while the Analyzed Project would not result in the physical loss or direct displacement of publicly accessible open space or significant adverse direct impacts due to shadows, air quality, noise, and construction that would affect the usefulness of a public open space temporarily or permanently, it would result in a significant adverse indirect open space impact to total, active, and passive open space due to the underserved nature of the study area.

EXISTING CONDITIONS

Since the 2022 FEIS, the residential population within the ½-mile open space study area has increased. Based on the 2020 Census, the study area currently has an estimated population of 66,737 (compared to 57,806 in the 2022 FEIS, based on the 2015–2019 ACS). No new open spaces have been developed within the study area since the 2022 FEIS; however, several open spaces in the study area are currently being renovated. These include reconstruction of the Percy E. Sutton Playground (formerly the Harlem Lane Playground), the William McCray Playground, and the Hansborough Recreation Center. The open space resource closest to the Development Site—the Brigadier General Charles Young Playground, formerly the Colonel Charles Young Playground—was recently improved with renovated basketball courts and a new soccer pitch, and planning is underway to renovate the playground's comfort station and field house.

The study area currently includes 17 public open spaces, which total 21.98 acres excluding areas of resources that are currently under construction. Of this total, 17.40 acres are active space and 4.58 acres are passive (see **Table 16** and **Figure 12**).

As detailed in **Table 17** below, with a residential population of 66,737 and a total of 21.98 acres of open space, the study area has a total open space ratio of 0.33 acres per 1,000 residents. This is below the City's planning guideline of 2.5 acres of combined active and passive open space per 1,000 residents as well as the City-wide median of 1.5 acres per 1,000 residents. The study area's passive open space ratio is 0.07 acres per 1,000 residents and the active open space ratio is 0.26 acres per 1,000 residents; which is below the City's planning goals of 0.5 acres and 2.0 acres per 1,000 residents, respectively.



Open Space Resources

Figure 12

Table 16
Existing Conditions Open Space Inventory

Map No.	Name	Owner	Features	Size (acres)	Acres of Active Open Space	Acres of Passive Open Space	Condition/ Utilization[1]
1/2-Mile Residential Study Area							
1	Brigadier General Charles Young Playground	NYC Parks	Playgrounds; basketball and tennis courts; baseball fields; chess tables; spray showers; benches; lawns	6.42	5.78	0.64	Good/High
2	Frederick Johnson Playground	NYC Parks	Seating areas; chess tables; playgrounds; spray showers; tennis and handball courts; sports court	2.44	2.20	0.24	Good/ Moderate Usage
3	Bill Bojangles Robinson Playground	NYC Parks	Playground; basketball court; benches	0.17	0.16	0.01	Good/Moderate
4	Percy E. Sutton Playground[2]	NYC Parks	Playground; basketball courts; benches	0.82	0.41	0.41	Under Construction
5	Brigadier General Charles Young Triangle	NYC Parks	Benches; lawn	0.88	0.00	0.88	Good/Low
6	Howard Bennett Playground	NYC Parks	Playground; benches; handball and basketball courts; spray showers; comfort station	1.23	1.23	0.00	Excellent/High
7	Fred Samuel Playground	NYC Parks	Playground; benches; basketball courts; fitness equipment; spray showers; comfort station	0.69	0.48	0.21	Excellent /High
8	Dorrance Brooks Square	NYC Parks	Benches; landscaping; subway station entrance	0.04	0.00	0.04	Good/Moderate
9	Jackie Robinson Park[3]	NYC Parks	Recreation center; outdoor pool; spray showers; playgrounds; handball, basketball, and volleyball courts; baseball fields; band shell; benches	6.66	5.00	1.66	Excellent/High
10	Renaissance Playground (PS 194)	NYC Parks/DOE	Playground; basketball courts; paved recreational area; benches; comfort station	1.34	1.34	0.00	Excellent /High
11	William McCray Playground[2]	NYC Parks	Playgrounds; basketball court; benches; water fountain	0.23	0.23	0.00	Under Construction
12	Abyssinian Tot Lot	NYC Parks	Playground; benches; picnic tables; lawn	0.12	0.09	0.03	Excellent/ Moderate
13	Robert L. Clinkscales Playground and Community Garden	NYC Parks	Playground; sandboxes; spray showers; community garden; chess and picnic tables; benches	0.44	0.22	0.22	Excellent /High
14	Hansborough Recreation Center[2]	NYC Parks	Accessible fitness equipment; basketball court; cardio, fitness, dance, and multipurpose rooms; gymnasium; kitchen; locker rooms; media lab; pool; pool table; track	0.00	0.00	0.00	Under Construction
15	Donnellan Square	NYC Parks	Landscaping; benches	0.11	0.00	0.11	Good/Moderate
16	Harlem River Park[4]	NYC Parks	Walkways; bike paths; benches; lawns	0.20	0.16	0.04	Fair/Moderate
17	Heritage Health Care Plaza and Playground	Heritage Health Care	Playground on a public plaza	0.19	0.10	0.09	Fair/Low
			Residential Study Area Total	**21.98**	**17.40**	**4.58**	
Outside Residential Study Area (Not Included in Quantitative Analysis)							
A	Holcombe Rucker Park	NYC Parks	Playgrounds; baseball fields, basketball courts, handball courts, spray showers	3.05	2.75	0.3	Good/moderate
B	St. Nicholas Park	NYC Parks	Barbecuing areas; basketball courts; handball courts; playgrounds; spray showers	22.74	4.54	18.2	Excellent/moderate
C	Mill Pond Park	NYC Parks	Barbecuing areas; tennis courts	11.57	4.62	6.95	Excellent/High

Notes: See **Figure 12** for open space resources.
[1] Condition and utilization are based on field observations made in June 2024.
[2] Resource is currently under construction. Acreage provided in table represents portion of resource that is currently accessible.
[3] Approximately half of the total acreage of Jackie Robinson Park (6.66 acres out of the total 12.77 acres) falls within the open space study area. Although all 12.77 acres would be available to the existing and future residents of this area, only the approximately 6.66 acres of the park located in the study area were used in the quantitative analysis.
[4] A small portion of the total acreage of Harlem River Park (0.2 acres out of the total 46.66-acre park) is located within the open space study area. Although all 46.66 acres would be available to the existing and future residents of this area, only the approximately 0.2 acres of the park located in the study area were used in the quantitative analysis.
Sources: NYC Parks; *2022 FEIS*; AKRF field survey, June 2024.

As stated in the 2022 FEIS, there are several open space resources just beyond the study area boundary that are not included in the quantitative analysis but are likely utilized by study area residents. The large linear resources identified above—Jackie Robinson Park and Harlem River Park—both continue outside the boundaries of the study area (although within a half-mile from the Development Site), and study area residents could reasonably be assumed to utilize portions of these resources lying outside the study area boundaries. Approximately 10.47 acres of Jackie Robinson Park are located within ½-mile of the Development Site (approximately 6.66 acres fall within the census tract study area), and approximately 3.53 acres of Harlem River Park are located within ½-mile of the Development Site (approximately 0.20 acres fall within the census tract study area). There are also several open spaces located just beyond the open space study area that could be used by residents, which are not accounted for in the quantitative assessment. These open spaces include St. Nicholas Park and Holcombe Rucker Park in Manhattan, and Mill Pond Park and Franz Sigel Park in the Bronx. There are also several large tower-in-the-park residential developments and New York City Housing Authority (NYCHA) complexes within the study area (see Chapter 8, "Urban Design and Visual Resources" for details). These complexes generally include open space resources, including landscaped areas, benches, and playgrounds. These facilities are excluded from the quantitative analysis because they are for the sole use of the residents of those developments; however, they provide those residents with alternative open space options for both active and passive recreation.

2032 FUTURE WITHOUT THE PROPOSED MODIFICATIONS

In the future without the proposed modifications, new residential developments are expected to add approximately 115 new dwelling units to the study area by 2032, and approximately 49 new dwelling units would be constructed on the Development Site. These projects will add approximately 359 new residents to the study area, bringing the estimated residential population to 67,096. The three playground/recreation center projects are expected to be complete by 2032. In addition, reconstruction of the ball fields at Jackie Robinson Park is in the Planning phase of NYC Parks' capital projects process, and renovation of the Renaissance Playground is in the Planning/Design phase. It is possible that these projects could move forward and be under construction or completed by 2032. With the addition of the open space acreage from completed renovations, the total amount of open space would increase to 23.32 acres in 2032, of which 18.33 acres would be active and 4.99 acres would be passive. **Table 17** below provides detail on the open space ratios that would be expected in the 2032 future without the proposed modifications.

Table 17
Study Area Population and Open Space Ratios

	Open Space Acreage			Open Space Ratios— acres per 1,000 People		
Population	**Total**	**Active**	**Passive**	**Total**	**Active**	**Passive**
2024 Existing Conditions						
66,737	21.98	17.40	4.58	0.33	0.26	0.07
2032 Future Without the Proposed Modifications						
67,096	23.32	18.33	4.99	0.35	0.27	0.07
2032 Future With the Proposed Modifications						
69,267	23.32	18.33	4.99	0.34	0.26	0.07
Notes: City Open Space Guidelines (acres per 1,000 people): 2.50 (Total), 2.00 (Active), 0.50 (Passive)						

2032 FUTURE WITH THE PROPOSED MODIFICATIONS

By 2032, the Modified Project would introduce a new population of approximately 2,171 residents to the Development Site. Therefore, the study area's population would increase to approximately 69,267 residents (see **Table 18** below), which would result in a total open space ratio of 0.34 acres of open space per 1,000 residents.

Table 18
2032 Future With the Proposed Modifications, Open Space Ratios Summary

Ratio	City Guideline	Open Space Ratios			Percent Change No Action to With Action Condition
		Existing Conditions	Future without the Proposed Modifications	Future with the Proposed Modifications	
Total/Residents	2.50	0.329	0.347	0.337	-3.14%
Active/Residents	2.00	0.261	0.273	0.265	-3.15%
Passive/Residents	0.50	0.069	0.074	0.072	-3.09%
Notes: Ratios are rounded and in acres per 1,000 people.					

According to the *CEQR Technical Manual*, for projects in study areas where the open space ratio is not near the City's planning goal of 2.5 acres per 1,000 residents, the percentage decrease in open space ratio associated with a project is weighed against how the open space ratio of the study area compares to the City's planning goal for open space. The open space ratios in the study area would decline by 2032 in the future with the proposed modifications, as with the future without the proposed modifications, and the decreases in ratios between the No Build and Build conditions in the 2032 future with the proposed modifications would be similar to those projected in the 2022 FEIS (see **Table 18**). Since the Development Site is located in an area that has open space ratios that are currently and would remain below the City's guideline open space ratios in the 2032 future without and with the proposed modifications, consistent with Table 7-1 of the *CEQR Technical Manual*, a one percent decline in open space ratios was used as the threshold to determine an impact. As a result, it is concluded that the Modified Project, like the Analyzed Project, would result in a significant adverse impact to open space due to the underserved nature of the study area. As detailed in the 2022 FEIS for the Analyzed Project, for the Modified Project the Applicant would make improvements to the playground area at the Brigadier General Charles Young Playground to address this impact.

Based on the shadows, air quality, noise, and construction impacts analyses presented in this Technical Memorandum, the study area's open spaces would not experience any direct effects from the Modified Project that would cause a significant adverse impact to open space. The Modified Project, like the Analyzed Project, would cast incremental shadows on portions of Brigadier General Charles Young Playground; however, the new shadow would be limited in duration and/or extent and would not cause any significant adverse impacts on the utilization of this resource, nor the viability of its landscaping.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to open space that were not already identified in the 2022 FEIS.

SHADOWS

The updated information on background conditions and the anticipated build year was reviewed to determine whether the potential for shadow-related impacts in the future with the Modified Project would remain consistent with the conclusions in the 2022 FEIS. As detailed above, the 2022 FEIS concluded that the Analyzed Project would not result in a significant adverse shadows impact.

The Modified Project would be very similar to the Analyzed Project in terms of footprint and building configuration, with a base and two towers: an L-shaped eastern tower at the corner of West 145th Street and Lenox Avenue and a western tower on West 145th Street. The base of the Modified Project would be the same as the Analyzed Project, rising to a maximum height of 85 feet; however, the eastern tower would be approximately 67 feet taller with the Modified Project, rising to a maximum height of 460 feet including a 40-foot allowance for rooftop mechanical structures, and approximately 15 feet longer along the West 145th Street frontage; and the western tower would be 27 feet taller with the Modified Project, rising to a height of 420 feet with the 40-foot allowance for rooftop mechanical structures, and substantially more compact, extending 160 feet along the West 145th Street frontage rather than 270 feet. See **Figures 2 to 7** for site plans, sections, and illustrative renderings of the Analyzed Project and the Modified Project. Given the increases in maximum height and other changes in massing configuration, a shadow study was conducted to ascertain whether changes in incremental shadows would result in any changes to the conclusions in the 2022 FEIS.

This shadow study was prepared in accordance with New York City CEQR procedures and follows the guidelines and tiered methodology of the 2021 *CEQR Technical Manual*.

TIER 1 SCREENING ASSESSMENT

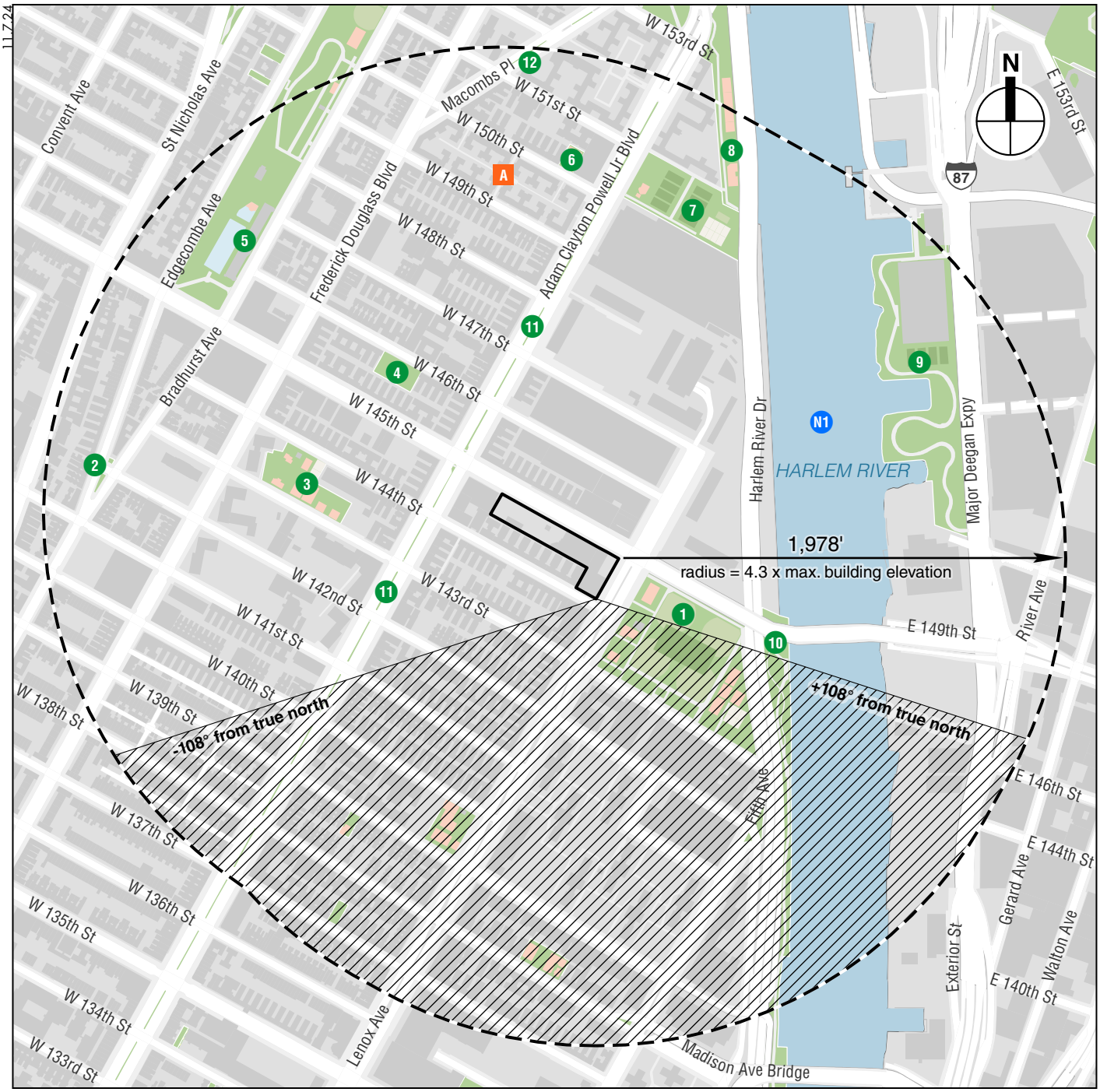
A base map was developed using Geographic Information Systems (GIS)[10] showing the location of the Development Site and the surrounding street layout and topography (see **Figure 13**). Mapped databases of parks and other public open spaces, City, state, and national historic resources, and natural resources were added to the map.[11] In coordination with the open space, historic and cultural resources, and natural resources assessments presented in other sections of this Technical Memorandum, potential sunlight-sensitive resources were identified and cross-referenced with those presented in the 2022 FEIS.

For a Tier 1 assessment, the longest shadow that a project could cast is calculated, and, using this length as the radius, a perimeter is drawn around the project site. Anything outside this perimeter representing the longest possible shadow could never be affected by project generated shadow, while anything inside the perimeter requires additional assessment.

According to the *CEQR Technical Manual*, the longest shadow that a structure can cast at the latitude of New York City occurs on December 21, the winter solstice, at the start of the analysis

[10] Software: Esri ArcGIS Pro 3.2

[11] Data: City, State, and Federal agencies including New York City Parks Department; New York City Office of Technology & Innovation (OTI), New York City Department of City Planning, New York City Landmarks Preservation Commission, New York City Department of Transportation, New York State Office of Parks, Recreation, and Historic Preservation, New York State Dept. of Environmental Conservation (NYSDEC), U.S. Fish and Wildlife Service, and others; supplemented by Nearmap hi-resolution imagery, and AKRF site visits.



Development Site

Tier 1: Longest Shadow Study Area Perimeter

Tier 2: Area South of Site That Could Never Be Shaded by Modified Project

Publicly-Accessible Open Space (see Table 19)

Historic Resource with Sunlight-Sensitive Features (see Table 19)

Natural Resource

Tier 1 and Tier 2 Assessments

day (90 minutes after sunrise[12]) and is equal to 4.3 times the height of the structure. At a maximum height of 460 feet above curb level, including 40 feet of rooftop mechanical structures, the Modified Project could cast a shadow up to 1,978 feet in length (460 x 4.3). Using this length as the radius, a perimeter was drawn around the Development Site (see **Figure 13**). This perimeter extends 288 feet farther than the perimeter of the Analyzed Project.

The assessment showed that three additional sunlight-sensitive resources beyond those identified in the 2022 FEIS are located in the Modified Project's expanded Tier 1 longest-shadow study area, one of which is approximately seven blocks north of the Development Site, and two of which are approximately seven blocks south of the Development Site. Otherwise, the rest of the inventory of sunlight-sensitive resources that could be reached by project-generated shadow is the same as with the Analyzed Project. The assessment proceeded to the next tier.

TIER 2 SCREENING ASSESSMENT

Because of the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City this area lies between -108 and +108 degrees from true north. **Figure 13** illustrates this triangular area south of the Development Site. The complementary area to the north within the longest shadow study area represents the remaining area that could potentially experience new project generated shadow.

The Tier 2 assessment showed that two of the additional resources in the Modified Project's expanded study area are located in the triangular area south of the Development Site and therefore could never be affected by project-generated shadow. However, the additional resource north of the Development Site is located within the expanded study area, and was added to the inventory for analysis. Consequently, a total of 14 sunlight-sensitive resources—12 open spaces (rather than the 11 in the Analyzed Project), 1 historic resource with sunlight-sensitive features, and 1 natural resource (the Harlem River)—are located in the remaining longest-shadow study area and required the next tier of assessment. These 14 resources are listed in **Table 19**, along with the Tier 3 assessment results.

TIER 3 SCREENING ASSESSMENT

The direction and length of shadows vary throughout the course of the day and differ depending on the season. In order to determine whether project-generated shadow could fall on a sunlight-sensitive resource, three-dimensional (3D) computer modeling software[13] is used in the Tier 3 assessment to calculate and display the project's shadows on individual representative days of the year. A computer model was developed containing three-dimensional representations of the elements in the base map used in the preceding assessments, the topographic information of the study area, and a reasonable worst-case three-dimensional representation of the proposed buildings.

Following the guidance of the *CEQR Technical Manual*, shadows on the summer solstice (June 21), winter solstice (December 21) and spring and fall equinoxes (March 21 and September 21, which are approximately the same in terms of shadow patterns) are modeled, to represent the

[12] As explained in more detail below in the "Tier 3 Screening Assessment" section, shadows occurring within 90 minutes of sunrise or sunset are not considered significant under CEQR.

[13] Bentley MicroStation.

range of shadows over the course of the year. An additional representative day during the growing season is also modeled, generally the day halfway between the summer solstice and the equinoxes, i.e., May 6 or August 6, which have approximately the same shadow patterns.

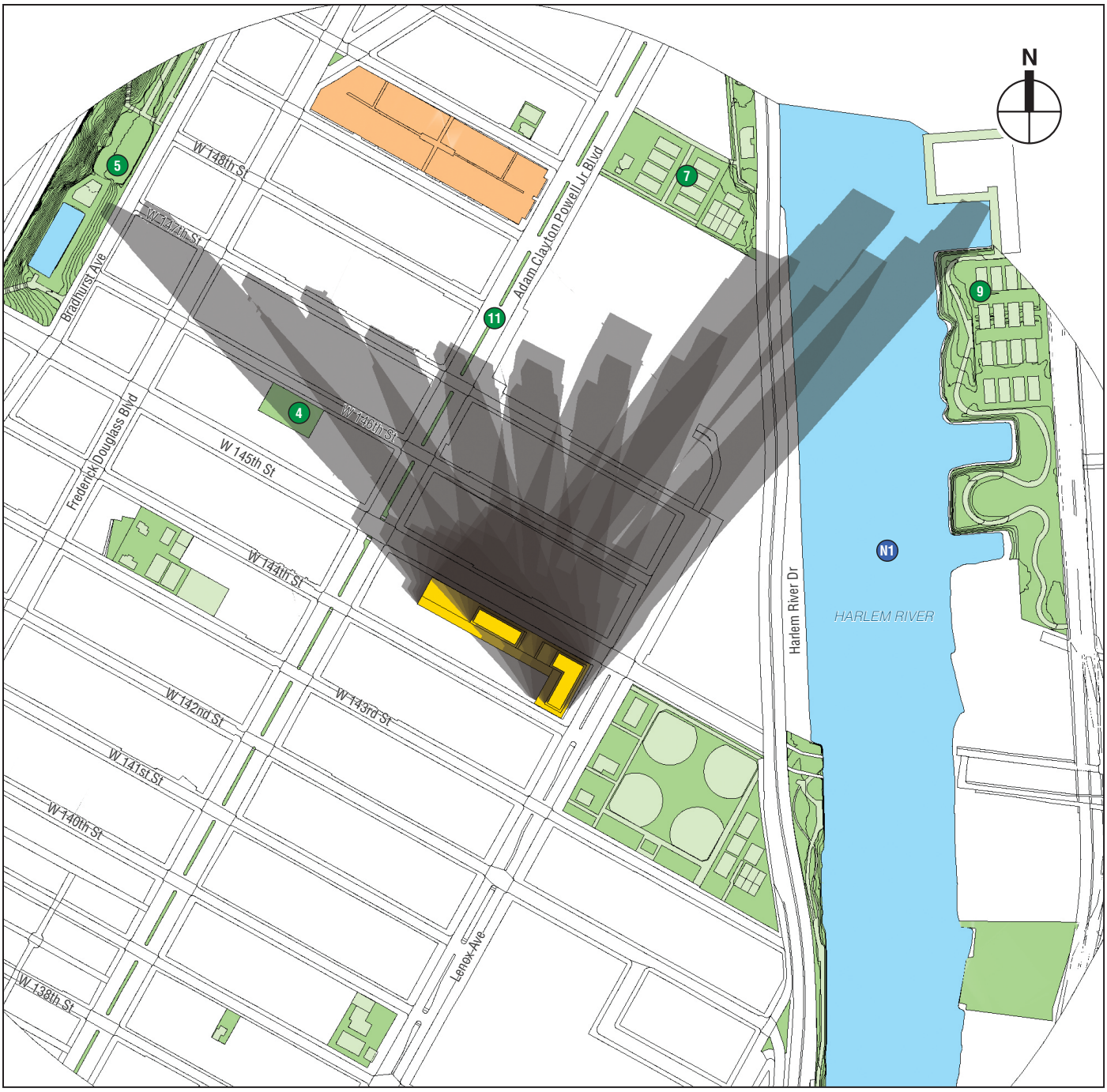
The shadow assessment considers shadows occurring between one and a half hours after sunrise and one and a half hours before sunset. At times earlier or later than this timeframe window of analysis, the sun is at or near the horizon and the sun's rays reach the Earth at very tangential angles, diminishing the amount of solar energy and producing shadows that are very long, move fast, and generally blend with shadows from existing structures. Consequently, shadows occurring outside the timeframe window of analysis are not considered significant under CEQR, and their assessment is not required.

Figures 14 to 17 illustrate the range of shadows that would occur, in the absence of intervening buildings, from the Modified Project on the four representative days for analysis. As they move clockwise and generally west to east over the landscape, the shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset).

In the 2022 FEIS, the Tier 3 assessment concluded that of the 13 sunlight-sensitive resources identified in the Tier 2 assessment, 7 resources (6 open spaces and the Harlem River) could potentially be reached, absent intervening buildings, by shadow from the Analyzed Project on one or more of the representative dates, whereas the rest of the identified resources were too far away and could never be affected.

The extent and sweep of the Modified Project's shadows over the course of each representative date would be very similar to those of the Analyzed Project. On the December 21 analysis date, small portions of two additional resources could be reached, compared to the Analyzed Project: Jackie Robinson Park, several blocks northwest of the Development Site, and Mill Pond Park, across the Hudson River to the east. unlike with the Analyzed Project. Other than these two additional resources on the one representative date, the Tier 3 assessment results were the same with the Modified Project as with the Analyzed Project, in terms of which resources could potentially be reached on which representative date. **Table 19** summarizes which analysis date or dates each resource could potentially receive project-generated shadow.

11.8.24



Modified Project

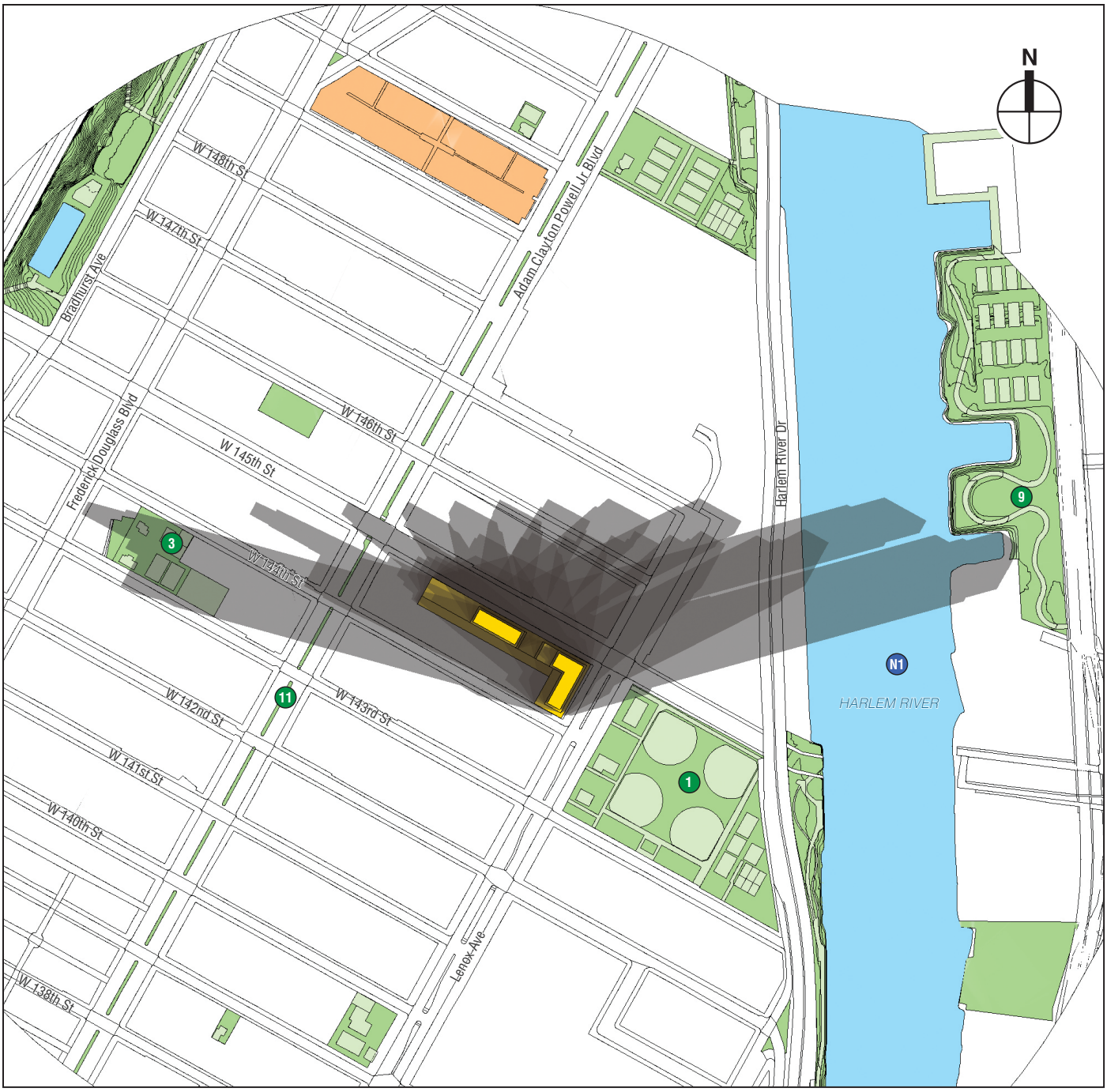
\# *Publicly Accessible Open Space (see Table 19)*

\# *Natural Resource (see Table 19)*

This figure illustrates the range of shadows that would occur from the Modified Project on the analysis day representing the winter. The shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset). The Tier 3 assessment does not account for future No Action shadows, and the shadows shown in this figure do not represent incremental shadows. The Tier 3 assessment serves to illustrate the daily path or "sweep" of the proposed building's shadows across the landscape, indicating which resources could potentially be affected on that analysis day, absent intervening buildings, by project-generated shadow. Daylight Saving Time was not used, per *CEQR Technical Manual* guidelines.

Tier 3 Assessment:
December 21

11.8.24



Modified Project

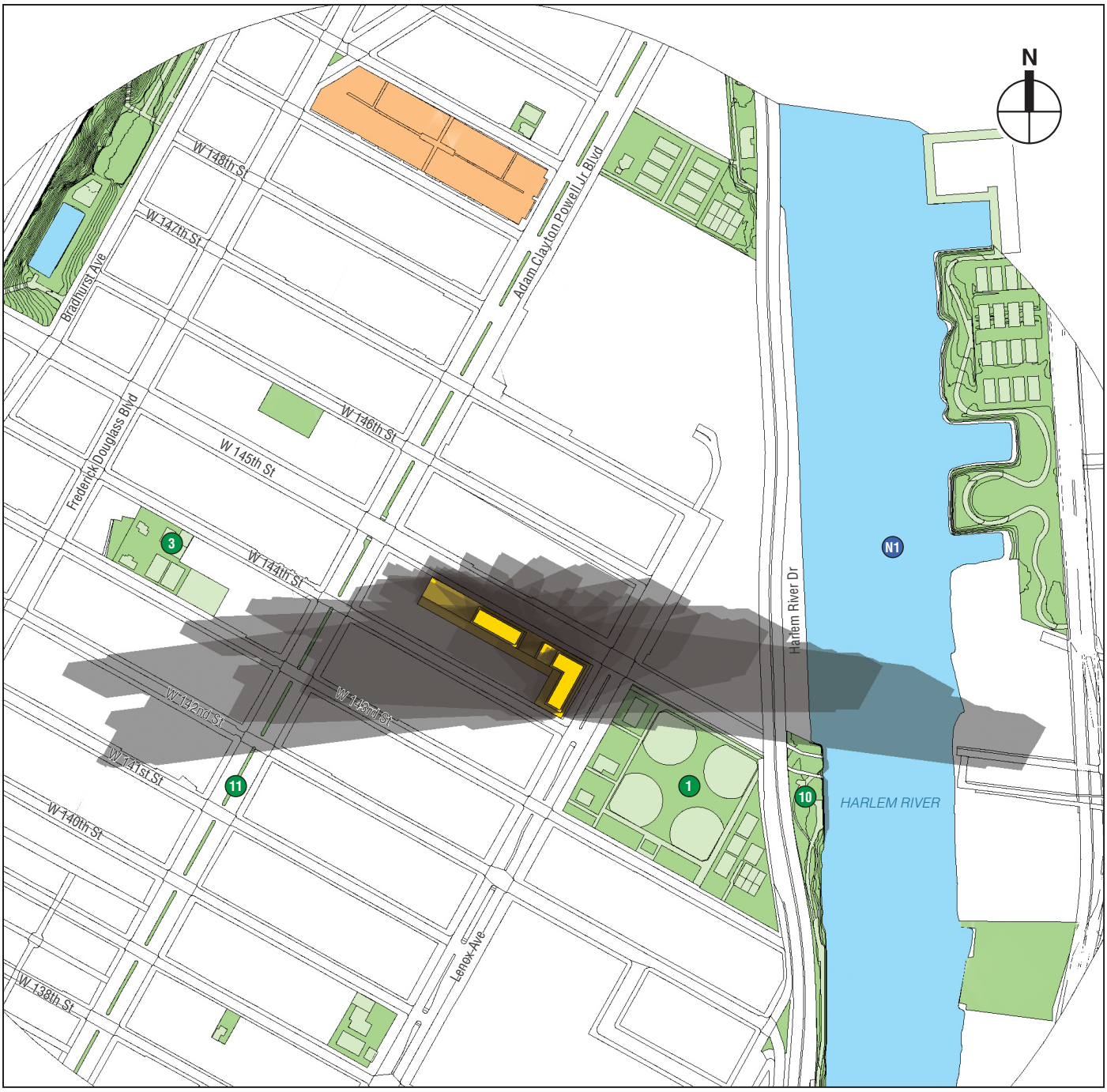
\# *Publicly Accessible Open Space (see Table 19)*

\# *Natural Resource (see Table 19)*

This figure illustrates the range of shadows that would occur from the Modified Project on the analysis day representing the early spring and the fall. The shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset). The Tier 3 assessment does not account for future No Action shadows, and the shadows shown in this figure do not represent incremental shadows. The Tier 3 assessment serves to illustrate the daily path or "sweep" of the proposed building's shadows across the landscape, indicating which resources could potentially be affected on that analysis day, absent intervening buildings, by project-generated shadow. Daylight Saving Time was not used, per *CEQR Technical Manual* guidelines.

Tier 3 Assessment:
March 21 / September 21

11.8.24



Modified Project

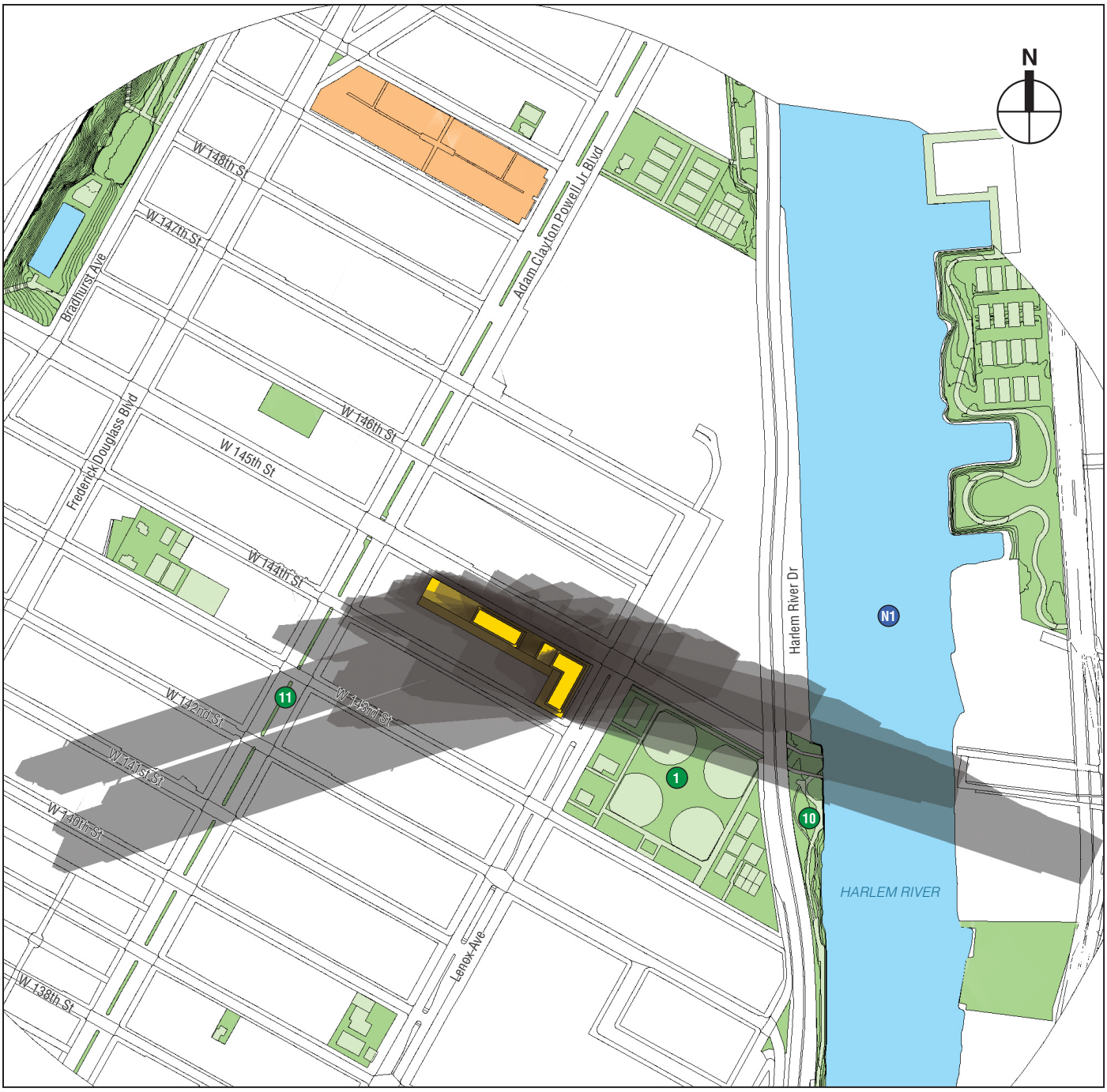
\# *Publicly Accessible Open Space (see Table 19)*

\# *Natural Resource (see Table 19)*

This figure illustrates the range of shadows that would occur from the Modified Project on the analysis day representing the spring and summer growing season period. The shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset). The Tier 3 assessment does not account for future No Action shadows, and the shadows shown in this figure do not represent incremental shadows. The Tier 3 assessment serves to illustrate the daily path or "sweep" of the proposed building's shadows across the landscape, indicating which resources could potentially be affected on that analysis day, absent intervening buildings, by project-generated shadow. Daylight Saving Time was not used, per *CEQR Technical Manual* guidelines.

Tier 3 Assessment:
May 6 / August 6

11.8.24



Modified Project

\# *Publicly Accessible Open Space (see Table 19)*

\# *Natural Resource (see Table 19)*

This figure illustrates the range of shadows that would occur from the Modified Project on the analysis day representing summer. The shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset). The Tier 3 assessment does not account for future No Action shadows, and the shadows shown in this figure do not represent incremental shadows. The Tier 3 assessment serves to illustrate the daily path or "sweep" of the proposed building's shadows across the landscape, indicating which resources could potentially be affected on that analysis day, absent intervening buildings, by project-generated shadow. Daylight Saving Time was not used, per *CEQR Technical Manual* guidelines.

Tier 3 Assessment:
June 21

Table 19
Tier 3 Assessment

Map Reference	Name	Dec. 21	Mar. 21 / Sept. 21	May 6 / Aug. 6	Jun. 21
Publicly Accessible Open Spaces					
1	Brigadier General Charles Young Playground	No	Potential	Potential	Potential
2	Greenstreets @ W 142nd St/Bradhurst Ave/Edgecombe Ave	No	No	No	No
3	Renaissance Playground (PS 194)	No	Potential	Potential	No
4	Robert L. Clinkscales Playground and Community Garden	Potential	No	No	No
5	Jackie Robinson Park	Potential*	No	No	No
6	Bill Bojangles Robinson Playground	No	No	No	No
7	Frederick Johnson Playground	Potential	No	No	No
8	Percy E. Sutton Playground	No	No	No	No
9	Mill Pond Park	Potential**	No	No	No
10	Harlem River Park	No	No	Potential	Potential
11	Adam Clayton Powell Jr. Boulevard Malls (W 140th to W 148th Sts)	Potential	Potential	Potential	Potential
12	Macombs Place Greenstreets Median	No	No	No	No
Historic Architectural Resources with Sunlight-Sensitive Features					
A	Dunbar Apartments	No	No	No	No
Natural Resources					
N1	Harlem River	Potential	Potential	Potential	Potential

Notes: See **Figures 14-17** for corresponding resource locations and shadow sweeps.
In the columns representing the representative analysis dates, "No" means project-generated shadow could not reach the resource, even without accounting for intervening buildings. "Potential" means project-generated shadow could potentially reach the resource on this date and requires further assessment.
* Unlike with the Analyzed Project, a very small portion of Jackie Robinson Park could potentially be reached by shadow from the Modified Project on this analysis date.
** Unlike with the Analyzed Project, a very small portion of Mill Pond Park could potentially be reached by shadow from the Modified Project on this analysis date.

The Tier 3 assessment concluded that a detailed analysis was required to quantify changes in incremental shadow durations and coverage resulting from the Modified Project, compared to the Analyzed Project, on the 9 sunlight-sensitive resources (8 open spaces and the Harlem River) indicated above.

DETAILED SHADOW ANALYSIS

In a detailed shadow analysis, existing buildings are added to the topography of the 3D model to establish baseline shadow conditions, to compare to the With Action condition to distinguish the additional (incremental) shadow cast by the project. Because existing buildings may already cast shadows on a sunlight-sensitive resource, the project may not result in incremental shadows on that resource.

Following the analysis framework described above, the detailed analysis was performed for the assumed build year of 2032, comparing the Modified Project to the future No Action condition. The No Action scenario assumed for the Development Site is unchanged from what was analyzed in the 2022 FEIS. Future planned developments in the study area were updated to reflect anticipated 2032 conditions, in coordination with the land use, zoning, and public policy assessment above, using best-available information from publicly available filings with the New York City Department of Buildings and other sources.

Summary of Analysis Results

Table 20 summarizes the entry and exit times and total duration of incremental shadows on each affected sun-sensitive resource. Further, the table notes when and where there would be less or more shadow with the Modified Project compared to the Analyzed Project.

Generally speaking, there would be reductions in incremental shadow on the resources west of the Development Site with the Modified Project, due to the western tower's substantial reduction in east-west bulk, which more than offset the tower's slightly increased height. The resources to the west include Renaissance Playground (PS 194), Robert L. Clinkscales Playground and Community Garden, and the Adam Clayton Powell Jr. Boulevard Malls.

To the east, Harlem River Park and the Harlem River would receive more incremental shadow at times with the Modified Project, due to the taller eastern tower, but not substantially more: Harlem River Park would receive 10 minutes more shadow on one analysis date while the River would receive between 5 and 20 minutes of new shadow depending on the season. With regard to Brigadier General Charles Young Playground, located southeast and adjacent to the Development Site, the eastern tower's increased height would not change the extent or duration of incremental shadow compared to the Analyzed Project; in both cases, the shadow increment on this park would come from the middle and lower portion of the tower, while shadow from the upper portion would fall well beyond the park at this late time of day.

Mill Pond Park would receive 6 minutes of incremental shadow with the Modified Project that would not occur with the Analyzed Project.

Table 20
Incremental Shadow Durations

Map Reference	Name	Dec. 21	Mar. 21 / Sept. 21	May 6 / Aug. 6	Jun. 21
Publicly Accessible Open Spaces					
1	Brigadier General Charles Young Playground	—	4:05pm to 4:29pm Total 24 min[1]	2:45pm to 5:18 pm Total 2 hr 33 min[1]	2:20pm to 6:01pm Total 3 hr 41 min[1]
3	Renaissance Playground (PS 194)	—	7:36am to 7:50am Total 14 min	—[2]	—
4	Robert L. Clinkscales Playground and Community Garden	9:00am to 9:02am Total 2 min [2]	—	—	—
9	Mill Pond Park	2:48pm to 2:53pm Total 6 min[3]	—	—	—
10	Harlem River Park	—	—	5:05 pm to 5:18 pm Total 13 min	4:35pm to 6:01pm Total 1 hr 26 min[3]
11	Adam Clayton Powell Jr. Boulevard Malls	8:51am to 11:50am Total 2 hr 59 min[2]	7:36am to 10:10am 2 hr 34 min[2]	6:27am to 8:45am Total 2 hr 18 min[2]	6:05am to 6:55am 7:20am to 8:20am Total 1 hr 50 min[2]
Natural Resources					
N1	Harlem River	2:15pm to 2:53pm Total 38 min[3]	3:25pm to 4:29pm Total 1 hr 4 min[3]	4:05pm to 5:18pm Total 1 hr 13 min[3]	4:25pm to 6:01pm Total 1 hr 36 min[3]

Notes: Table indicates entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource. Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine actual clock time.

[1] Incremental shadow duration would be the same as with the Analyzed Project.

[2] Incremental shadow would be reduced compared to the Analyzed Project, by 8 minutes on Robert L. Clinkscales Playground and Community Garden, and between 15 to 45 minutes on the Adam Clayton Powell Jr. Boulevard Malls depending on the season.

[3] Incremental shadow would be increased compared to the Analyzed Project, by 6 minutes on Mill Pond Park, by 10 minutes on Harlem River Park, and between 5 and 20 minutes on the Harlem River

Assessment of Shadow Impacts by Resource

- There would be no change in incremental shadow duration on **Brigadier General Charles Young Playground** with the Modified Project. Therefore, the Modified Project would not result in any significant adverse shadows impacts, consistent with the findings of the 2022 FEIS.
- **Renaissance Playground (PS 194)**, **Robert L. Clinkscales Playground and Community Garden**, and **the Adam Clayton Powell Jr. Boulevard Malls** would receive less incremental shadow with the Modified Project and therefore, similar to the Analyzed Project, the Modified Project would not result in any significant adverse shadows impacts to these three resources.
- Unlike the Analyzed Project, with the Modified Project **Mill Pond Park** would receive up to 6 minutes of incremental shadow on 1 of the 4 representative dates. However, this negligible amount of incremental shadow would not be significant, per *CEQR Technical Manual*[14] guidelines.
- Similar to the Analyzed Project, with the Modified Project **Harlem River Park** would receive incremental shadow on the late spring and summer analysis dates. On the May 6/August 6 date, the increment would be the same, while on the June 21 date, the increment would enter the same portion of the park 10 minutes earlier. However, the size of the affected area would remain small, and adjacent areas of the park to the south would remain in sun during the affected period. The affected area of the esplanade would be in sun for much of the day in all seasons, due to the adjacent river to the east and highway and park to the west. Consequently, given these factors, the Modified Project would not result in any significant adverse shadows impacts to this park, consistent with the findings of the 2022 FEIS.
- Similar to the Analyzed Project, with the Modified Project portions of the **Harlem River** would receive incremental shadow in the late afternoon in all seasons. However, with the Modified Project the shadow increment would enter between 5 and 20 minutes earlier on all dates. Total durations would range from approximately 38 minutes up to an hour and 36 minutes depending on the date. The affected areas of the river would receive direct sun for most of the day before this period on all analysis days. Therefore, the additional 5 to 20 minutes of incremental shadow resulting from the Modified Project would not change the conclusions of the 2022 FEIS that the shadow increment would not significantly affect the river's primary productivity (phytoplankton and other natural elements), fish, or other aquatic resources.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse shadows impacts, consistent with the findings of the 2022 FEIS.

HISTORIC AND CULTURAL RESOURCES

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to historic and cultural resources that were not addressed in the

[14] Per *CEQR Technical Manual* guidelines, incremental shadow is not considered significant when its duration is no more than 10 minutes and the resource otherwise continues to receive substantial sunlight. *CEQR Technical Manual*, 2021 edition, page 8-28.

2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to historic and cultural resources.

The 2022 FEIS concluded that the preparation and implementation of a Construction Protection Plan (CPP) for the one known architectural resource within 90 feet of the Development Site—the 145th Street subway station, which is listed on the State and National Registers of Historic Places—would avoid the potential for inadvertent demolition and/or construction-related damage to the resource during construction of the Analyzed Project. The 2022 FEIS also concluded that the Analyzed Project would not result in the isolation of any architectural resource from its setting or visual relationship with the streetscape, or otherwise adversely alter a historic property's setting or visual prominence. At approximately 363 feet (393 feet including mechanical bulkhead), the Analyzed Project buildings would be taller than the buildings in the surrounding area; however, the visual context of the architectural resources in the study area also includes larger-scale buildings, such as the 27-story apartment complex at the northeast corner of the study area. In addition, the 85-foot-tall base of the Analyzed Project buildings would be similar in height to the six-story residential buildings and self-storage facility opposite the Development Site on the north side of West 145th Street, as well as the height of the 2501-2519 Adam Clayton Powell Jr. Boulevard Historic District buildings. The Analyzed Project would not introduce incompatible visual, audible, or atmospheric elements to a resource's setting, nor would it result in the elimination or screening of significant publicly accessible views of any architectural resources in the study area. The Analyzed Project also would not result in a substantial reduction in sunlight available for the appreciation of the sunlight-sensitive features of historic resources.

As LPC previously determined that the Development Site is not sensitive for archaeological resources, the changes in background conditions, change in the build year, and differences between the Analyzed Project and the Modified Project would not have a significant adverse impact on archaeological resources.

As with the Analyzed Project, the Modified Project would avoid the potential for inadvertent demolition and/or construction-related damage on architectural resources within 90 feet of the Development Site (the S/NR-listed 145th Street subway station) through preparation and implementation of a CPP. At approximately 380 feet and 420 feet (420 feet and 460 feet, including mechanical bulkhead), the Modified Project buildings would be taller than the buildings in the surrounding area, and slightly taller than the Analyzed Project buildings; however, the visual context of the architectural resources in the study area also includes larger-scale buildings, such as the 27-story apartment complex at the northeast corner of the study area. In addition, the base of the Modified Project buildings would be consistent with the base of the Analyzed Project buildings (at approximately 85 feet), and would be similar in height to the six-story residential buildings and self-storage facility under construction opposite the Development Site on the north side of West 145th Street, as well as the height of the 2501-2519 Adam Clayton Powell Jr. Boulevard Historic District buildings. The Modified Project would not result in the isolation of any architectural resource from its setting or visual relationship with the streetscape, or otherwise adversely alter a historic property's setting or visual prominence. It would not introduce incompatible visual, audible, or atmospheric elements to a resource's setting, nor would it result in the elimination or screening of significant publicly accessible views of any architectural resources in the study area. The Modified Project also would not result in a substantial reduction in sunlight available for the appreciation of the sunlight-sensitive features of historic resources.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to historic and cultural resources, consistent with the findings of the 2022 FEIS.

URBAN DESIGN AND VISUAL RESOURCES

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to urban design and visual resources that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to urban design and visual resources. The 2002 FEIS concluded that the Analyzed Project buildings would have beneficial effects on the pedestrian experience by redeveloping the vacant lot, one-story commercial buildings, and gas stations with new buildings with active ground floor retail, community facility, office, and residential uses. The proposed uses for the Analyzed Project would be compatible with the mix of uses that characterize the study area. While the Analyzed Project buildings would have curb cuts for loading and parking garage access on West 145th and West 144th Streets, the No Action buildings also would have curb cuts on West 145th Street, and curb cuts for loading and parking are found in the study area. In addition, the parking garage would be located below-grade to maintain the ground-floor continuity of the retail, community facility, office, and residential uses. While the Analyzed Project buildings would be substantially larger and taller than the No Action buildings, they would be compatible in terms of scale, height, and massing with the urban design of the study area, which includes three tower-in-a-park residential developments. The Analyzed Project buildings would be constructed on an existing block and built to the block lines, and thus would not block the view corridors along West 145th Street and Lenox Avenue. The Analyzed Project buildings would be visible from the Brigadier General Charles Young Playground, Harlem River bikeway and esplanade, and Mill Pond Park and would be more prominent than the No Action buildings from these perspectives; however, the Analyzed Project buildings would not result in adverse effects on those views, as the tall Esplanade Gardens buildings are also visible from within the parks. Further, because the parks provide expansive views in all directions, the Analyzed Project buildings would not dominate views within the parks. From Mill Pond Park, the Analyzed Project buildings would be seen in the background of the tall Esplanade Gardens buildings.

Like the Analyzed Project, the Modified Project would have beneficial effects on the pedestrian experience by redeveloping the vacant lot, one-story commercial buildings, vehicle storage lot, and gas station with new buildings with active residential, community, and ground floor retail uses. The proposed uses for the Modified Project are consistent with the Analyzed Project and would be compatible with the mix of uses that characterize the study area. In comparison to the Analyzed Project, the Modified Project would not require a curb cut for loading on West 145th Street, and thus would not require a CPC certification pursuant to ZR Section 26-17 to allow a curb cut on a wide street. In addition, the Modified Project would not require illuminated signage and thus would not require a special permit pursuant to ZR Section 74-744(c) to modify the sign regulations of Sections 32-64 and 32-65. This special permit would have been required for the Analyzed Project, to provide illuminated signage related to the proposed museum use.

The massing of the Modified Project would be substantially similar to that of the Analyzed Project. As described above, the Analyzed Project had an approximately 85-foot-tall base and two towers, each rising to a height of approximately 363 feet, not including approximately 30 feet of

mechanical bulkhead. The tower fronting on Lenox Avenue would have an L-shaped footprint and would be approximately 175 feet in width along Lenox Avenue and approximately 140 feet in width along West 145th Street. The tower fronting on West 145th Street would be approximately 270 feet in width and would have a rectangular footprint; it would be separated from the other tower by approximately 60 feet. The Analyzed Project would fully occupy the Development Site. The Modified Project would also have two towers above a 85-foot-tall base. The western tower would have a rectangular footprint and rise to a height of approximately 380 feet (not including approximately 40 feet of mechanical bulkhead), or approximately 27 feet higher than in the Analyzed Project. The eastern tower would have an L-shaped footprint and would rise to a height of approximately 420 feet (not including approximately 40 feet of mechanical bulkhead), or approximately 67 feet higher than in Analyzed Project. The towers would be separated by approximately 60 feet on West 145th Street, consistent with the Analyzed Project. In the Modified Project, the western tower would be approximately 160 feet wide along its West 145th Street frontage, compared to approximately 270 feet for the Analyzed Project. See **Figures 2-7** above for site plans, sections, and illustrative renderings of the Analyzed Project and the Modified Project.

As with the Analyzed Project, in the Modified Project the parking garage would be located below-grade to maintain the ground-floor continuity of the retail, community facility, and residential uses; as described above, in the Modified Project there would be no loading area or curb cut on West 145th Street to inhibit ground-floor continuity. At approximately 380 feet and 420 feet (420 feet and 460 feet, including mechanical bulkhead), the Modified Project buildings would be taller than the buildings in the surrounding area, and slightly taller than the Analyzed Project buildings; however, they would be generally compatible in terms of scale, height, and massing with the urban design of the study area, which includes three tower-in-a-park residential developments. In addition, the base of the Modified Project buildings would be consistent with the base of the Analyzed Project buildings (at approximately 85 feet), and would be similar in height to the six-story residential buildings and self-storage facility under construction opposite the Development Site on the north side of West 145th Street.

Consistent with the Analyzed Project, the Modified Project buildings would be constructed on an existing block and built to the block lines, and thus would not block the view corridors along West 145th Street and Lenox Avenue. The Modified Project buildings would be visible from the Brigadier General Charles Young Playground, Harlem River bikeway and esplanade, and Mill Pond Park and would be more prominent than the No Action buildings from these perspectives; however, the Modified Project buildings would not result in adverse effects on those views, as the tall Esplanade Gardens buildings are also visible from within the parks. Further, because the parks provide expansive views in all directions, the Modified Project buildings would not dominate views within the parks. From Mill Pond Park, the Modified Project buildings would be seen in the background of the tall Esplanade Gardens buildings.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to urban design and visual resources, consistent with the findings of the 2022 FEIS.

NATURAL RESOURCES

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to natural resources that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to natural resources. A screening-level analysis of natural resources was conducted for the 2022 FEIS based on the methodology set forth in the *CEQR Technical Manual*. This analysis concluded that the Development Site is in a fully developed residential and commercial area of Manhattan and contains limited natural resources, and the Analyzed Project would not have a significant adverse effect on floodplains, ecological communities and wildlife, including bird collisions, or threatened and endangered species.

Like the Analyzed Project, the Modified Project would be consistent with federal, state and citywide policies for the conservation and improvement of natural resources. Any work involving the street trees adjacent to the Development Site would be performed in compliance with Local Law 3 of 2010, Chapter 5 of Title 56 of the Rules of the City of New York and New York City Department of Parks and Recreation (NYC Parks) Tree Protection Protocol. Any disturbance in the vicinity of the Development Site, including construction noise, would not reduce habitat availability for the common, urban-adapted species that occur in the area, or have any potential to adversely affect their populations. The Modified Project, like the Analyzed Project, would be designed to be in full compliance with Section 1403.8 of the New York City building code to minimize the potential for bird collisions. The DEC Environmental Resource Mapper did not indicate records of state-listed species to occur within the vicinity of the Development Site. The USFWS IPaC system indicates the potential for northern long-eared bat (*Myotis septentrionalis*, federally endangered) and monarch butterfly (*Danaus plexippus*, candidate for federal listing) to occur in the Development Site or to be affected by the Modified Project. However, the fully developed condition of Development Site does not include suitable habitat for the forest interior-dependent northern long-eared bat, or wildflowers (particularly milkweed species) which the monarch butterfly relies upon for forage and breeding. In addition, the Modified Project does not include wind turbine operations, which could otherwise affect northern long-eared bats. Thus the Modified Project, like the Analyzed Project, would not have the potential to adversely affect threatened, endangered, or special concern species, or significant natural communities. A discussion of projected future flooding conditions at the Development Site and planned adaptive measures is included in the “Waterfront Revitalization Program” section above. Therefore, the Modified Project would not affect flood risk or floodplains within or adjacent to the Development Site.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to natural resources, consistent with the findings of the 2022 FEIS.

HAZARDOUS MATERIALS

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse hazardous materials impacts that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to hazardous materials.

The 2022 FEIS determined that the Analyzed Project would not result in significant adverse impacts related to hazardous materials with the placement of an (E)-Designation on the Development Site. The 2022 FEIS noted that the Applicant had been approved for the Development Site to be enrolled in the New York State Department of Environmental Conservation (DEC) Brownfield Cleanup Program (BCP), and that the potential for the Analyzed Project to result in significant adverse impacts related to hazardous materials would be avoided

through compliance with existing regulatory requirements and conformance with BCP requirements, in particular completion of a Remedial Investigation (RI) and implementation of an approved Remedial Action Work Plan (RAWP). Should the Applicant not perform the remediation under the BCP (due to withdrawal or other reasons), the Applicant would be required to perform these activities (including preparation and implementation of a RAWP) under the oversight of the New York City Department of Environmental Protection (DEP) and/or the New York City Office of Environmental Remediation (OER). To ensure that this would occur, an (E)-Designation for hazardous materials would be placed on the Development Site. The (E)-Designation would ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance in the event the Applicant withdraws their participation from the DEC BCP. These measures would ensure the development is protective of human health and the environment through the OER oversight as part of the New York City Department of Buildings approval process.

The Development Site has been approved to be enrolled in the BCP as two sites. Since the preparation of the 2022 FEIS, the Applicant has submitted a Remedial Investigation Report (RIR) for one site and is preparing an RIR for the second. As with the Analyzed Project, the Modified Project would not result in significant adverse impacts related to hazardous materials with the placement of an (E)-Designation on the Development Site

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse hazardous materials impacts, consistent with the findings of the 2022 FEIS.

WATER AND SEWER INFRASTRUCTURE

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to water and sewer infrastructure that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to water and sewer infrastructure. The Analyzed Project did not meet the *CEQR Technical Manual* threshold for an analysis of water and sewer infrastructure, because the Development Site is located in a combined sewer area and would not be developed with more than 1,000 residential units. As the Development Site is not located in an area that experiences low water pressure, and the Analyzed Project would not result in an exceptionally large demand for water, a water supply analysis was not warranted.

The Modified Project also would not meet the *CEQR Technical Manual* threshold for analysis of water supply or water and sewer infrastructure, as it would include less than 1,000 residential units and the characteristics of the Development Site have not changed.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to water and sewer infrastructure, consistent with the findings of the 2022 FEIS.

SOLID WASTE AND SANITATION SERVICES

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to solid waste and sanitation services that were not addressed in

the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to solid waste and sanitation services.

The 2022 FEIS concluded that the Analyzed Project would not directly affect a solid waste management facility. The Analyzed Project would collectively generate approximately 14.39 tons per week of solid waste over the No Action condition. The Analyzed Project would generate approximately 19.71 tons of solid waste to be handled by the New York City Department of Sanitation (DSNY) and would generate 5.32 fewer tons of solid waste to be handled by private carters, compared to the No Action condition. The additional solid waste resulting from the Analyzed Project to be handled by DSNY would be a negligible increase relative to the amounts of solid waste handled by DSNY and private carters every day and would not overburden available waste management capacity. Furthermore, the Analyzed Project would not result in any conflicts with, or require any amendment to, the City's solid waste management objectives as stated in the solid waste management plan (SWMP).

The Modified Project would be expected to generate approximately 12.02 tons per week of solid waste over the No Action condition, including approximately 18.94 tons of solid waste to be handled by DSNY and 6.92 fewer tons of solid waste to be handled by private carters compared to the No Action condition. The additional solid waste resulting from the Modified Project would be a negligible increase relative to the approximately 10,500 tons of residential and institutional refuse and 1,760 tons of recyclables collected by DSNY per day or the 9,000 tons of solid waste handled by private carters per day. Therefore, the Modified Project would not result in an increase in solid waste that would overburden available waste management capacity and there would be no significant adverse impact to solid waste. The Modified Project also would not conflict with, or require any amendment to, the City's solid waste management objectives as stated in the SWMP.

Under Local Law 199 of 2019 (Title 16-B of the New York City Administrative Code), Commercial Waste Zones were established throughout New York City. The program divided New York City into 20 zones, with a limited number of carters authorized to operate in each zone. The CWZ program is expected to be in place by the 2032 analysis year independent of the Modified Project. This approach is expected to reduce inefficiencies in waste collection routes and substantially reduce carter truck miles.

The Modified Project would incorporate on-site trash storage within the proposed buildings to minimize placement of trash on sidewalks. Trash at the Development Site would be compacted and containerized prior to collection; recyclables would also be containerized. It is expected that trash would be picked up approximately three times per week depending on the use. By containerizing and minimizing the placement of trash on sidewalks, rodents, odors, and other related nuisances would be minimized in the future with the Modified Project.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to solid waste and sanitation services, consistent with the findings of the 2022 FEIS.

ENERGY

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to energy that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to energy. The Analyzed Project did not meet the *CEQR Technical Manual* threshold for a detailed energy assessment,

which is limited to actions that may significantly affect the transmission or generation of energy. To support the Greenhouse Gas Emissions analysis, the 2022 FEIS disclosed the projected amount of energy consumption during long-term operation of the Analyzed Project.

The Modified Project also would not meet the *CEQR Technical Manual* threshold for a detailed energy assessment. As with the Analyzed Project, any increases in energy consumption and demand with the Modified Project would not be significant relative to the capacity of the energy system and current levels of service within New York City.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to energy, consistent with the findings of the 2022 FEIS.

TRANSPORTATION

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project (under the Residential Podium or the Office Podium Scenarios) and the Modified Project, would result in any significant adverse transportation impacts that were not addressed in the 2022 FEIS.

The 2022 FEIS concluded that the Analyzed Project would not result in significant adverse impacts to traffic or pedestrians, as the screening preliminary assessments found that incremental trips associated with the Analyzed Project would not exceed the CEQR thresholds warranted for a detailed traffic analysis or a detailed pedestrian analysis. The detailed analysis of station circulation elements and control areas at the 145th Street Station (No. 3 train) and the subway line-haul analysis for the No. 3 train concluded that the Analyzed Project would not have the potential to yield significant adverse transit impacts.

For the Modified Project, a preliminary screening assessment was prepared, applying approved assumptions from the 2022 FEIS and the most recently adopted CEQR travel demand assumptions, where appropriate. Similar to the 2022 FEIS analyses, this screening assessment compares the anticipated trips from the Modified Project to those associated with the No Action development, as summarized in **Table 21**.

Table 21
Comparison of No Action and Modified Project

Use	No Action Scenario	Modified Project	Increment
Residential (DU)	49	992	943
Commercial Office (gsf)	±64,345	0	-64,345
Community Facility Non-Profit Office (gsf)	±115,730	0	-115,730
Community Facility Medical Office (gsf)	±33,238	0	-33,238
Community Facility Recreation Center (gsf)	0	6,977	6,977
UGVIII Banquet Hall/Event Space*			
(gsf)	0	±13,571	13,571
(persons)	0	200	200
Retail (gsf)			
Destination	±21,146	0	-21,146
Local	±49,340	±36,741	-12,599
Total	±70,486	±36,741	-33,745
Accessory Parking (spaces)	165	40	-125

Notes: * The event space occupancy took into consideration the Modified Project's specific programming and anticipated use for this space, which is not representative of typical banquet-related event spaces. The Applicant will enter into a Restrictive Declaration that incorporates measures to limit the occupancy of this event space to 200 attendees. Approximately 9,000 gsf of this space will be a banquet hall or catering establishment with a 200-person capacity, and the remainder of the total is back-of-house space.

LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the number of person and vehicle trips by mode expected to be generated by the No Action Scenario and the Modified Project during the weekday AM, midday, PM, and Saturday midday/afternoon peak hours. These estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted. Trip generation factors were developed using guidance from the *CEQR Technical Manual*, U.S. Census data, assumptions presented in approved environmental review documents, and recent guidance from the New York City Department of Transportation (DOT). These factors are summarized in **Table 22**.

Travel Demand Assumptions of Proposed Uses

- Residential: The daily person trip rates and temporal distribution are from the *CEQR Technical Manual*. The directional distributions for all peak periods are based on DOT's mode choice surveys. Modal splits are based on the Journey-to-Work (JTW) data from the 2015–2019 U.S. Census Bureau American Community Survey (ACS) for Manhattan census tracts 214, 230, 232, 234, 236, and 259. The vehicle occupancies are from the 2015–2019 U.S. Census ACS for autos and from the 2020 *Lenox Terrace FEIS* for taxis. The daily delivery trip rates and temporal and directional distributions are from the *CEQR Technical Manual*.
- Local Retail: The daily person trip generation rates for the local neighborhood retail component are from the *CEQR Technical Manual*. Consistent with assumptions typically accepted by City agencies for the purposes of environmental review, a 25-percent linked trip credit was applied to the local retail trip generation estimates. The directional

distributions, vehicle occupancies, and modal splits are based on DOT's mode choice surveys. The temporal distribution is obtained from the *CEQR Technical Manual*. The daily delivery trip rates and temporal and directional distributions are also from the *CEQR Technical Manual*.

- Destination Retail: The daily person trip generation rates and temporal and directional distributions for the destination retail component are from the *CEQR Technical Manual*. The modal splits and vehicle occupancies are from the 2020 *Lenox Terrace FEIS*. The daily delivery trip rates and temporal and directional distributions are from the 2020 *Lenox Terrace FEIS*.
- Community Facility – Non-Profit Office: The daily person trip generation rates and temporal distribution for the non-profit office community facility component are from the *CEQR Technical Manual*. Directional distributions are based on DOT's mode choice surveys. Weekday AM and PM peak hour modal splits were obtained from the Reverse Journey-to-Work (RJTW) data from the 2012–2016 U.S. Census Bureau ACS for Manhattan census tracts 214, 230, 232, 234, 236, and 259 and the weekday midday and Saturday peak hour modal splits were obtained from the 2017 *East Harlem Rezoning FEIS*. The vehicle occupancies are from the 2012-2016 U.S. Census ACS RJTW for autos and from the 2017 *East Harlem Rezoning FEIS* for taxis. The daily delivery trip rates and temporal and directional distributions are from the *CEQR Technical Manual*.
- Community Facility – Medical Office: The daily person trip generation rates are from the *CEQR Technical Manual*, with the weekday rate calculated by 66.626x + 141.77 (where x represents 1,000 gsf of space) and the Saturday rate at 37 daily trips per 1,000 gsf. The temporal distribution is also from the *CEQR Technical Manual*, while directional distributions, modal splits, and vehicle occupancies are based on DOT's mode choice surveys. The daily delivery trip rates and temporal and directional distributions are from the 2020 *Lenox Terrace FEIS*.

Table 22
Travel Demand Assumptions

Use	Residential				Local Retail				Destination Retail			
	Weekday			Saturday	Weekday			Saturday	Weekday			Saturday
Daily Person Trip Generation Rate	(1) 8.18 Trips/DU			9.08	(1) 329.0 Trips/KSF			358.0	(1) 78.2 Trips/KSF			92.5
Link Credit	N/A				25%				N/A			
Final Trip Rate	8.18			9.08	246.75			268.5	78.2			92.5
Person Trip	(1)				(1)				(1)			
Temporal	AM	MD	PM	Sat	AM	MD	PM	Sat	AM	MD	PM	Sat
Distribution	9.3%	5.6%	8.5%	8.4%	4.8%	8.0%	10.9%	11.7%	3%	9%	9%	11%
Directional Distribution	(2)				(2)				(1)			
In	22%	50%	62%	55%	52%	50%	50%	50%	63%	53%	49%	52%
Out	78%	50%	38%	45%	48%	50%	50%	50%	37%	47%	51%	48%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)				(2)				(4)			
Auto	10.0%	10.0%	10.0%	10.0%	4.0%	4.0%	4.0%	4.0%	15.0%	15.0%	15.0%	17.0%
Taxi	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	9.0%	9.0%	9.0%	10.0%
Subway	71.0%	71.0%	71.0%	71.0%	1.0%	1.0%	1.0%	1.0%	27.0%	27.0%	27.0%	16.0%
Railroad	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bus	8.0%	8.0%	8.0%	8.0%	1.0%	1.0%	1.0%	1.0%	12.0%	12.0%	12.0%	20.0%
Walk	9.0%	9.0%	9.0%	9.0%	93.0%	93.0%	93.0%	93.0%	37.0%	37.0%	37.0%	37.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(3)(4)				(2)				(4)			
	Weekday/Saturday				Weekday/Saturday				Weekday		Saturday	
Auto	1.09				1.20				2.00		2.70	
Taxi	1.40				1.20				2.00		2.80	
Daily Delivery Trip Generation Rate	(1) 0.06 Delivery Trips / DU			0.02	(1) 0.35 Delivery Trips / KSF			0.04	(4) 0.35 Delivery Trips / KSF			0.04
Delivery Trip	(1)				(1)				(4)			
Temporal	AM	MD	PM	Sat	AM	MD	PM	Sat	AM	MD	PM	Sat
Distribution	12%	9%	2%	9%	8.0%	11%	2%	11%	8.0%	11%	2%	11%
Directional Distribution	(1)				(1)				(4)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Use	Community Facility – Non-Profit Office				Community Facility – Medical Office				Commercial Office			
	Weekday			Saturday	Weekday			Saturday	Weekday			Saturday
Daily Person Trip Generation Rate	(1) 18.0 Trips/KSF			3.9	(1,7) 2,356.0 Person Trips			37.0 Trips/KSF	(1) 18.0 Trips/KSF			3.9
Link Credit	N/A				N/A				N/A			
Final Trip Rate	18.0			3.9	2,356.0 Person Trips			37.0 Trips/KSF	18.0			3.9
Person Trip	(1)				(1)				(1)			
Temporal	AM	MD	PM	Sat	AM	AM	PM	Sat	AM	MD	PM	Sat
Distribution	12.4%	11.0%	10.5%	14.1%	11.0%	12.6%	8.5%	16.6%	12.4%	11.0%	10.5%	14.1%
Directional Distribution	(2)				(2)				(2)			
In	86%	52%	16%	48%	62%	53%	39%	54%	86%	52%	16%	48%
Out	14%	48%	84%	52%	38%	47%	61%	46%	14%	48%	84%	52%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(5,6)				(2)				(5,6)			
Auto	29.0%	2.0%	29.0%	2.0%	1.0%	1.0%	1.0%	1.0%	29.0%	2.0%	29.0%	2.0%
Taxi	0.0%	3.0%	0.0%	3.0%	5.0%	5.0%	5.0%	5.0%	0.0%	3.0%	0.0%	3.0%
Subway	39.0%	6.0%	39.0%	6.0%	60.0%	60.0%	60.0%	60.0%	39.0%	6.0%	39.0%	6.0%
Railroad	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	2.0%	0.0%
Bus	10.0%	6.0%	10.0%	6.0%	5.0%	5.0%	5.0%	5.0%	10.0%	6.0%	10.0%	6.0%
Walk	20.0%	83.0%	20.0%	83.0%	29.0%	29.0%	29.0%	29.0%	20.0%	83.0%	20.0%	83.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Vehicle Occupancy	(5,6)				(2)				(5,6)			
	Weekday/Saturday				Weekday/Saturday				Weekday/Saturday			
Auto	1.05				1.53				1.05			
Taxi	1.40				1.53				1.40			
Daily Delivery Trip Generation Rate	(1) 0.32 Delivery Trips / KSF			0.01	(4) 0.29 Delivery Trips / KSF			0.29	(1) 0.32 Delivery Trips / KSF			0.01
Delivery Trip	(1)				(4)				(1)			
Temporal	AM	MD	PM	Sat	AM	MD	PM	Sat	AM	MD	PM	Sat
Distribution	10.0%	11.0%	2.0%	11.0%	3.0%	11.0%	1.0%	0.0%	10.0%	11.0%	2.0%	11.0%
Directional Distribution	(1)				(4)				(1)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 22 (cont'd)
Travel Demand Assumptions

Use	UGVIII – Community Facility				UGVIII – Event Space				Community Facility – Recreation Center			
	Weekday			Saturday	Weekday			Saturday	Weekday			Saturday
Daily	(1,8)				(9)				(1)			
Person Trip Generation Rate	51.6 Trips/KSF			50.4	2.68 Trips/Person			2.68	51.6 Trips/KSF			50.4
Link Credit	N/A				N/A				N/A			
Final Trip Rate	51.6			50.4	2.68			2.68	51.6			50.4
Person Trip	(1,8)				(9)				(1)			
Temporal	AM	MD	PM	Sat	AM	MD	PM	Sat	AM	MD	PM	Sat
Distribution	9.0%	7.4%	9.0%	12.6%	0.0%	0.0%	32.0%	0.0%	9.0%	7.4%	9.0%	12.6%
Directional Distribution	(2)				(9)				(2)			
In	57%	48%	52%	48%	50%	50%	75%	50%	57%	48%	52%	48%
Out	43%	52%	48%	52%	50%	50%	25%	50%	43%	52%	48%	52%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(4)				(9)				(4)			
Auto	4.0%	4.0%	4.0%	4.0%	17.4%	17.4%	17.4%	17.4%	4.0%	4.0%	4.0%	4.0%
Taxi	9.0%	9.0%	9.0%	9.0%	6.4%	6.4%	6.4%	6.4%	9.0%	9.0%	9.0%	9.0%
Subway	12.0%	12.0%	12.0%	12.0%	20.0%	20.0%	20.0%	20.0%	12.0%	12.0%	12.0%	12.0%
Railroad	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bus	5.0%	5.0%	5.0%	5.0%	8.4%	8.4%	8.4%	8.4%	5.0%	5.0%	5.0%	5.0%
Walk	70.0%	70.0%	70.0%	70.0%	47.8%	47.8%	47.8%	47.8%	70.0%	70.0%	70.0%	70.0%
Total	100%	100%	100%	100%	100.0%	100.0%	100.0%	100.0%	100%	100%	100%	100%
Vehicle Occupancy	(4) Weekday/Saturday				(9) Weekday/Saturday				(4) Weekday/Saturday			
Auto	1.50				2.20				1.50			
Taxi	1.50				2.30				1.50			
Daily	(4)				(9)				(4)			
Delivery Trip Generation Rate	0.19 Delivery Trips / KSF			0.04	0.01 Delivery Trips / Person			0.01	0.19 Delivery Trips / KSF			0.04
Delivery Trip	(4)				(9)				(4)			
Temporal	AM	MD	PM	Sat	AM	MD	PM	Sat	AM	MD	PM	Sat
Distribution	6.0%	11.0%	1.0%	0.0%	0.0%	6.0%	1.0%	0.0%	6.0%	11.0%	1.0%	0.0%
Directional Distribution	(4)				(9)				(4)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sources:
(1) 2021 *CEQR Technical Manual*
(2) *Based on DOT's mode choice surveys*
(3) U.S. Census Bureau, ACS 2015-2019 Five-Year Estimates - Journey-to-Work (JTW) Data for Census Tracts 214, 230, 232, 234, 236, and 259
(4) *Lenox Terrace FEIS* (2020)
(5) *East Harlem Rezoning FEIS* (2017)
(6) U.S. Census Bureau, ACS 2012-2016 Five-Year Estimates – Reverse Journey-to-Work (RJTW) Data for Census Tracts 214, 230, 232, 234, 236, and 259
(7) For medical office size greater than 15,000 gsf – weekday trip rate = 66.626x + 141.77 where x represents gsf per 1,000 sf
(8) For event space, health club trip generation assumptions were applied to the weekday AM, midday, and Saturday peak hours; actual event space trip generation assumptions were applied to the weekday PM peak hour
(9) *550 Washington Street/Special Hudson River Park District FEIS* (2016)

- Commercial Office: The daily person trip generation rates and temporal distribution for the commercial office component are from the *CEQR Technical Manual*. Directional distributions are based on DOT's mode choice surveys. Weekday AM and PM peak hour modal splits are from the RJTW data from the 2012-2016 U.S. Census Bureau ACS for Manhattan census tracts 214, 230, 232, 234, 236, and 259, and the weekday midday and Saturday peak hour modal splits are from the 2017 *East Harlem Rezoning FEIS*. The vehicle occupancies are from the 2012-2016 U.S. Census ACS RJTW for autos and from the 2017 *East Harlem Rezoning FEIS* for taxis. The daily delivery trip rates and temporal and directional distributions are from the *CEQR Technical Manual*.
- UGVIII – Community Facility/Event Space: As previously committed during the FEIS process, the Applicant will enter into a Restrictive Declaration that incorporates measures to limit the occupancy of this event space to 200 attendees. The typical times when the proposed event space is expected to be used would be during the evening periods. For the weekday PM peak hour, when the event space is expected to be used, the travel demand assumptions are based on those from the 2016 *550 Washington Street/Special Hudson River Park District FEIS*. Also, in consultation with DOT and to provide a conservative analysis for the other analysis peak hours, community facility health club trip

generation assumptions, as described below, are used to estimate the proposed event space's peak hour trips for the weekday AM, midday, and Saturday peak hours.

- Community Facility – Recreational Center: The daily person trip generation rates and temporal distribution for the recreational center are based on the health club assumptions from the *CEQR Technical Manual*. Directional distributions are based on DOT's mode choice surveys, while the modal splits, vehicle occupancies, as well as delivery trip rates and delivery temporal and directional distributions are from the 2020 *Lenox Terrace FEIS.*

Travel Demand Projection Summary and Level 1 Screening Results

Projected peak hour trip generation by mode for the No Action development and the Modified Project are summarized in **Tables 23 and 24**, respectively. The differences between the two sets of trip estimates represent the incremental trip generation resulting from the Modified Project and which are subject to the examination of potential impacts.

Table 23
Trip Generation—No Action Scenario

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			
			Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential **49 DU**	AM	In	1	0	6	0	1	1	9	1	0	0	1
		Out	3	0	21	0	2	3	29	3	0	0	3
		Total	4	0	27	0	3	4	38	4	0	0	4
	Midday	In	1	0	8	0	1	1	11	1	0	0	1
		Out	1	0	8	0	1	1	11	1	0	0	1
		Total	2	0	16	0	2	2	22	2	0	0	2
	PM	In	2	0	15	0	2	2	21	2	0	0	2
		Out	1	0	9	0	1	1	12	1	0	0	1
		Total	3	0	24	0	3	3	33	3	0	0	3
	Saturday	In	2	0	15	0	2	2	21	2	0	0	2
		Out	2	0	12	0	1	2	17	2	0	0	2
		Total	4	0	27	0	3	4	38	4	0	0	4
Local Retail **49,340 GSF**	AM	In	12	3	3	0	3	283	304	10	5	1	16
		Out	11	3	3	0	3	261	281	9	5	1	15
		Total	23	6	6	0	6	544	585	19	10	2	31
	Midday	In	19	5	5	0	5	453	487	16	7	1	24
		Out	19	5	5	0	5	453	487	16	7	1	24
		Total	38	10	10	0	10	906	974	32	14	2	48
	PM	In	27	7	7	0	7	617	665	23	11	0	34
		Out	27	7	7	0	7	617	665	23	11	0	34
		Total	54	14	14	0	14	1,234	1,330	46	22	0	68
	Saturday	In	31	8	8	0	8	721	776	26	12	0	38
		Out	31	8	8	0	8	721	776	26	12	0	38
		Total	62	16	16	0	16	1,442	1,552	52	24	0	76
Destination Retail **21,146 GSF**	AM	In	5	3	8	0	4	12	32	3	2	0	5
		Out	3	2	5	0	2	7	19	2	2	0	4
		Total	8	5	13	0	6	19	51	5	4	0	9
	Midday	In	12	7	21	0	9	29	78	6	6	0	12
		Out	10	6	19	0	8	26	69	5	6	0	11
		Total	22	13	40	0	17	55	147	11	12	0	23
	PM	In	11	7	20	0	9	27	74	6	7	0	13
		Out	11	7	20	0	9	28	75	6	7	0	13
		Total	22	14	40	0	18	55	149	12	14	0	26
	Saturday	In	19	11	18	0	22	41	111	7	7	0	14
		Out	18	10	17	0	21	38	104	7	7	0	14
		Total	37	21	35	0	43	79	215	14	14	0	28
Community Facility Non-Profit Office **115,730 GSF**	AM	In	64	0	87	4	22	44	221	61	0	2	63
		Out	10	0	14	1	4	7	36	10	0	2	12
		Total	74	0	101	5	26	51	257	71	0	4	75
	Midday	In	2	4	7	0	7	99	119	2	4	2	8
		Out	2	3	7	0	7	91	110	2	4	2	8
		Total	4	7	14	0	14	190	229	4	8	4	16
	PM	In	10	0	14	1	3	7	35	10	0	0	10
		Out	53	0	72	4	18	37	184	50	0	0	50
		Total	63	0	86	5	21	44	219	60	0	0	60

Table 23 (cont'd)
Trip Generation—No Action Scenario

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			
			Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
		In	1	1	2	0	2	25	31	1	2	0	3
	Saturday	Out	1	1	2	0	2	27	33	1	2	0	3
		Total	2	2	4	0	4	52	64	2	4	0	6
		In	2	8	96	0	8	47	161	1	7	0	8
	AM	Out	1	5	59	0	5	29	99	1	7	0	8
		Total	3	13	155	0	13	76	260	2	14	0	16
Community Facility Medical Office		In	2	8	94	0	8	46	158	1	9	1	11
	Midday	Out	1	7	84	0	7	40	139	1	9	1	11
		Total	3	15	178	0	15	86	297	2	18	2	22
33,238 GSF		In	1	4	47	0	4	23	79	1	6	0	7
	PM	Out	1	6	73	0	6	35	121	1	6	0	7
		Total	2	10	120	0	10	58	200	2	12	0	14
		In	1	6	66	0	6	32	111	1	6	0	7
	Saturday	Out	1	5	56	0	5	27	94	1	6	0	7
		Total	2	11	122	0	11	59	205	2	12	0	14
		In	36	0	48	2	12	25	123	34	0	1	35
	AM	Out	6	0	8	0	2	4	20	6	0	1	7
		Total	42	0	56	2	14	29	143	40	0	2	42
Office		In	1	2	4	0	4	55	66	1	2	1	4
	Midday	Out	1	2	4	0	4	51	62	1	2	1	4
64,345 GSF		Total	2	4	8	0	8	106	128	2	4	2	8
		In	6	0	8	0	2	4	20	6	0	0	6
	PM	Out	30	0	40	2	10	20	102	29	0	0	29
		Total	36	0	48	2	12	24	122	35	0	0	35
		In	0	1	1	0	1	14	17	0	2	0	2
	Saturday	Out	0	1	1	0	1	15	18	0	2	0	2
		Total	0	2	2	0	2	29	35	0	4	0	4
		In	120	14	248	6	50	412	850	110	14	4	128
	AM	Out	34	10	110	1	18	311	484	31	14	4	49
		Total	154	24	358	7	68	723	1,334	141	28	8	177
		In	37	26	139	0	34	683	919	27	28	5	60
No Action Total	Midday	Out	34	23	127	0	32	662	878	26	28	5	59
		Total	71	49	266	0	66	1,345	1,797	53	56	10	119
		In	57	18	111	1	27	680	894	48	24	0	72
	PM	Out	123	20	221	6	51	738	1,159	110	24	0	134
		Total	180	38	332	7	78	1,418	2,053	158	48	0	206
		In	54	27	110	0	41	835	1,067	37	29	0	66
	Saturday	Out	53	25	96	0	38	830	1,042	37	29	0	66
		Total	107	52	206	0	79	1,665	2,109	74	58	0	132

Table 24
Trip Generation—With Action Modified Project

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			
			Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential	AM	In	17	2	118	2	13	15	167	16	4	4	24
		Out	59	6	418	6	47	53	589	54	4	4	62
		Total	76	8	536	8	60	68	756	70	8	8	86
	Midday	In	23	2	161	2	18	20	226	21	2	3	26
		Out	23	2	161	2	18	20	226	21	2	3	26
		Total	46	4	322	4	36	40	452	42	4	6	52
992 DU	PM	In	43	4	304	4	34	38	427	39	4	1	44
		Out	26	3	186	3	21	24	263	24	4	1	29
		Total	69	7	490	7	55	62	690	63	8	2	73
	Saturday	In	42	4	295	4	33	37	415	39	4	1	44
		Out	34	3	242	3	27	31	340	31	4	1	36
		Total	76	7	537	7	60	68	755	70	8	2	80
Local Retail	AM	In	9	2	2	0	2	210	225	8	3	1	12
		Out	8	2	2	0	2	194	208	7	3	1	11
		Total	17	4	4	0	4	404	433	15	6	2	23
	Midday	In	15	4	4	0	4	337	364	13	4	1	18
		Out	15	4	4	0	4	337	364	13	4	1	18
		Total	30	8	8	0	8	674	728	26	8	2	36
36,741 GSF	PM	In	20	5	5	0	5	460	495	17	7	0	24
		Out	20	5	5	0	5	460	495	17	7	0	24
		Total	40	10	10	0	10	920	990	34	14	0	48
	Saturday	In	23	6	6	0	6	537	578	19	9	0	28
		Out	23	6	6	0	6	537	578	19	9	0	28
		Total	46	12	12	0	12	1,074	1,156	38	18	0	56
UGVIII - Community Facility	AM	In	1	3	4	0	2	25	35	1	3	0	4
		Out	1	2	3	0	1	19	26	1	3	0	4
		Total	2	5	7	0	3	44	61	2	6	0	8
	Midday	In	1	2	3	0	1	17	24	1	2	0	3
		Out	1	2	3	0	1	19	26	1	2	0	3
		Total	2	4	6	0	2	36	50	2	4	0	6
13,571 GSF	PM	In											
		Out											
		Total											
	Saturday	In	2	4	5	0	2	29	42	1	5	0	6
		Out	2	4	5	0	2	31	44	1	5	0	6
		Total	4	8	10	0	4	60	86	2	10	0	12
UGVIII - Event Space	AM	In											
		Out											
		Total											
	Midday	In											
		Out											
		Total											
200 Persons	PM	In	22	8	26	0	11	61	128	10	3	0	13
		Out	7	3	9	0	4	20	43	3	3	0	6
		Total	29	11	35	0	15	81	171	13	6	0	19
	Saturday	In											
		Out											
		Total											
Community Facility - Recreation Center	AM	In	1	2	2	0	1	13	19	1	2	0	3
		Out	1	1	2	0	1	10	15	1	2	0	3
		Total	2	3	4	0	2	23	34	2	4	0	6
	Midday	In	1	1	2	0	1	9	14	1	2	0	3
		Out	1	1	2	0	1	10	15	1	2	0	3
6,977 GSF		Total	2	2	4	0	2	19	29	2	4	0	6
	PM	In	1	2	2	0	1	12	18	1	2	0	3
		Out	1	1	2	0	1	11	16	1	2	0	3
		Total	2	3	4	0	2	23	34	2	4	0	6
	Saturday	In	1	2	3	0	1	15	22	1	2	0	3
		Out	1	2	3	0	1	16	23	1	2	0	3
		Total	2	4	6	0	2	31	45	2	4	0	6

Table 24 (cont'd)
Trip Generation—With Action Modified Project

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			
			Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
With Action Total	AM	In	28	9	126	2	18	263	446	26	12	5	43
		Out	69	11	425	6	51	276	838	63	12	5	80
		Total	97	20	551	8	69	539	1,284	89	24	10	123
	Midday	In	40	9	170	2	24	383	628	36	10	4	50
		Out	40	9	170	2	24	386	631	36	10	4	50
		Total	80	18	340	4	48	769	1,259	72	20	8	100
	PM	In	86	19	337	4	51	571	1,068	67	16	1	84
		Out	54	12	202	3	31	515	817	45	16	1	62
		Total	140	31	539	7	82	1,086	1,885	112	32	2	146
	Saturday	In	68	16	309	4	42	618	1,057	60	20	1	81
		Out	60	15	256	3	36	615	985	52	20	1	73
		Total	128	31	565	7	78	1,233	2,042	112	40	2	154

As show in **Table 25**, the Modified Project would result in fewer than 200 overall person trips and fewer than 50 incremental vehicle trips during the weekday AM, midday, and PM, and Saturday midday/afternoon peak hours. Accordingly, a Level 2 screening assessment, involving the assignment of vehicular and pedestrian traffic, would not be warranted to determine detailed analysis needs. For transit, the evaluation of potential impacts is typically undertaken only for the weekday AM and PM peak hours when background travel via public transportation would be the highest. For the Modified Project, railroad and bus incremental trips would be well under CEQR analysis thresholds. For subway travel, the Modified Project is expected to incur 193 and 207 incremental trips during the weekday AM and PM peak hours, respectively. Directionally, the Modified Project would yield incrementally 315 subway trips leaving the site during the weekday AM peak hour and 226 subway trips arriving at the site during the weekday PM peak hour.

Table 25
Trip Generation Summary—Modified Project Incremental Trips

Peak Hour	In/Out	Person Trip							Vehicle Trip			
		Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
AM	In	-92	-5	-122	-4	-32	-149	-404	-84	-2	1	-85
	Out	35	1	315	5	33	-35	354	32	-2	1	31
	Total	-57	-4	193	1	1	-184	-50	-52	-4	2	-54
Midday	In	3	-17	31	2	-10	-300	-291	9	-18	-1	-10
	Out	6	-14	43	2	-8	-276	-247	10	-18	-1	-9
	Total	9	-31	74	4	-18	-576	-538	19	-36	-2	-19
PM	In	29	1	226	3	24	-109	174	19	-8	1	12
	Out	-69	-8	-19	-3	-20	-223	-342	-65	-8	1	-72
	Total	-40	-7	207	0	4	-332	-168	-46	-16	2	-60
Saturday	In	14	-11	199	4	1	-217	-10	23	-9	1	15
	Out	7	-10	160	3	-2	-215	-57	15	-9	1	7
	Total	21	-21	359	7	-1	-432	-67	38	-18	2	22

IMPACT ASSESSMENT OF THE MODIFIED PROJECT

Traffic

As with the Analyzed Project, the Modified Project would not result in incremental vehicle trips that would warrant a detailed intersection analysis. Accordingly, the Modified Project would not result in the potential for significant adverse impacts.

Transit

As with the Analyzed Project, the Modified Project would not result in incremental rail or bus trips that would warrant a detailed analysis. Accordingly, the Modified Project would not result in the potential for significant adverse rail or bus line-haul impacts. For travel via subway, **Table 26** provides a comparison of the weekday AM and PM With Action and incremental trips projected for the Analyzed Project under the Residential Podium and Office Podium Scenarios, and for the Modified Project.

Table 26
Comparison of Analyzed Project and Modified Project Subway Trips

		With Action Subway Trips			Incremental Subway Trips		
Peak Hour	**Direction**	**Res. Podium**	**Off. Podium**	**Modified**	**Res. Podium**	**Off. Podium**	**Modified**
AM	In	116	155	126	-136	-97	-122
	Out	461	428	425	362	329	315
	Total	577	583	551	226	232	193
PM	In	469	446	337	353	330	226
	Out	260	293	202	-8	25	-19
	Total	729	739	539	345	355	207

As shown, the Modified Project would result in fewer total With Action and incremental subway trips during the weekday AM and PM peak hours than both With Action scenarios for the Analyzed Project. In the 2022 FEIS, the subway Level 2 assessment assumed that 80 percent of the project-generated subway trips would be distributed to the 145th Street (No. 3 train) Station and the remaining 20 percent distributed to the 145th Street (A, B, C, and D train) Station. This allocation of projected subway trips for the Analyzed Project necessitated detailed analyses of the 145th Street (No. 3 train) Station for the weekday PM peak hour and line-haul condition of the No. 3 train for both the weekday AM and PM peak hours. As detailed in the 2022 FEIS, due to COVID-19 conditions, baseline subway usage levels were developed using a combination of actual 2021 count data and pre-COVID 2018 and 2019 data provided by New York City Transit (NYCT). Those analyses concluded that neither With Action condition would have the potential to result in significant adverse subway station and line-haul impacts.

Applying the above 80/20 distribution to the two 145th Street subway stations, the Modified Project would result in fewer than 200 subway trips at both stations. Accordingly, a detailed analysis would not be warranted, and the Modified Project would not have the potential to result in any significant adverse impacts to subway station control areas and vertical circulation elements. Regarding subway line-haul conditions, the 2022 FEIS provided a conservative analysis, building on a 2018 pre-COVID baseline. However, ridership levels in New York City have not yet returned to pre-COVID levels. Since the Analyzed Project, assessed with that elevated baseline, was determined to not result in an exceedance of the line-haul capacity of the No. 3 subway line, such results can similarly be expected with the lower With Action and incremental subway trips projected for the Modified Project. Accordingly, like the Analyzed Project, the Modified Project would also not result in the potential for a significant adverse subway line-haul impact.

Pedestrians

As with the Analyzed Project, the Modified Project would not result in incremental pedestrian trips that would warrant a detailed analysis of sidewalks, corners, and/or crosswalks. Accordingly, the Modified Project would not result in the potential for significant adverse impacts.

Parking

According to the *CEQR Technical Manual*, a detailed parking analysis is typically not warranted if a detailed traffic analysis is not undertaken. The 2022 FEIS provided an inventory of nearby parking resources to support the screening out of a detailed traffic analysis but did not quantify how the Analyzed Project's parking demand would be accommodated on-site and by off-site parking resources. For the Modified Project, because a parking waiver is sought to reduce the on-site parking supply to 40 parking spaces, a detailed parking analysis is needed to determine if there would be a potential for a parking shortfall.

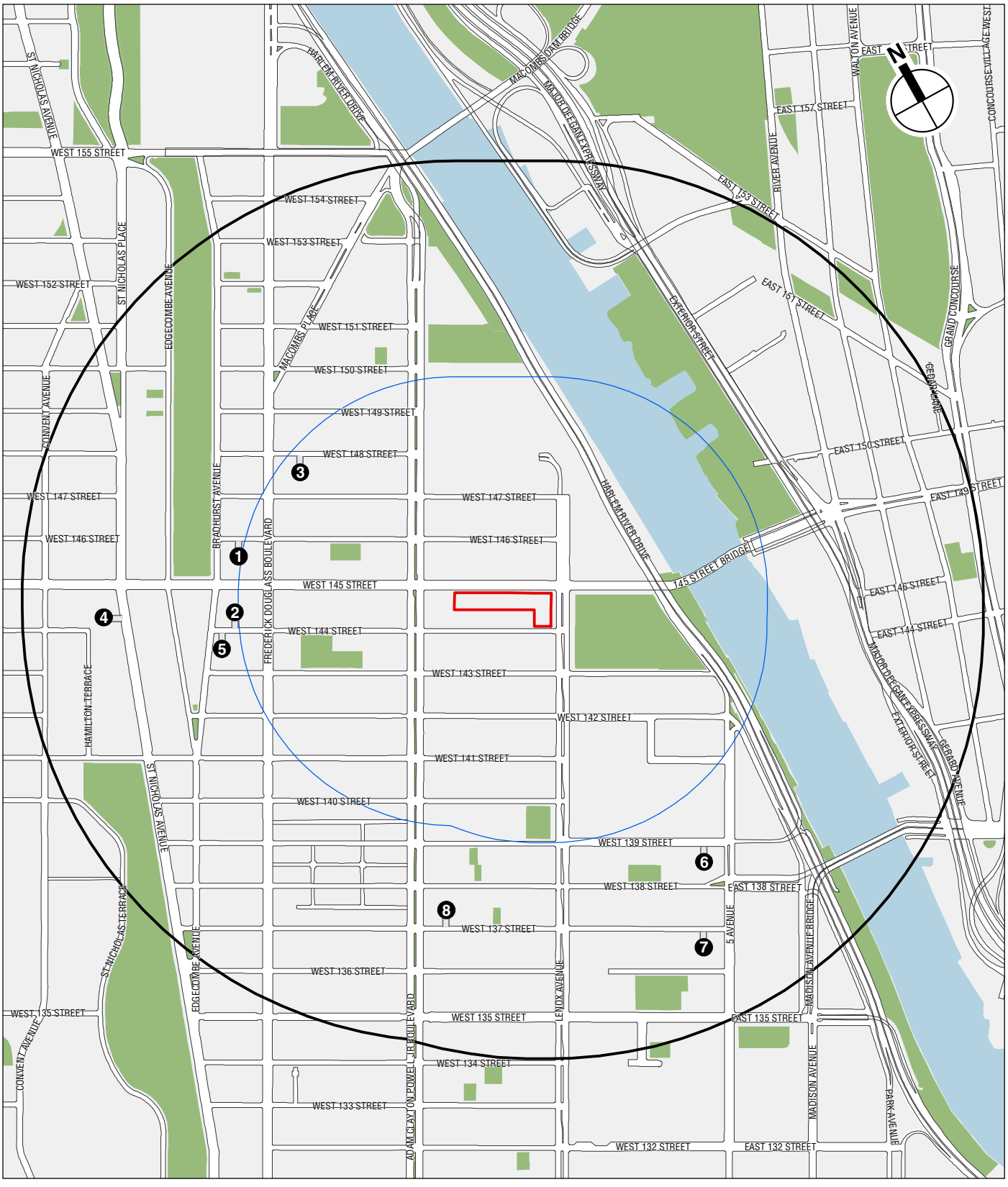
Similar to what was undertaken for the 2022 FEIS, an off-street parking inventory for an area of approximately half-a-mile from the project site was conducted. As depicted in **Figure 18**, there are eight off-street public parking facilities within ½-mile of the project site. Each facility's operating license and legal capacity were noted. Based on visual inspection, where possible, and the responses given by parking attendants, estimates were made on the parking occupancy or utilization at each facility for the weekday morning, midday, and evening, and Saturday afternoon time periods. A summary of the recorded information, including the area's overall off-street public parking supply and utilization, is presented in **Table 27**. The eight inventoried public parking facilities have a combined capacity of 980 parking spaces. Overall, they were 72, 82, 75, 54, and 64-percent utilized, with 275, 176, 243, 450, and 356 parking spaces available during the weekday AM, midday, PM, weekday overnight, and Saturday time periods, respectively.

Table 27
Existing Off-Street Parking Utilization
½-mile Study Area

Map #	Name/Operator and Address/Location	License Number	Licensed Capacity	Utilization Rate					Utilized Spaces					Available Spaces				
				AM	MD	PM	ON	SAT	AM	MD	PM	ON	SAT	AM	MD	PM	ON	SAT
1	iPark - 145 Bradhurst Ave	1253416	63	100%	100%	100%	100%	100%	63	63	63	63	63	0	0	0	0	0
2	MP 144 LLC - 300 W.145th St	1466919	158	50%	50%	75%	75%	75%	79	79	119	119	119	79	79	39	39	39
3	TPEC 148 LLC - 234-240 W.148th St	1319642	110	75%	100%	100%	75%	50%	83	110	110	83	55	27	0	0	27	55
4	iPark - 673 Nicholas Ave	2109585	180	25%	65%	70%	70%	70%	45	117	126	126	126	135	63	54	54	54
5	World Tower Parking Garage LLC - 310 W.144th St	1460710	130	100%	100%	50%	50%	50%	130	130	65	65	65	0	0	65	65	65
6	Park 139th LLC - 29 W.138th St/34 W.139th St	1354465/1312579	144	90%	90%	90%	20%	50%	130	130	130	29	72	14	14	14	115	72
7	Uptown Parking - 6 W.137th St	2030917	128	90%	90%	50%	25%	50%	115	115	64	32	64	13	13	64	96	64
8	MV Garage Management Inc - 2351 Adam Clayton Powell Jr Blvd	2111198	67	90%	90%	90%	20%	90%	60	60	60	13	60	7	7	7	54	7
			980	**72%**	**82%**	**75%**	**54%**	**64%**	**705**	**804**	**737**	**530**	**624**	**275**	**176**	**243**	**450**	**356**

Notes: MD = Midday; ON = overnight; SAT = Saturday Afternoon
Source: Survey conducted by AKRF Inc. in June 2024

With an average auto ownership rate of 19 percent (per U.S. Census data) for rental-occupied housing, the 992 residential units would generate a demand for 188 parking spaces. This maximum level would materialize overnight and diminish during the day when some residents use their autos for commuting to work or other travels. The other uses of the Modified Project would have relatively low parking demand that mostly occur during daytime hours. Accordingly, the maximum parking demand stemmed from the Modified Project's residential dwelling units is also the maximum parking demand for the entire Modified Project. With 40 on-site parking spaces and a minimum of 176 available off-site parking spaces, the adoption of the proposed parking waiver would not have the potential to result in a parking shortfall.



Off-Street Parking Facilities

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to transportation, consistent with the findings of the 2022 FEIS.

AIR QUALITY

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to air quality that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to air quality.

Consistent with the Analyzed Project, the maximum projected hourly incremental traffic volumes generated by the Modified Project would not exceed the *City Environmental Quality Review (CEQR) Technical Manual* carbon monoxide (CO) screening threshold of 170 peak-hour vehicle trips at any intersection in the study area. The incremental traffic volumes would also not exceed the particulate matter (PM) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Furthermore, compared to the Analyzed Project, the Modified Project would result in a reduction of 90 parking spaces; consequently, the maximum pollutant concentrations and concentration increments from the parking garage ventilation system would continue to be projected to be lower than the corresponding *de minimis* criteria and ambient air quality standards. Therefore, consistent with the program analyzed in the 2022 FEIS, no mobile source analysis would be required for the project with the proposed modifications.

The Modified Project would continue to comply with the requirements of the Development Site's (E) Designation for stationary source air quality, which would require that any new residential, commercial and/or community facility development on the Development Site ensure that any fossil fuel-fired heating and hot water systems be fitted with low NOx (30 ppm) burners firing only natural gas, and ensure that the heating and hot water system stacks are located on the tallest portion of the tower fronting onto Lenox Avenue and at least 330 feet above grade, and at most 106 feet from the eastern lot line of lot 33 facing Lenox Avenue. Although compared to the Analyzed Project, the overall floor area is slightly larger for the Modified Project, the emissions estimates prepared for the 2022 FEIS conservatively assumed included the parking garage in the calculations to estimate annual fuel usage. Furthermore, the towers for the Modified Project would be taller in height compared to the Analyzed Project. The taller height would also not affect the conclusions of the nearby large emission source (Esplanade Gardens) analyzed for the 2022 FEIS. Therefore, the changes to the site massing would not affect the conclusions of the stationary source analysis of the Analyzed Project's fossil fuel-fired heating and hot water systems.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to air quality, consistent with the findings of the 2022 FEIS.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to greenhouse gas emissions and climate change that were not addressed in the 2022 FEIS.

The 2022 FEIS did not identify a significant adverse impact related to greenhouse gas emissions and climate change. As detailed in the 2022 FEIS, the building energy use and vehicle use

associated with the Analyzed Project would result in up to approximately either 9 thousand metric tons of carbon dioxide equivalent (CO_2e) emissions per year with the Residential Podium Scenario, or 10 thousand metric tons of CO2e emissions per year with the Office Podium Scenario. The design of both potential development scenarios would target energy efficiency measures, the inclusion of renewable energy, and carbon emission reductions in line with the City's goals. In addition, emissions associated with the Analyzed Project's consumption of grid electricity is expected to decrease as New York State and New York City target 100 percent renewable electricity and would result in significant reduction of emissions associated with the buildings' electricity consumption. Total GHG emissions associated with the construction of the Analyzed Project, including direct emissions and upstream emissions associated with construction materials, would be approximately 27 thousand metric tons. The Analyzed Project would be required at a minimum to achieve the energy efficiency requirements of the New York City Building Code. The 2022 FEIS also noted that the Applicant has committed to performing third party building commissioning in order to ensure energy performance targets are being met. The Analyzed Project would also align with GHG goals by virtue of its proximity to public transportation, commitment to construction air quality controls and recycling construction materials, and the fact that, as a matter of course, construction in New York City uses recycled steel and includes cement replacements.

The 2022 FEIS also noted that the Analyzed Project would be designed to provide flood resilience to the potential conditions projected through the end of the century, based on future adjustments to end-of-century potential flood elevations estimates. Nothing in the project's designs would structurally or otherwise preclude the introduction, at a later date, of additional flood protection measures to protect project elements up to potential flood elevations projected for 2100.

The building energy use and vehicle use associated with the Modified Project would result in a similar amount of carbon dioxide equivalent (CO_2e) emissions per year as the Analyzed Project, and the design of the Modified Project would target energy efficiency measures, the inclusion of renewable energy, and carbon emission reductions in line with the City's goals. As with the Analyzed Project, emissions associated with the Modified Project's consumption of grid electricity is expected to decrease as New York State and New York City target 100 percent renewable electricity and would result in significant reduction of emissions associated with the buildings' electricity consumption. Total GHG emissions associated with the construction of the Modified Project, including direct emissions and upstream emissions associated with construction materials, would be similar to those associated with the Analyzed Project. The Modified Project, like the Analyzed Project, would be committed to achieve or outperform the minimum energy efficiency and carbon intensity requirements of the New York City Building Code and the Applicant has committed to performing third party building commissioning following design of the Modified Project in order to ensure energy performance targets are being met. The Modified Project would also align with GHG goals by virtue of its proximity to public transportation, commitment to construction air quality controls and recycling construction materials, and the fact that, as a matter of course, construction in New York City uses recycled steel and includes cement replacements. Like the Analyzed Project, the Modified Project would be designed to provide flood resilience to the potential conditions projected through the end of the century, based on future adjustments to end-of-century potential flood elevations estimates.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to greenhouse gas emissions and climate change, consistent with the findings of the 2022 FEIS.

NOISE

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse noise impacts that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to operational noise.

Using the methodology used in the 2022 FEIS, 2032 No Action and With Action condition noise levels for the Modified Project were calculated at each of the noise analysis receptors for the 2032 analysis year. The resultant noise levels are shown in **Table 28**.

Table 28
2032 With Action Condition – Modified Project Noise Levels (in dBA)

Receptor	Location	Time	No Action $L_{eq(1)}$	With Action $L_{eq(1)}$	$L_{eq(1)}$ Change	With Action $L_{10(1)}$
1	West 145th Street at western edge of Development Site-Western Building	AM	69.9	69.9	0.0	72.9
		MD	69.8	69.7	-0.1	72.7
		PM	67.7	67.5	-0.2	70.0
		WE	68.6	68.6	0.0	70.7
2	West 145th Street at eastern edge of Development Site-Western Building/western edge of Development Site-Eastern Building	AM	69.8	69.8	0.0	72.4
		MD	68.6	68.5	-0.1	71.5
		PM	67.9	67.7	-0.2	70.0
3	West 145th Street adjacent to Development Site-Eastern Building, near intersection with Lenox Avenue	AM	74.5	74.5	0.0	75.0
		MD	74.2	74.1	-0.1	75.2
		PM	73.2	73.0	-0.2	75.0
		WE	71.8	71.8	0.0	72.3
3a	Elevated measurement on West 145th Street, near intersection with Lenox Avenue	AM	75.4	75.4	0.0	76.8
		MD	75.1	75.0	-0.1	77.0
		PM	74.1	73.9	-0.2	76.8
4	Lenox Avenue between West 144th and West 145th Streets	AM	69.5	69.6	0.1	71.6
		MD	72.2	72.2	0.0	72.7
		PM	68.0	68.2	0.2	70.1
		WE	66.8	67.1	0.3	69.5
4a	Elevated measurement on Lenox Avenue between West 144th and West 145th Streets	AM	68.5	68.6	0.1	70.6
		MD	71.2	71.2	0.0	71.7
		PM	67.0	67.2	0.2	69.1
5	West 144th Street adjacent to Development Site	AM	62.1	65.3	**3.2**	66.5
		MD	63.7	65.1	1.4	66.4
		PM	65.4	66.1	0.7	65.7
		WE	63.6	64.8	1.2	65.5
5a[2]	West 144th Street between Adam Clayton Powell and the Development Site	AM	62.1	64.0	1.9	65.2
		MD	63.7	65.1	1.4	66.4
		PM	65.4	66.5	1.1	66.1
		WE	63.6	64.9	1.3	65.6

Notes:
[1] Noise levels at all receptor locations were calculated by using proportional modeling.
[2] Existing noise levels at receptor location 5a based on measurements at receptor location 5.

By 2032, the maximum increase in $L_{eq(1)}$ noise levels for the With Action condition would be less than 2 dBA at all noise analysis receptors except for receptor 5. Changes of this magnitude would be considered imperceptible and not significant according to *CEQR Technical Manual* noise impact criteria.

The maximum predicted noise level increment at receptor 5 of 3.2 dBA would be considered just noticeable according to *CEQR Technical Manual* guidance, but it would not represent a significant adverse noise impact since there are no existing noise-sensitive land uses along West 144th Street where this receptor is located. Noise exposure at receptors that would be introduced along this

roadway segment as part of the Modified Project are discussed below. In terms of CEQR noise exposure guidelines, noise levels at receptor locations 5 and 5a would be in the "marginally acceptable" category, and noise levels at receptor locations 1, 2, 3, 3a, 4, and 4a would remain categorized as "marginally unacceptable."

As shown in Table 19-3 of the *CEQR Technical Manual* has set noise attenuation values for buildings based on exterior noise levels in order to maintain interior noise levels of 45 dBA or lower for residential dwellings and community facility uses and 50 dBA or lower for commercial office uses.

Table 29 shows the minimum window/wall attenuation necessary to meet *CEQR Technical Manual* requirements for internal noise levels at each of the noise measurement locations. The With Action condition $L_{10(1)}$ noise levels were determined by adjusting the existing noise measurements to account for future increases in traffic with the proposed actions based on the Noise PCE screening analysis results. The projected future $L_{10(1)}$ noise levels include the noise contribution from vehicular traffic on adjacent roadways and nearby playgrounds.

Table 29
CEQR-Required Attenuation at Noise Measurement Locations (in dBA)

Receptor	Location	Highest With Action $L_{10(1)}$ Value	Minimum Required Attenuation[2]
1	West 145th Street at western edge of Development Site-Western Building	72.9	28
2	West 145th Street at eastern edge of Development Site-Western Building/western edge of Development Site-Eastern Building	72.4	28
3	West 145th Street adjacent to Development Site-Eastern Building, near intersection with Lenox Avenue	75.2	31
3a	Elevated measurement on West 145th Street, near intersection with Lenox Avenue	77.0	33
4	Lenox Avenue between West 144th and West 145th Streets	72.7[1]	28
4a	Elevated measurement on Lenox Avenue between West 144th and West 145th Streets	71.7[1]	28
5	West 144th Street adjacent to Development Site	66.5	N/A[3]

Notes:
[1] Includes contribution from vehicular traffic and nearby Brigadier General Charles Young Playground.
[2] Attenuation values are shown for residential dwellings or community facility uses; commercial office uses would require 5 dBA less attenuation.
[3] "N/A" indicates that the highest calculated L_{10} is below 70 dBA. The *CEQR Technical Manual* does not specify minimum attenuation guidance for exterior L_{10} values below this level.

Based on the values shown in **Table 29**, required attenuation levels in order to provide an interior noise level of 45 dBA for residential dwellings or community facility uses and 50 dBA for commercial office uses were determined for the Development Site. These values are summarized in **Table 30** and shown in **Figure 19**.

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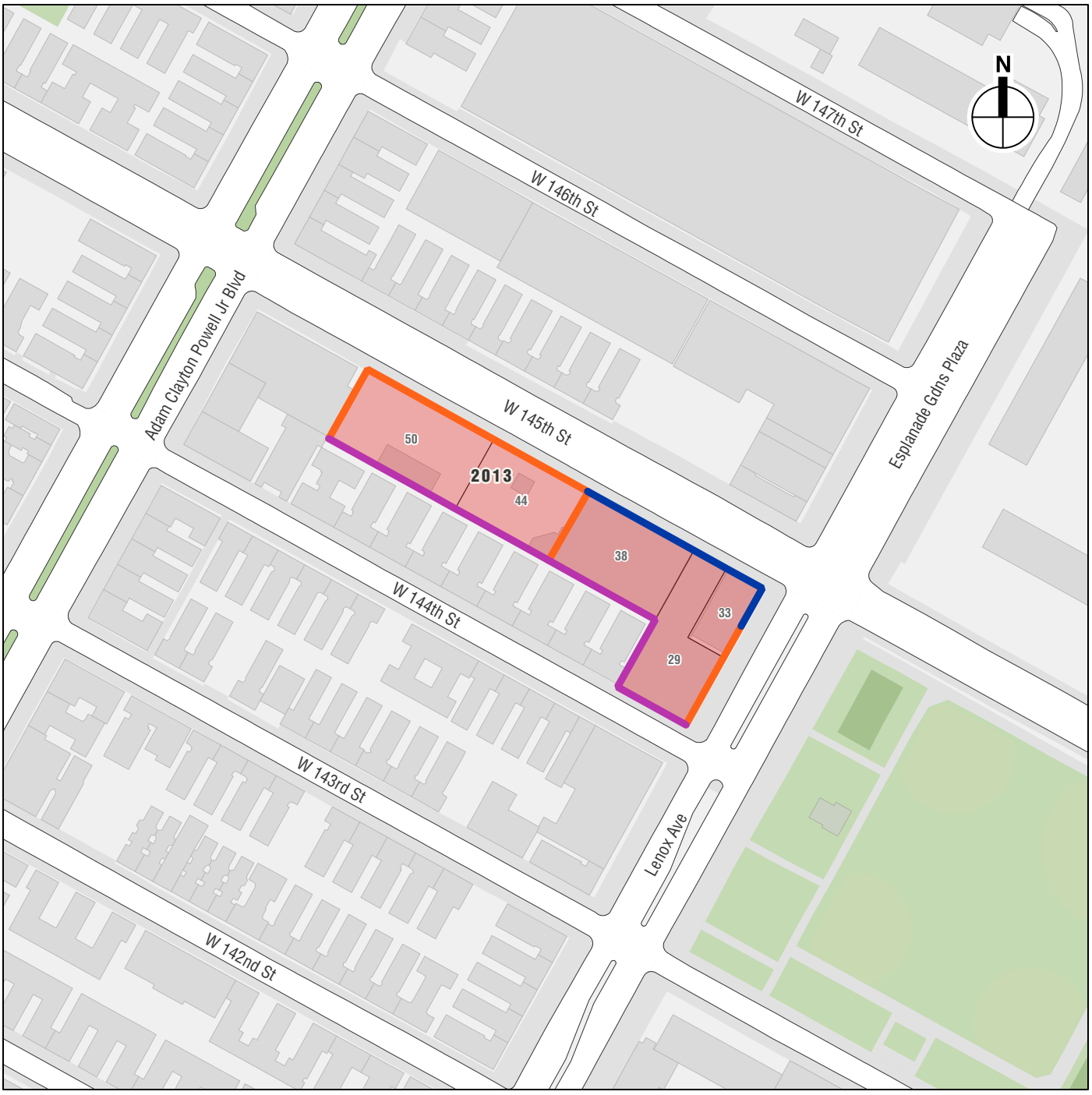

Development Site (Block 2013)

50 Tax Lot in the Development Site

33 dBA Building Attenuation Required

28 dBA Building Attenuation Required

No Attenuation Required

0 200 FEET

** Attenuation values are shown for residential dwellings or community facility uses; commercial office uses would require 5 dBA less attenuation.*

Required Building Attenuation

Table 30
Minimum Required Attenuation at Development Site (in dBA)

Development Site	Façade(s)	Associated Noise Measurement Site(s)	Required Attenuation[1,2]
Block 2013, Lot 29 (Former Lots 29, 33 and 38)	North	2, 3, 3a	33
	East (within 50 ft of W 145th Street)	3, 3a	33
	East (beyond 50 ft of W 145th Street)	4	28
	South	5	N/A[2]
	West (within 100 ft of W 145th Street)	2	28
	West (beyond 100 ft of W 145th Street)	5	N/A[2]
Block 2013, Lot 29 (Former Lots 44 and 50)	North	1, 2	28
	East	2	28
	South	5	N/A[2]
	West	1	28

Notes:
[1] Attenuation values are shown for residential dwellings or community facility uses; commercial office uses would require 5 dBA less attenuation.
[2] "N/A" indicates that the highest calculated L_{10} is below 70 dBA. The *CEQR Technical Manual* does not specify minimum attenuation guidance for exterior L_{10} values below this level.

To require attenuation at the Development Site, an (E) Designation for noise would be applied, specifying the appropriate amount of window/wall attenuation. The text of the (E) Designation would be as follows:

> Block 2013, Lot 29 (former Lots 29, 33, and 38): To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 33 dBA window/wall attenuation on the facades facing West 145th Street and the facades facing Lenox Avenue within 50 feet of West 145th Street and 28 dBA of attenuation on the facades facing Lenox Avenue beyond 50 feet from West 145th Street and the facades facing Adam Clayton Powell Jr Boulevard within 100 feet of West 145th Street to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EIS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.
>
> Block 2013, Lot 29 (former Lots 44 and 50): To ensure an acceptable interior noise environment, future residential/community facility uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation on the facades facing West 145th Street, the facades facing Lenox Avenue and the facades facing Adam Clayton Powell Jr Boulevard to maintain an interior noise level not greater than 45 dBA for residential and community facility uses as illustrated in the EIS. To maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation includes, but is not limited to, air conditioning.

The attenuation of a composite structure is a function of the attenuation provided by each of its component parts and how much of the area is made up of each part. Normally, a building façade is composed of the wall, glazing, and any vents or louvers for HVAC systems in various ratios of area. Buildings proposed to be located on the Development Site with the (E) Designation would

be designed to provide composite window/wall attenuation greater than or equal to the attenuation requirements listed in **Table 30**.

By adhering to the (E) Designation described above, the buildings to be developed as a result of the proposed actions would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L_{10} for residential or community facility uses and 50 dBA L_{10} for commercial office uses. Therefore, the Modified Project would not result in any significant adverse noise impacts.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to operational noise, consistent with the findings of the 2022 FEIS.

PUBLIC HEALTH

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to public health that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to public health.

The 2022 FEIS concluded that the Analyzed Project would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, hazardous materials, or operational noise with the placement of an (E)-Designation on the Development Site. While the 2022 FEIS concluded that construction activities would result in significant adverse construction-period noise impacts at receptors in the vicinity of the Analyzed Project's work areas, construction of the Analyzed Project would not result in chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, or episodic and unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. Consequently, the 2022 FEIS concluded that construction of the Analyzed Project would not result in a significant adverse public health impact.

As with the Analyzed Project, the Modified Project would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, hazardous materials, or operational noise with the placement of an (E)-Designation on the Development Site. The Modified Project, like the Analyzed Project, would be anticipated to result in significant adverse, though temporary, construction-period noise impacts; however, the Modified Project would not result in chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, or episodic and unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. Consequently, construction of the Modified Project would not result in a significant adverse public health impact.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to public health, consistent with the findings of the 2022 FEIS.

NEIGHBORHOOD CHARACTER

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse impacts to neighborhood character that were not addressed in the 2022 FEIS. The 2022 FEIS did not identify a significant adverse impact related to neighborhood character.

As described in the 2022 FEIS, the Analyzed Project would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; or operational-period noise. Although the 2022 FEIS did identify significant adverse impacts with respect to open space and construction-period noise, those impacts would be partially mitigated or would occur only during the construction period and would not result in a significant overall change to the defining elements of the area's neighborhood character.

As described above, consistent with the findings of the 2022 FEIS, the Modified Project would not result in significant adverse impacts to land use, zoning, and public policy; socioeconomic conditions; urban design and visual resources; or operational-period noise and would be expected to result in significant adverse impacts to open space and construction-period noise. As with the Analyzed Project, for the Modified Project those impacts would be partially mitigated or would occur only during the construction period, and would not result in a significant overall change to the defining elements of the area's neighborhood character. New development on the Development Site would allow for the provision of new housing units, including permanently affordable housing pursuant to the Mandatory Inclusionary Housing program (MIH), and facilitate the development of new retail uses that would create more active ground-floor street-front spaces and create more defined street walls along West 144th Street, West 145th Street, and Lenox Avenue. The proposed reduction in parking regulations is intended to enhance the urban design conditions of the Development Site and surrounding area, thereby contributing to the neighborhood character.

In summary, accounting for the changes in background conditions and the anticipated build year, the proposed modifications to the Analyzed Project would not result in any significant adverse impacts to neighborhood character, consistent with the findings of the 2022 FEIS.

CONSTRUCTION

This analysis assesses whether any changes in background conditions or the anticipated build year, or the differences between the Analyzed Project and the Modified Project, would result in any significant adverse construction impacts that were not addressed in the 2022 FEIS. The 2022 FEIS identified a significant adverse impact related to construction noise. For all other technical areas, the 2022 FEIS concluded that construction activities associated with the Analyzed Project would not result in significant adverse impacts.

Specifically, for construction noise, the 2022 FEIS concluded that although noise levels from construction of the Analyzed Project are expected to be comparable to those from typical New York City construction involving a new building or buildings with concrete slab floors and foundation on piles, construction activities pursuant to the proposed actions has the potential to result in construction noise levels that exceed the 2020 *City Environmental Quality Review (CEQR) Technical Manual* construction noise screening threshold for an extended period of time or the additional construction noise impact criteria defined herein at receptors surrounding the proposed construction work areas, including residences and a community facility immediately adjacent to the Development Site (all façades of 109 through 117 West 144th Street, north, east and west façades of 121 through 137 West 144th Street and north and east façades of 141 West 144th Street, nine buildings in total), south façades of residences at 133-163 West 145th Street (nine buildings in total), the west façade and a small western portion of the south façade of the south residential building at 700 Esplanade Gardens Plaza, the north façades of residences at 104-152 West 144th Street, the east façades of 104 and 144 West 144th Street, and the west façade of 112 West 144th Street (eight buildings in total) and the north façade of the New Mt.

Calvary Baptist Church at 102 West 144th Street. At these receptors, construction could produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities and would produce noticeable increases over the course of construction. The analysis evaluated the construction periods with the potential to result in the greatest levels of construction noise; however, the predicted maximum levels would not persist throughout the entire construction period, and the noise levels would fluctuate throughout the construction period. For impacted buildings that do not already have insulated glass windows and alternate means of ventilation, the predicted impacts could be partially mitigated with receptor controls (i.e., the offer of storm windows and air conditioning units at residences that do not already have air conditioning). There would be no feasible and practicable mitigation measures to further reduce noise levels at buildings or units that have been identified as potentially experiencing significant adverse construction noise impacts, that already have insulated glass windows and air conditioning units; therefore, the impact would remain unmitigated.

The amount of new construction under the Modified Project would be similar to that identified for the Analyzed Project. In addition, the Modified Project would involve the same types of construction activities and similar construction phasing and logistics and construction worker and truck estimates as presented in the 2022 FEIS. Under the Modified Project, Buildings A and B are anticipated to be constructed simultaneously and construction is anticipated to take approximately 40 months to complete, from 2028 to 2031. Specifically, construction of the proposed buildings would consist of the following primary construction stages, which may overlap at certain times: demolition (Month 1 to Month 4 for approximately 4 months), excavation and foundation (Month 5 to Month 14 for approximately 10 months); superstructure and exteriors (Month 15 to Month 32 for approximately 18 months); and interiors and finishing (Month 17 to Month 40 for approximately 24 months). The Modified Project would also include the construction of Building C which is anticipated to take approximately 12 months to complete from 2031 to 2032, including approximately 2-3 months for site remediation.

The Modified Project would comply with the same laws, codes, and other rules and regulations as the Analyzed Project. Any noise or air quality effects from construction are expected to be temporary; however, measures to control air emissions and noise would be implemented as previously assumed. The peak daily construction worker and truck trips under the Modified Project are estimated to be substantially similar to what was analyzed in the 2022 FEIS.

Overall, the potential for construction impacts associated with the Modified Project would be the same as disclosed in the 2022 FEIS. No significant adverse construction impacts related to land use, socioeconomic conditions, neighborhood character, community facilities, natural resources, hazardous materials, transit and pedestrians, noise, or air quality not already disclosed in the 2022 FEIS are expected. The potential for construction-related impacts to historic resources within 90 feet of the Development Site (the 145th Street Station) would be avoided through preparation and implementation of a CPP.

As described above, the 2022 FEIS concluded that the Analyzed Project would result in significant adverse impacts due to construction-related noise. Where impacts during construction could occur, the FEIS noted that for impacted buildings that do not already have insulated glass windows and alternate means of ventilation, the Applicant would offer to make receptor control measures (installation of storm windows and/or one window air conditioner per living room and bedroom on impacted facades of residences, or per noise sensitive space on impacted facades of residences, or per noise sensitive space on impacted facades of community facility buildings) available at no cost for purchase and installation to partially mitigate the impacts. The potential

for construction related noise impacts under the Modified Project would be similar to the construction impacts identified in the 2022 FEIS. The commitment for the Applicant to make receptor control measures available at no cost for purchase and installation would also apply to the Modified Project. Further, the Modified Project would proceed with the same Project Commitments Related to the Environment (PCREs) described in the 2022 FEIS. Specifically, these include:

- Concrete trucks shall be required to be located inside site-perimeter noise barriers while pouring or being washed out;
- During construction, tower cranes shall not exceed an L_{max} noise level limit of 80 dBA at 50 feet, generators shall not exceed L_{max} noise level limit of 72 dBA at 50 feet, and excavators shall not exceed an L_{max} noise level limit of 80 dBA at 50 feet as set forth in Table 18-11 of the 2022 FEIS.

E. CONCLUSION

In summary, the proposed project modifications described above together with the changes in background conditions and the anticipated build year would not result in any significant adverse impacts not previously identified in the 2022 FEIS. ✷