

Project Commodore

Draft Scope of Work for Preparation of a Draft Environmental Impact Statement

LEAD AGENCY



New York City Department of City Planning

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Draft Scope of Work

Section 1: Introduction

This Draft Scope of Work outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the redevelopment of a Manhattan site located on Block 1280, Lot 30, a 57,292-square-foot (sf) lot that currently contains the Grand Hyatt Hotel, a 26-story, approximately 1,028,120-sf, 295-foot-tall steel and glass building with approximately 1,300 guest rooms and approximately 60,000 sf of conference/event space. The Development Site is notable for its integration with one of the City's primary transportation hubs. The building sits directly above the Grand Central – 42nd Street subway station and Metropolitan Transportation Authority (MTA) Metro-North railroad tracks below grade and is located immediately to the east of the Beaux Arts-style Grand Central Terminal (GCT) on Block 1280, Lot 1. The building is immediately to the south of the Grand Central Market (the Market) on Block 1280, Lots 54 and 154. The GCT and Market are located on an existing merged zoning lot (Lots 1, 54, and 154) and contain approximately 322,664 sf of floor area. The MTA controls Lots 1, 54, and 154 as well as ground-floor and mezzanine-level circulation areas located on the Development Site.

The Applicant, Commodore Owner LLC, is seeking several discretionary approvals from the City Planning Commission (CPC)—including special permits, zoning text amendments, an authorization, and approval for the disposition of City-owned real property (the “Proposed Actions”)—to facilitate a mixed-use development containing up to approximately 2,108,820 gross square feet (gsf) of office space; an up-to-approximately 452,950-gsf, 500-room hotel; approximately 10,000 sf of open-air publicly accessible space; and up to approximately 43,370 gsf of retail (including MTA-controlled retail) on the cellar, ground, and second floors of the proposed building (the “Proposed Project”). The Proposed Project would also include significant public realm improvements, as well as subway and mass transit improvements to enhance circulation and reduce congestion at GCT and the Grand Central – 42nd Street subway station.

Section 2: City Environmental Quality Review (CEQR) and Scoping

The Proposed Project and the related discretionary actions are considered a Type I Action under the State Environmental Quality Review Act (SEQR). Based on **Part II: Technical Analysis** of the Environmental Assessment Statement (EAS) prepared for the project, the Proposed Project would not exceed the CEQR thresholds for analysis of the following technical areas, and no significant adverse impacts would result from the Proposed Actions and resulting development: community facilities; socioeconomic conditions; natural resources; energy; and solid waste and sanitation. Therefore, no further analysis of these technical areas is warranted. However, for certain technical areas, the Proposed Actions would exceed the CEQR threshold for analysis, and the potential for impact cannot be ruled out. As such, the Department of City Planning (DCP), as lead agency, has issued a Positive

Declaration, which establishes that the Proposed Project may have a significant adverse impact on the environment, thus warranting the preparation of an EIS.

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the Proposed Project. The process allows other agencies and the public a voice in framing the scope of work for the EIS. The scoping document sets forth the analyses and methodologies that will be utilized to prepare the EIS. During the period for scoping, those interested in reviewing the Draft Scope of Work (Draft Scope) may do so and give their comments to the lead agency.

In accordance with SEQRA and CEQR, this Draft Scope has been distributed for public review. A public scoping meeting has been scheduled for Monday, December 21, 2020 at 2:00 PM, and the period for submitting written comments will remain open for ten days, or until Thursday, December 31, 2020. In support of the City's efforts to contain the spread of COVID-19, DCP will hold the public scoping meeting remotely. Instructions on how to view and participate, as well as materials relating to the meeting, will be available at the DCP Scoping Documents webpage (<https://www1.nyc.gov/site/planning/applicants/scoping-documents.page>) and NYC Engage website (<https://www1.nyc.gov/site/nycengage/index.page>) in advance of the meeting. Comments received during the Draft Scope's public meeting and written comments received until 5:00 PM on Thursday, December 31, 2020, will be considered and incorporated as appropriate into the Final Scope of Work (Final Scope).

The Final Scope will incorporate all relevant comments made on the Draft Scope and revise the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The Draft EIS (DEIS) will be prepared in accordance with the Final Scope.

Once the DEIS is complete, the document will be made available for public review and comment. A public hearing will be held on the DEIS in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The record will remain open for ten days after the public hearing to allow additional written comments on the DEIS. At the close of the public review period, a Final EIS (FEIS) will be prepared that will respond to all substantive comments made on the DEIS. The FEIS will then be used by the decision makers to evaluate CEQR findings, which address project impacts and proposed mitigation measures, in deciding whether to approve the requested discretionary actions, with or without modifications.

Section 3: Project Area and Project Area History

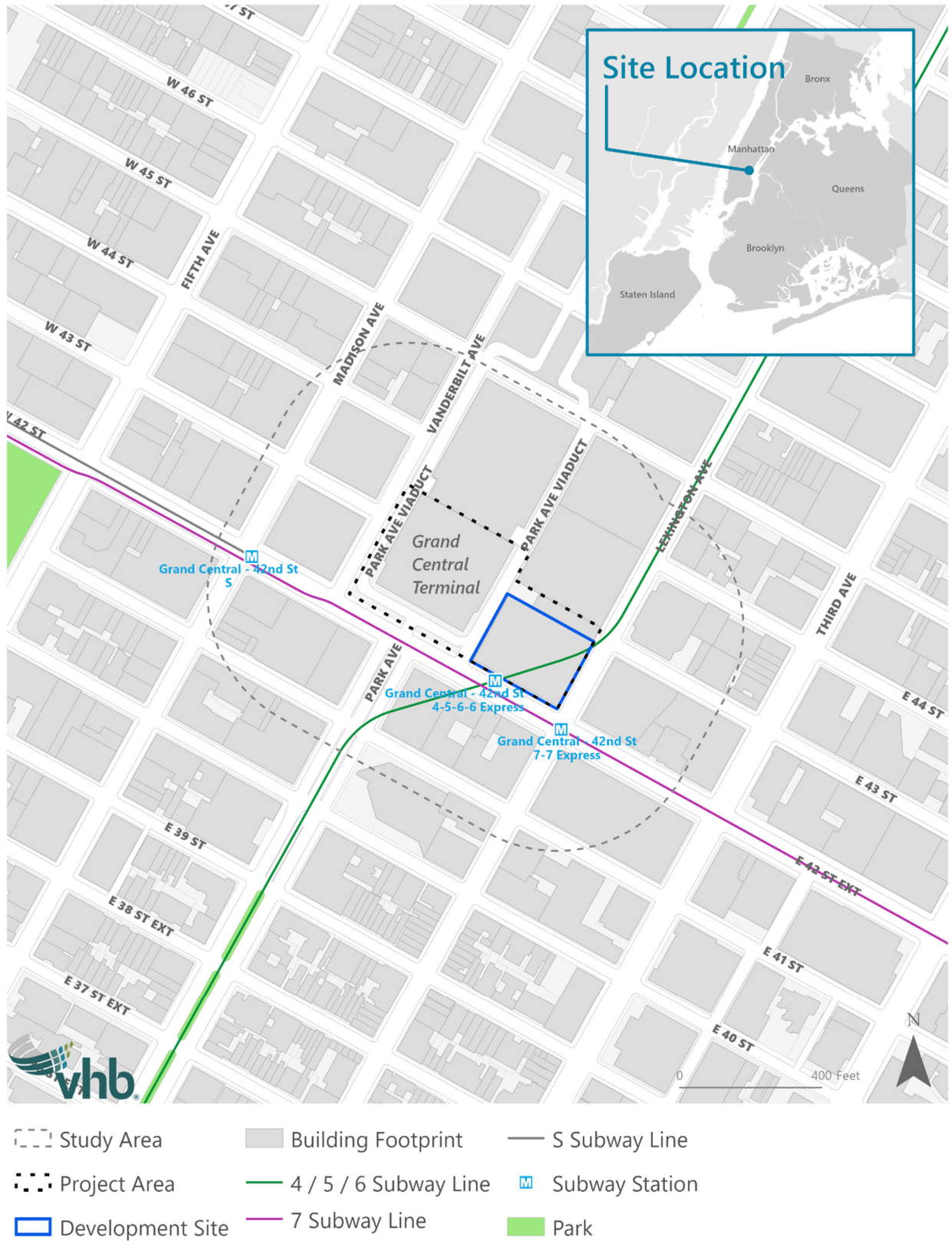
Project Area

The Project Area—comprising the existing hotel, GCT, and the Market on Block 1280, Lots 1, 30, 54, and 154—has a combined area of 203,872 sf (See **1Photo 1Table 0Figure 1**), with approximately 340 feet of frontage on Vanderbilt Avenue; 669 feet of frontage on East 42nd Street; and 253 feet of frontage on Lexington Avenue. Pursuant to a CPC special permit, the

Project Area would be treated as a qualifying site¹ under the East Midtown Subdistrict requirements of the Zoning Resolution.

¹ In order to be considered a qualifying site, sites must have cleared frontage along a wide street, dedicate no more than 20 percent of the building's floor area for residential use, and comply with environmental standards.

Figure 1 Project Area Map



The Project Area is located in the East Midtown central business district in Community District 5 of Manhattan. Located within the Grand Central Core Area and the Grand Central Transit Improvement Zone Subarea of the East Midtown Subdistrict, the underlying zoning district of the Project Area is C5-3. In 2017, the CPC approved the Greater East Midtown Rezoning (N 170186(A) ZRM and C 170187 ZMM) to reinforce the area's standing as a premier central business district, support the preservation of landmarked buildings, and provide for public realm improvements. The Greater East Midtown Rezoning included creation of the Grand Central Transit Improvement Zone Subarea, which permits development of up to 27 FAR as-of-right and up to 30 FAR by special permit. Developments can achieve as-of-right maximum FARs through three mechanisms: the district-wide transfer of unused landmark development rights, a payment to a district improvement fund to reconstruct overbuilt floor area, and the construction of pre-identified transit infrastructure projects.

Project Area History

The Greater East Midtown business district is one of the largest job centers in New York City and one of the highest-profile business addresses in the world. The area between Second and Fifth Avenues and East 39th and East 57th Streets contains more than 60 million sf of office space, more than a quarter million jobs, and numerous Fortune 500 companies.

This area is anchored by Grand Central, one of the city's major transportation hubs and most significant civic spaces. Around GCT and to the north, some of the city's most iconic office buildings, such as Lever House, the Seagram Building, 550 Madison (formerly the AT&T, then the Sony Building), 601 Lexington (formerly the Citigroup Building) and the Chrysler Building, line the major avenues—Park, Madison, and Lexington Avenues—along with a mix of other landmarks, civic structures and hotels.

The Commodore Hotel opened on the Development Site itself in 1919. It was developed as part of Terminal City, a complex of hotels and offices connected to GCT. It was later renovated and reopened as the Grand Hyatt.

At ground floor level, the Development Site is fronted by Lexington Avenue to the east, 42nd Street to the south, Grand Central and the Park Avenue viaduct to the west and the Graybar Building to the north. The surrounding roadway network generally consists of a grid of north-south avenues and east-west streets with the notable exception of Park Avenue, which consists of a two-way viaduct running between East 40th and East 46th Streets. This allows through traffic to bypass intersections in the Grand Central area. The northbound Park Avenue viaduct also provides vehicular access to the Grand Hyatt on the second-floor level.

The Development Site is located above a New York City Transit (NYCT) subway station; the Grand Central – 42nd Street subway station serves the Nos. 4, 5, 6, 7 Lines and Shuttle service. It is also located immediately east of GCT, which is the southern terminus of the Metro-North Railroad's Harlem, Hudson, and New Haven Line commuter rail service, which serves the northern parts of the New York metropolitan area and Connecticut.

Additionally, the East Side Access project that is currently under construction will, for the first time, permit Long Island commuters one-seat access to East Midtown through a new below-grade Long Island Railroad station at Grand Central. Construction for the East Side Access project is expected to be completed in 2022.

There are numerous bus routes with stops adjacent to or near the Development Site, including the M1, M2, M3, M4, M5, M15, M15 SBS, M42, M101, M102, M103, and Q32 local bus routes, as well as express bus routes from the Bronx, Brooklyn, Queens, and Staten Island, and Port Authority Bus Terminal buses.

Section 4: Required Approvals

The following actions would be required from the CPC in accordance with the Uniform Land Use Review Procedure (ULURP).

- › A CPC special permit pursuant to ZR Section 81-621 to allow hotel use;
- › A CPC special permit pursuant to ZR Section 81-644 for transit improvements;
- › A CPC special permit pursuant to ZR Section 81-645 for public concourse improvements;
- › A CPC special permit pursuant to ZR Section 81-685 to modify qualifying site, floor area, height and setback, street wall, district plan elements, loading, and publicly accessible space regulations;
- › Zoning text amendments to amend existing special permits in ZR Sections 81-644 and 81-685, and update a section reference in ZR Section 81-613;
- › A CPC authorization pursuant to ZR Section 36-72 to reduce the number of required bicycle parking spaces; and
- › Approval for the disposition of City-owned real property pursuant to Section 197-c of the New York City Charter with respect to the Development Site.

Additionally, the following non-discretionary actions would be required:

- › A joint certification from the CPC Chairperson and the MTA pursuant to ZR Section 81-673(a) as to the size and location of transit easement volumes on the zoning lot;
- › A joint certification from the CPC Chairperson and the MTA pursuant to ZR Section 81-673(b) as to whether a transit easement volume is required on the zoning lot.

Approval by the Empire State Development Corporation or its subsidiary would also be required for the conveyance of the Development Site to the City of New York, subject to the existing ground lease between UDC/Commodore Redevelopment Corporation and Hyatt Equities L.L.C. (or its successor/assign). A lease extension would be approved pursuant to actions to be determined. Disposition of the Development Site from the City of New York to a local development corporation would require approval by the Mayor and Borough Board pursuant to Section 384(b)(4) of the New York City Charter.

Section 5: Proposed Project and With-Action Condition

The Applicant proposes to redevelop the Development Site with up to approximately 2,976,740 gsf (2,246,515 zsf) of mixed-use development, including a hotel, office, and public space.² The Development Site would contain up to approximately 2,108,820 gsf of office

² As noted above, Block 1280, Lots 1, 30, 54, and 154, would be treated as a qualifying site, or a single zoning lot, for purposes of applying East Midtown bulk regulations. The floor area located on the Development Site would be equivalent to approximately 39.2 FAR if calculated on the basis of the area of the Development Site alone.

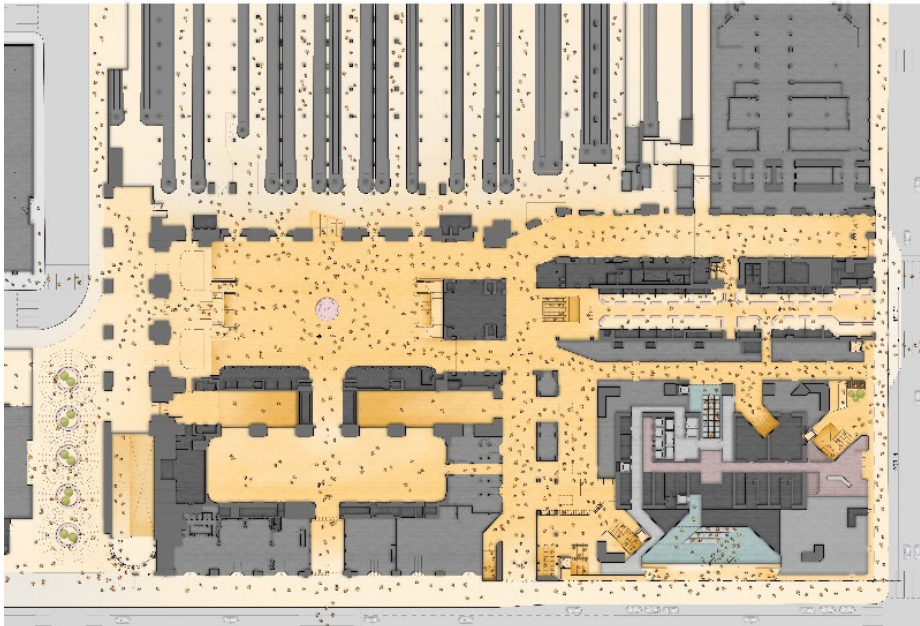
space; an up-to-approximately 452,950-gsf, 500-room hotel; approximately 10,000 sf of open-air publicly accessible space; and up to approximately 43,370 gsf of retail (including MTA-controlled retail) on the cellar, ground, and second floors (see **Figure 2** for the illustrative ground floor and second floor plans). It would also contain approximately 16,245 gsf of space for transit circulation.

The Development Site's exceptional connectivity to public transportation provides opportunities for major upgrades to the transit system as part of a new development. The at-grade and below-grade portions of the Development Site would continue to contain the subway station and rail station areas, with significant improvements that are discussed further below. The ground floor would include a hotel lobby and an office lobby, a reconstructed Lexington Passage and MTA retail located along the passage, an approximately 6,350-sf Transit Hall, and approximately 1,300 sf of additional area for a subway entrance off Lexington Avenue. The hotel lobby would be located on the eastern frontage on Lexington Avenue, while the office lobby would be accessed from East 42nd Street.

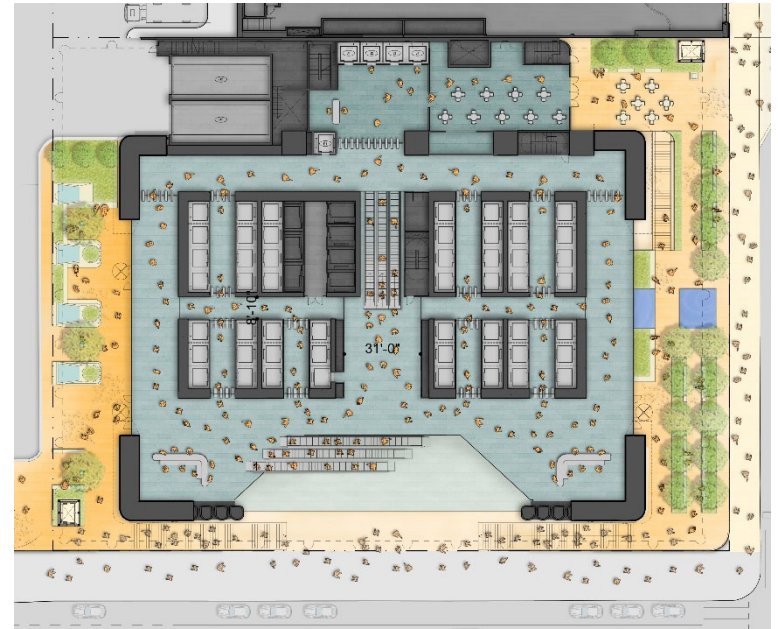
The second floor would contain office lobby and open-air publicly accessible space fronting on Lexington Avenue. Office space is planned to be located on floors 7-63, and the hotel on floors 65-83.

The building would be a tower rising up to approximately 1,646 feet tall (see **Figure 3**). The design would require relief from various zoning requirements, such as for street wall regulations, in order to enhance views of adjacent landmarks as well as the public realm pedestrian experience.

Figure 2 Illustrative Ground Floor and Second Floor Plans

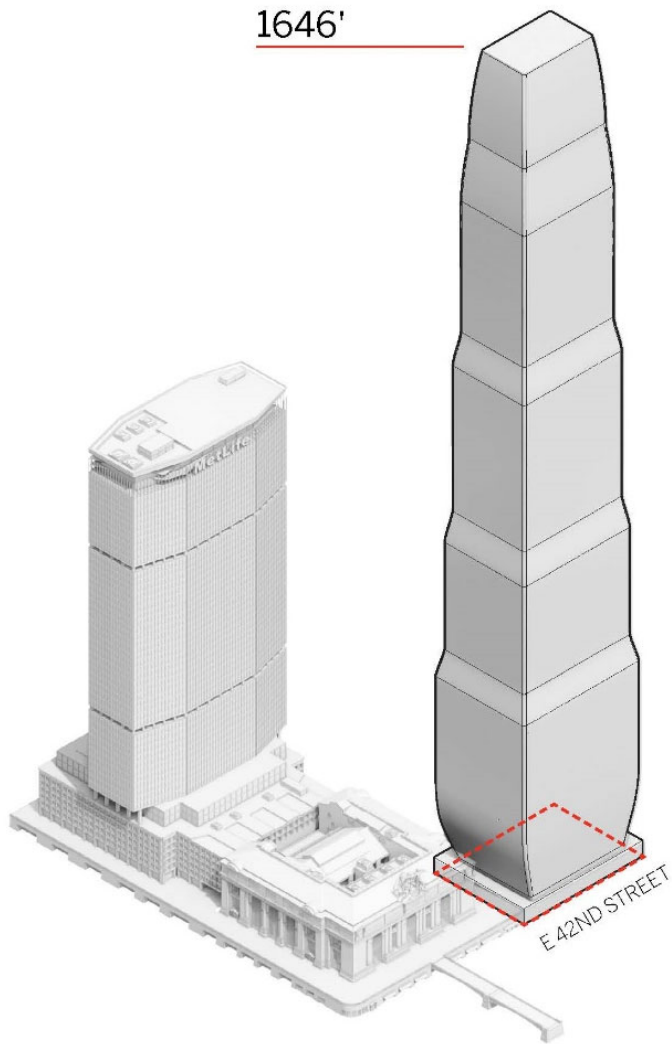


Illustrative Ground Floor Plan

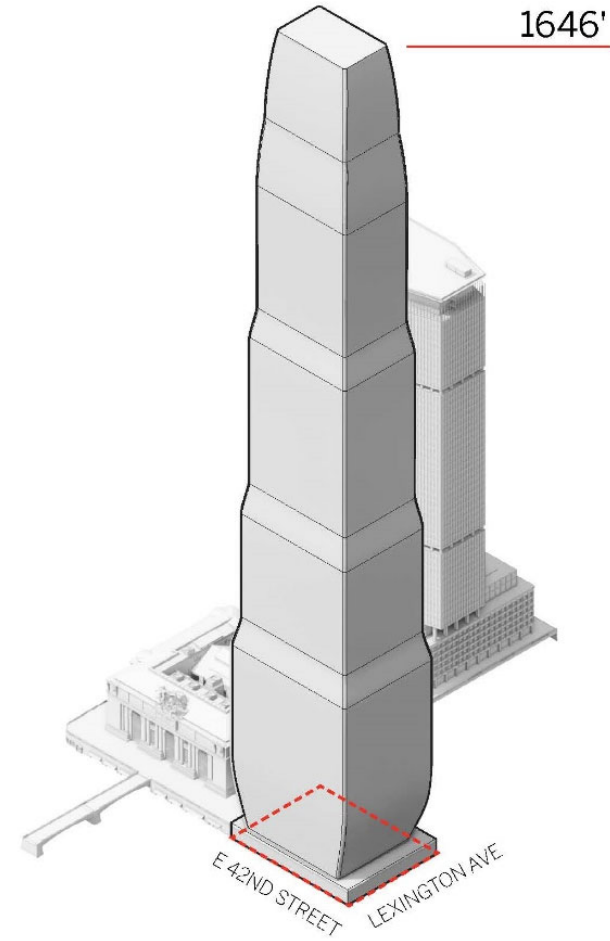


Illustrative Second Floor Plan

Figure 3 Illustrative Massing of With-Action Maximum Zoning Envelope



Illustrative Massing view from southwest



Illustrative Massing view from southeast

In connection with the Proposed Development, the Proposed Project would provide the following transit and public realm improvements to improve the pedestrian experience and reduce congestion at GCT and the Grand Central – 42nd Street subway station:

- › The subway entrance at East 42nd Street (R-238) would be redesigned and expanded. Natural light would be introduced into the newly enlarged entrance. Turnstiles would be relocated to street level and arranged to increase the subway entrance space at-grade. A new stair would redistribute passengers more evenly throughout the mezzanine level and platform stairs. The ADA elevator currently located within one bay of the historic entrance bays to the 42nd Street Passage would be relocated, and in its place the historic entrance would be restored. The relocated elevator would provide a more direct ADA connection to the subway mezzanine.³
- › A new transit hall containing retail, information screens and booths, and connections to GCT would be constructed at the ground floor level on the western side of the Development Site. The eastern side of the transit hall will consist of retail stores with appropriately designed storefronts as well as smaller stores built between existing building structures. The transit hall would work in tandem with the existing 42nd Street Passage and expanded subway entrance to increase pedestrian throughput. The transit hall would have skylights providing natural light and offering views of the eastern facade of GCT. While the transit hall would be located on the Development Site, the transit hall would be subject to an easement for public access.
- › The proposed building would be set back from Lexington Avenue to allow for increased sidewalk widths and enhanced views to adjacent landmarks. In concert with this change, the stairs located near the northwest corner of Lexington Avenue and East 42nd Street that provide access from Lexington Avenue down to the mezzanine level of the subway station would be realigned and relocated further north as part of a reconstructed subway entrance with an ADA elevator that would bring light and air into the subway mezzanine and provide a larger, covered at-grade subway entrance.
- › The Lexington Passage entrance would be redesigned to make it legible and inviting to pedestrians, and the Passage would be refinished and its ceiling height would be increased to improve the pedestrian experience. The rebuilt Passage would include retail on both sides of the corridor as well as access to the Grand Central Market.
- › Girders and structure associated with the existing Hyatt Hotel would be removed from the subway mezzanine level to improve circulation and enhance sightlines and the surrounding area would be renovated to match subway mezzanine finishes.
- › A new Short Loop connection would be constructed to provide direct access from Metro-North's lower platform level to NYCT's Lexington Avenue 4, 5 and 6 subway mezzanine level. There would also be a similar connection from the southernmost portion of the new East Side Access/Long Island Rail Road concourse level to the newly created access point into the NYCT Lexington Avenue 4, 5 and 6 subway mezzanine level. The connection would include stairs and an ADA elevator.

Table 1 summarizes the Proposed Development.

³ The Applicant would replace any artwork in the R-238 circulation area that is affected by construction of the transit and public realm improvements. The removal and replacement of artwork by the Applicant would be performed under the direction and supervision of the MTA and the artist.

Table 1 Development Program for Proposed Project

Proposed Use	Proposed Development
	(GSF)
Commercial Office	2,108,820
Retail	43,370
Hotel	452,950
Publicly Accessible Space	10,000
MTA Circulation	16,240
Mechanical	345,355
Total Development	2,976,740

Note: All floor areas are approximate

Section 6: Project Purpose and Need

As noted above, the East Midtown Central Business District is one of the largest job centers in New York City and one of the most attractive business districts in the world. The district is anchored by GCT and the Grand Central – 42nd Street subway station and is adjacent to two recent major public infrastructure projects: East Side Access and the Second Avenue Subway. While the area benefits from a robust and improving transportation system, the office building stock is lagging behind. The average age of office buildings in the area is approximately 75 years and many of these buildings are, or may soon become, outdated for today's office tenants.

The Proposed Actions would facilitate the development of a new, mixed-use Class A office and hotel building on a site that is well-served by a variety of transit modes, including subway, bus, and regional train service. The Proposed Project would also provide significant improvements to the public realm, including major improvements to access and circulation within the Grand Central transportation network and new publicly accessible open space.

The Proposed Project would therefore significantly further the following stated goals from the *Greater East Midtown Rezoning FEIS*:

- › Protect and strengthen East Midtown as one of the world's premier business addresses and key job center for the City and region;
- › Seed the area with new modern and sustainable office buildings to maintain its preeminence as a premier office district;
- › Improve the area's pedestrian and built environments to make East Midtown a better place to work and visit; and
- › Complement ongoing office development in Hudson Yards and Lower Manhattan to facilitate the long-term expansion of the City's overall stock of office space.

Section 7: Analysis Framework

The 2014 *City Environmental Quality Review (CEQR) Technical Manual* will serve as guidance on the methodologies and impact criteria for evaluating the potential environmental effects

of the proposed development that would result from the proposed discretionary actions. To the extent that the proposed actions allow for a range of possible scenarios that are considered reasonable and likely, the scenario with the worst environmental consequences will be chosen for CEQR analysis. This is considered to be the reasonable worst-case development scenario (RWCDs), the use of which ensures that, regardless of which scenario actually occurs, its impacts would be no worse than those considered in the environmental review. The CEQR assessment examines the incremental differences between the RWCDs of the future without the proposed actions in place (No-Action condition) and the future with the proposed actions in place and the associated development operation (With-Action condition).

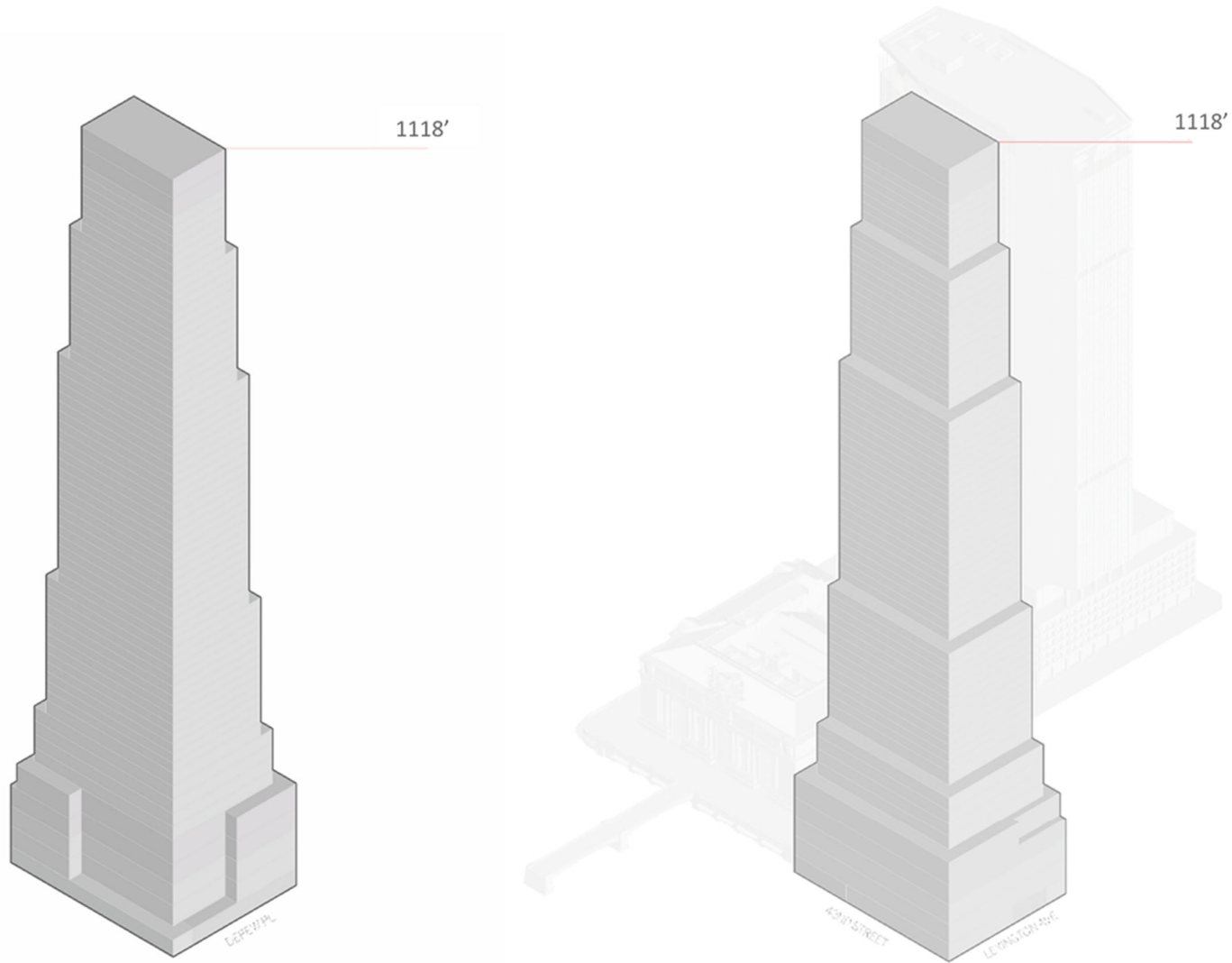
For the purpose of the environmental analyses, the No-Action condition represents the future absent the proposed actions and serves as the baseline by which the proposed project (or With-Action condition) is compared to determine the potential for significant environment impacts. The difference between the No-Action and With-Action conditions represents the increment to be analyzed in the CEQR process.

The Proposed Actions would facilitate development on the Development Site only and would also result in improvements to MTA facilities both on the Development Site and on the larger qualifying site, as described above. The amount and size of development on the Development Site would be governed by the regulations of East Midtown Subdistrict, as proposed to be amended pursuant to the Proposed Actions, as well as the controls of the Special Permits granted for the new building. The Proposed Project, therefore, defines the RWCDs for purposes of the With-Action condition.

Section 8: Future No-Action Condition

Absent the Proposed Project, the Development Site would be developed with a 27-FAR development of approximately 1,845,033 gsf (1,546,884 zsf), comprised of 1,682,630 gsf of office space (1,539,370 zsf), 18,300 gsf (7,514 zsf) of retail, and a 5,729-sf enclosed publicly accessible space on the ground floor. In addition, 7,800 gsf of MTA circulation space would be provided on the ground floor. The No-Action development would be 69 stories and 1,118 feet tall (see **Figure 4**). This represents the maximum floor area developable on the Development Site through non-discretionary actions.

Figure 4 No-Action Massing



In the No-Action condition, the Applicant would provide transit improvements from the Priority Improvement List set forth in ZR Section 81-682 to improve circulation and reduce congestion. Specifically, at the 42nd Street – Bryant Park/Fifth Avenue station, the Applicant would provide the following Type 1 improvements, which each generate 40,000 sf of floor area (a combined total of 160,000 sf of floor area):

- › ADA elevator between Flushing platform and mezzanine level;
- › A new street entrance from the north side of West 42nd Street;
- › ADA elevator between Sixth Avenue northbound platform and mezzanine level; and
- › ADA elevator between Sixth Avenue southbound platform and mezzanine level.

The following non-discretionary approvals would be required for the No-Action condition:

- › A joint Zoning Certification from the CPC Chairperson and the MTA as to the size and location of transit easement volumes on the zoning lot (ZR 81-673(a));
- › A joint Zoning Certification from the CPC Chairperson and the MTA as to whether a transit easement volume is required on the zoning lot (ZR 81-673(b));
- › A Zoning Certification from the CPC Chairperson pursuant to ZR Section 81-643 as to the amount of non-complying floor area on the Development Site and to reconstruct non-complying floor area on the Development Site;
- › A Zoning Certification from the CPC Chairperson pursuant to ZR Section 81-641 to increase the permitted floor area on a qualifying site though the construction of transit improvements from the Priority Improvement List set forth in ZR Section 81-682;
- › A Zoning Certification from the CPC Chairperson pursuant to ZR Section 81-642 for the transfer of unused landmark development rights and to verify payment of the contribution to the public realm improvement fund; and
- › A Zoning Certification from the CPC Chairperson to certify compliance of the design for an enclosed publicly accessible space with all applicable requirements of ZR Section 81-681(b).

Section 9: Future With-Action Condition

As stated previously, in the future With-Action condition, the Applicant proposes to redevelop the Development Site with up to approximately 2,976,740 gsf (2,246,515 zsf) of mixed-use development, including office, local retail, hotel, and public space. The Development Site would contain up to approximately 2,108,820 gsf of office space; an up-to-approximately 452,950-gsf hotel with 500 rooms; approximately 10,000 sf of open-air publicly accessible space; and up to approximately 43,370 gsf of retail (including MTA-controlled retail) on the cellar, ground, and second floors. The Development Site would also contain approximately 16,245 gsf of space for transit circulation. The Proposed Project, as described above, reflects the With-Action condition.

The proposed tower would be flanked by the Chrysler Terrace, an open-air publicly accessible space running the length of the site in the north/south direction on the east side of the Development Site at a height of approximately 30 feet, providing an overlook onto Lexington Avenue and East 42nd Street and a unique vantage point for viewing the Chrysler Building and other surrounding landmarks. The proposed open space would be reachable by

a grand staircase along East 42nd Street, by a second staircase along Lexington Ave, and by elevator. The Chrysler Terrace would feature trees, plantings, multiple types of seating, and a larger clearing that can be used for small events or gatherings.

While the above program represents the Proposed Project, for conservative purposes, some technical areas of the EIS will evaluate a With-Action option that does not include a hotel component. This With-Action option is based on the same total building square footage and building massing as the Proposed Project but would be comprised of a different mix of uses: up to approximately 2,481,770 gsf of office space and no hotel. All other elements of the Proposed Project would remain the same.

Increment for Analysis

In total, the With-Action condition would result in a net increase of up to approximately 1,131,707 gsf over the No-Action condition, with approximately 426,190 gsf dedicated to commercial office space, approximately 452,950 gsf for hotel space, a reduction of 25,070 gsf for local retail space, approximately 8,445 gsf of additional MTA circulation space, and an increase in the amount of publicly accessible space by approximately 4,271 sf (see [Error! Reference source not found.](#)).

Table 2 Increment for Analysis

	No-Action	With-Action	Increment
Commercial Office	1,682,630	2,108,820	426,190
Hotel	0	452,950	452,950
Retail	18,300	43,370	25,070
MTA Circulation	7,800	16,245	8,445
Mechanical	130,574	345,355	214,781
Publicly Accessible Space	5,729	10,000	4,271
Total	1,845,033	2,976,740	1,131,707
Total Commercial	1,700,930	2,605,140	904,210
Stories	69 Stories	83 Stories	14 Stories
Height	1,118 Feet	up to 1,646 Feet	528 Feet

Note: All floor areas are in approximate GSF

Future development will be in accordance with the requested special permits. Therefore, the Proposed Project would be limited to the project and development described above, and the summary in **Table 2** represents the reasonable worst-case development scenario.

Section 10: Analysis (Build) Year

The build year for the Proposed Project is 2030.

Section 11: Proposed Scope of Work for the DEIS

The New York City Department of City Planning, as lead agency for the environmental review, determined that the Proposed Project has the potential to result in significant environmental impacts and, therefore, pursuant to CEQR procedures, issued a Positive Declaration requiring that a Draft EIS be prepared for the Proposed Project that analyzes all technical areas of concern. The Draft EIS will be prepared in conformance with all applicable laws and regulations, including SEQRA (Article 8 of the New York State Environmental Conservation Law) and its implementing regulations found at 6 NYCRR Part 617, New York City Executive Order No. 91 of 1977, as amended, and the Rules and Procedure for CEQR, found at Title 62, Chapter 5 of the Rules of the City of New York.

As described previously, the environmental review provides a means for decision-makers to systematically consider environmental effects along with other aspects of project planning and design, to evaluate reasonable alternatives, and to identify, and mitigate where practicable, any significant adverse environmental impacts.

The EIS, following the guidance of the 2014 *CEQR Technical Manual*, will contain:

- › A description of the Proposed Actions, the Proposed Project, and their environmental setting;
- › A statement of the potential significant adverse environmental impacts of the Proposed Project, including their short- and long-term effects, typical associated environmental effects, and cumulative effects when considered with other planned developments in the area;
- › A description of mitigation measures proposed to eliminate or minimize adverse environmental impacts;
- › An identification of any adverse environmental effects that cannot be avoided if the Proposed Project is implemented;
- › A discussion of reasonable alternatives to the Proposed Project; and
- › A discussion of any irreversible and irretrievable commitments of resources to develop the project.

As noted above, the EIS will analyze the Proposed Project for all technical areas of concern. The specific technical areas to be included in the EIS, as well as their respective tasks and methodologies, are described below.

The first step in preparing the EIS is the public scoping process. Scoping is the process of focusing the environmental impact analysis on the key issues that are to be studied in the EIS. The proposed scope of work for each technical area to be analyzed in the EIS follows. The scope of work and the proposed impact assessment criteria below are based on the methodologies and guidance set forth in the 2014 *CEQR Technical Manual*.

Task 1: Project Description

As the first chapter of the EIS, the Project Description introduces the reader to the Proposed Project and sets the context in which to assess impacts. This chapter will contain a description of the Proposed Project: its location; the background and/or history of the project; a statement of the purpose and need; key planning considerations that have shaped

the current proposal; a description of the Proposed Actions; and a discussion of the approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Project and gives the public and decision makers a base from which to evaluate the Proposed Project.

In addition, the project description chapter will present the planning background and rationale for the actions being proposed and summarize the RWCDs for analysis. The section on approval procedure will explain the ULURP and zoning text amendment processes, their timing, and hearings before the Community Board, the Borough President's Office, the CPC, and the New York City Council. The role of the EIS as a full disclosure document to aid in decision-making will be identified and its relationship to the discretionary approvals and the public hearings described.

Task 2: Land Use, Zoning, and Public Policy

A land use analysis characterizes the uses and development trends in the area that may be affected by the Proposed Project, describes the public policies that guide development, and determines whether a proposed project is either compatible with those conditions and policies or whether it may affect them. Similarly, the analysis considers compliance of the Proposed Actions with, and their effect on, the area's zoning and other applicable public policies. This chapter will analyze the potential impacts of the Proposed Project on land use, zoning, and public policy, pursuant to the methodologies presented in the *2014 CEQR Technical Manual*. Additionally, this chapter will also provide a baseline for other analyses.

The land use study area will consist of the area within 400 feet of the Project Area (see **Figure 5**, **Figure 6**, and **Figure 7**). The analysis will:

- › Provide a description of land use, zoning, and public policy in the study area. Recent trends in the study areas will be noted. Other public policies that apply to the study areas will also be described.
- › Based on field surveys and prior studies, identify, describe, and graphically portray predominant land use patterns in the study area. Describe recent land use trends, such as the development of One Vanderbilt and adoption of the East Midtown Rezoning, in the study area and identify major factors influencing land use trends.
- › Describe and map existing zoning and recent zoning actions in the study area.
- › Prepare a list of future development projects in the study area that are expected to be constructed by the 2030 analysis year and may influence future land use trends. Also, identify pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area. Based on these planned projects and initiatives, assess future land use and zoning conditions without the Proposed Actions (No-Action condition).
- › Describe proposed zoning changes and land use changes based on the With-Action condition.
- › Discuss the potential effects of the Proposed Project related to issues of compatibility with surrounding land use, the consistency with zoning and other public policies, and the effect of the Proposed Project on ongoing development trends and conditions in the study area.

- › Assess the Proposed Project's conformity to city goals, including consistency with the City's sustainability goals (PlaNYC/OneNYC) and goals related to the East Midtown Subdistrict as well as the Special Midtown District as a whole.
- › If necessary, identify mitigation measures to avoid or reduce potential significant adverse land use, zoning, and/or public policy impacts.

Figure 5 Existing Zoning Map

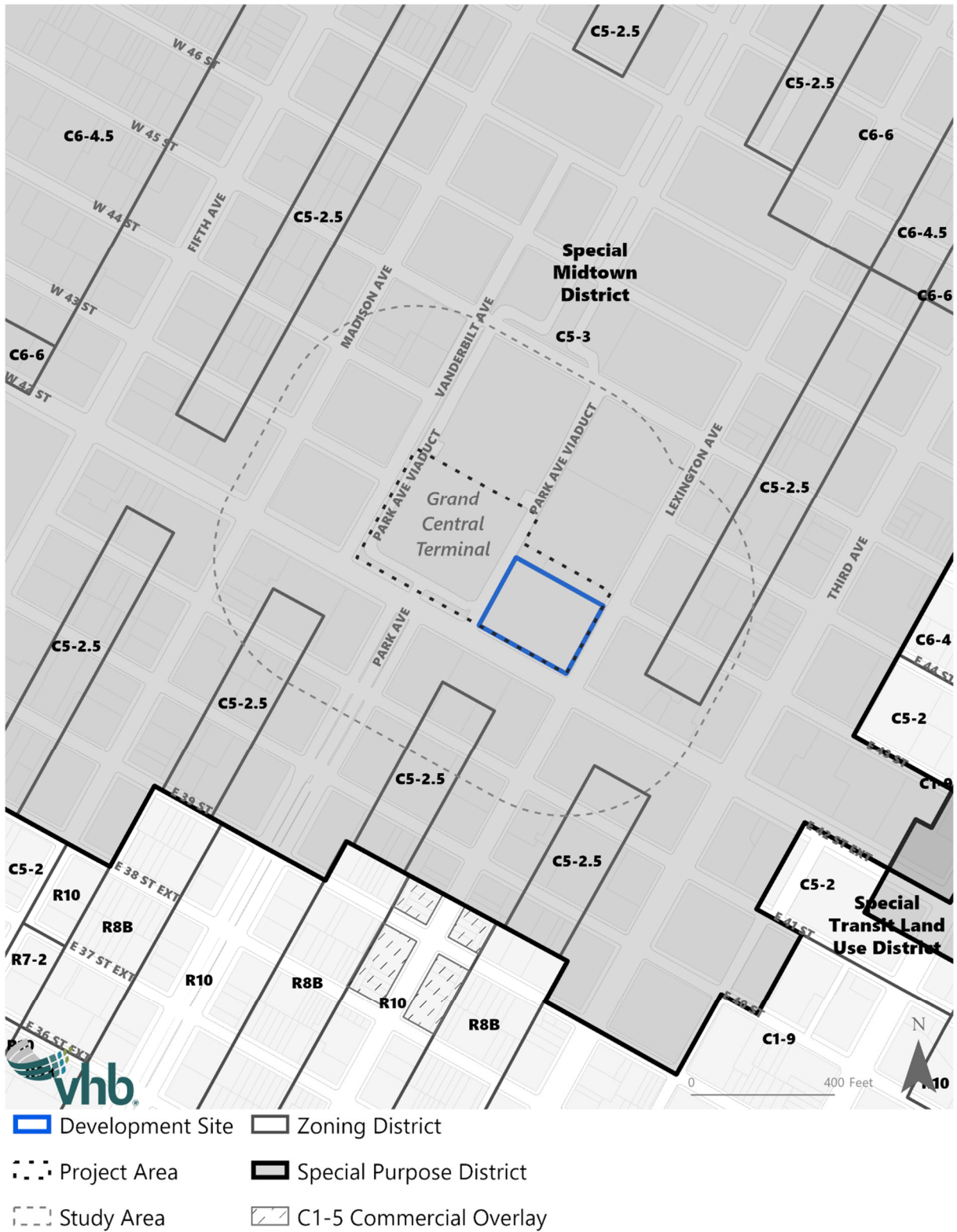


Figure 6 Existing Land Use Map

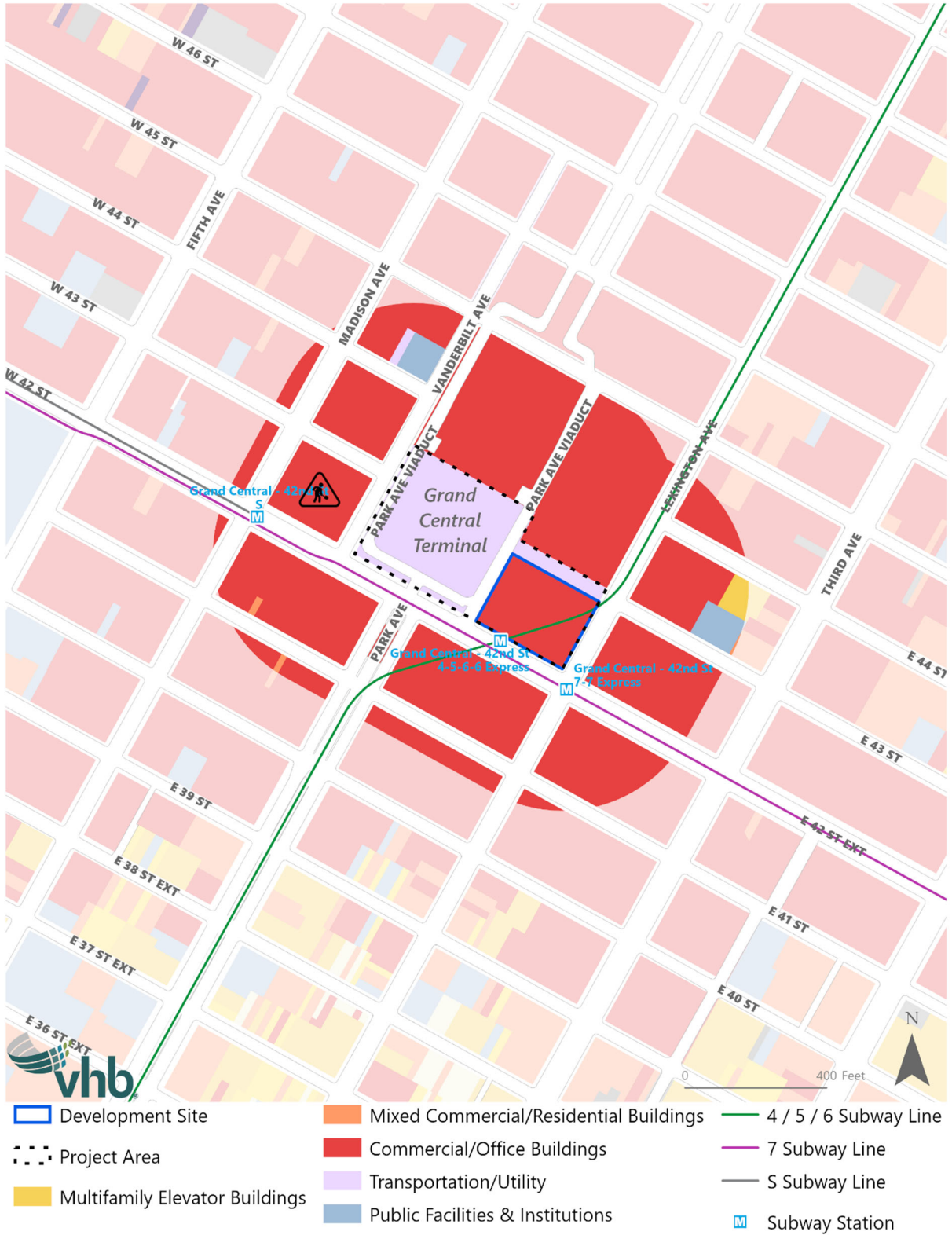
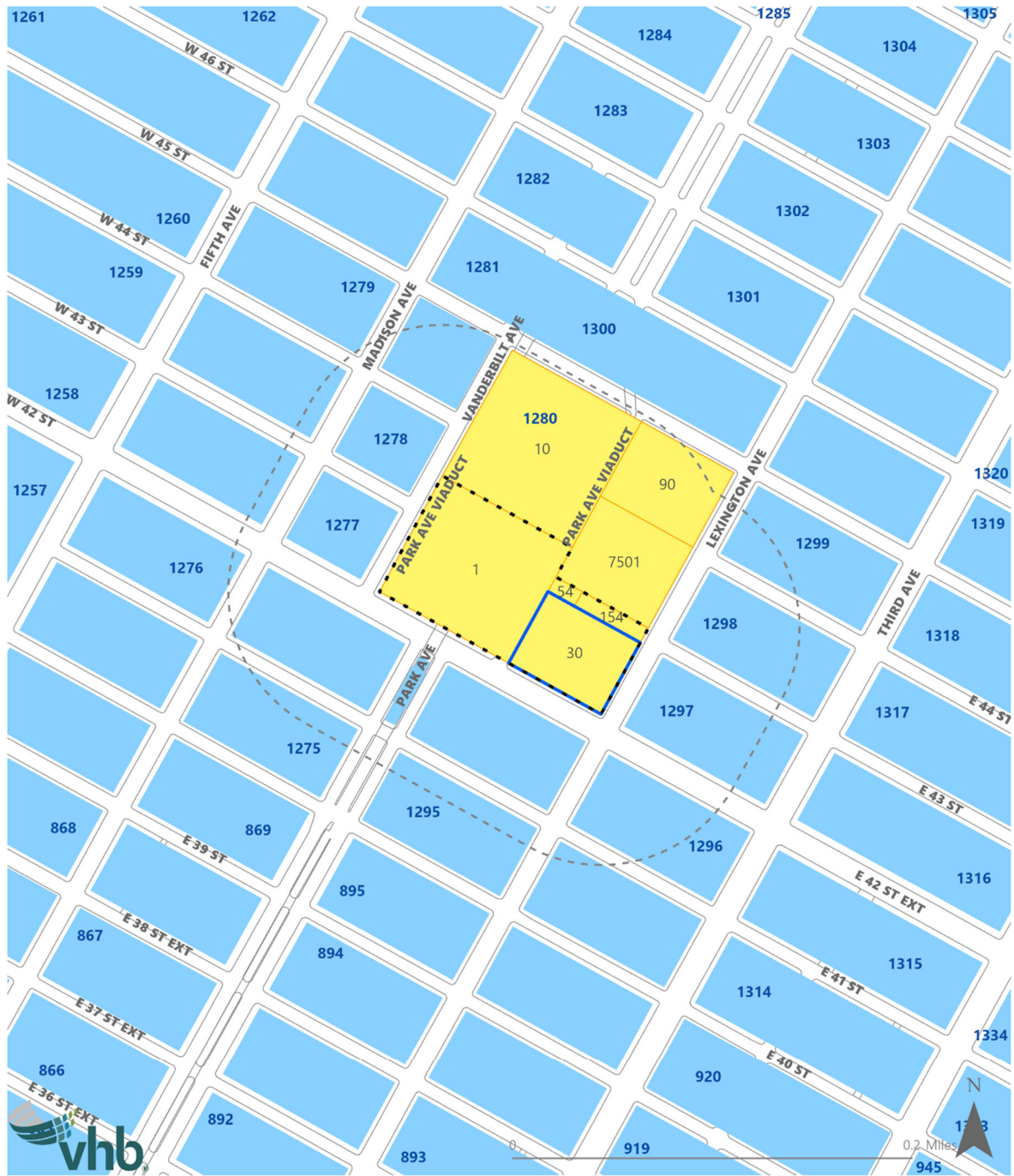


Figure 7 Tax Map



- Development Site
- Study Area
- Tax Lots
- Project Area
- Tax Block

Task 3: Socioeconomic Conditions

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area.

According to the 2014 *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed project would result in significant impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on a specific industry.

No residential uses are currently located or proposed on the Development Site; therefore, the Proposed Actions would not result in direct or indirect residential displacement. Indirect business displacement due to retail market saturation would not occur because limited retail uses are included in the Proposed Actions. And, because the Proposed Actions are not expected to affect conditions within a specific industry, an analysis of adverse effects on specific industries is not warranted.

The Proposed Actions would result in a smaller hotel than what currently exists, which would ultimately result in fewer staff. There may also be a slight reduction in MTA retail uses, which could result in a loss of workers. The hotel and some MTA retail uses would continue to operate, albeit in a reduced capacity, in the With Action condition. Therefore, analysis of direct business displacement is not warranted.

The With-Action condition includes the development of up to 426,190 gsf of office use compared to the No-Action condition. This exceeds the increment set forth in the *CEQR Technical Manual* for indirect business displacement. However, the *CEQR Technical Manual* also states that a different threshold may apply in certain circumstances. The Development Site is located in the East Midtown central business district and mapped within a C5-3 district within the East Midtown Subdistrict of the Special Midtown District. The Development Site was not identified in the Greater East Midtown Rezoning EIS as a projected or potential development site. However, the Greater East Midtown Rezoning EIS extensively studied the area for potential socioeconomic impacts and concluded that the primary and secondary study areas examined in the EIS already have well-established commercial markets and that rezoning to allow greater density and additional office space would not alter existing office and retail economic patterns. The Proposed Actions further the goals envisioned in the Greater East Midtown Rezoning and reinforces East Midtown as one of the most sought-after dynamic office markets and central business districts in the New York region. It is therefore expected that adverse impacts would not occur and analysis of indirect business displacement is not warranted.

These impact categories are discussed further in the EAS Technical Screening.

Task 4: Open Space

Open space is defined as publicly- or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment. An analysis of open space is conducted to determine whether a proposed action would have direct effects resulting from the elimination or alteration of open space, and/or an indirect effect resulting from overtaxing available open space.

A direct effect on open space can occur from increased noise or air pollutant emissions, odors, or shadows on public open space. The results from the Shadows, Air Quality, and Noise chapters will be referenced to determine if a direct effects analysis is warranted.

The Proposed Actions' directly affected area is not located within an underserved or well-served area and, as such, the threshold for when an open space assessment is required is when an action would generate more than 200 residents or 500 employees. The Proposed Actions would generate more than 500 employees (8,753 total employees, with an incremental increase of approximately 1,967 employees); therefore, a non-residential open space assessment is warranted. The proposed project will both create new non-residential demand for open spaces in the form of new workers and visitors in the study area, as well as create new open space. As no new residents would be generated by the Proposed Actions, a residential open space assessment is not warranted for the Proposed Actions.

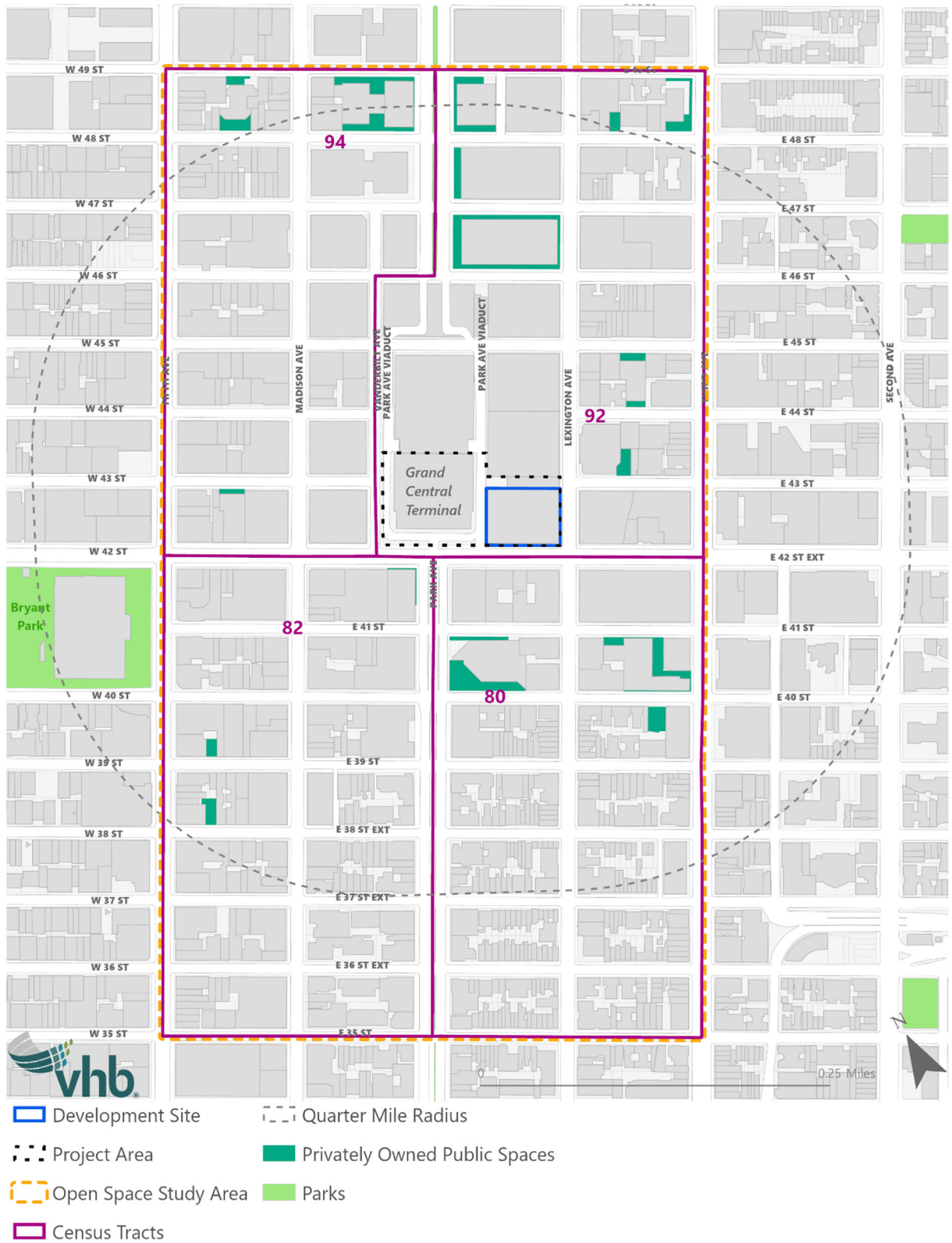
As the Proposed Actions would introduce workers in excess of the CEQR threshold, the open space analysis will assess open space resources and calculate open space ratios within a non-residential (1/4-mile radius) study area. As recommended in the *CEQR Technical Manual*, the study area comprises all census tracts that have 50 percent of their area located within a 1/4-mile radius of the Project Area (**Figure 8**). The detailed open space analysis in the EIS will include the following sub-tasks.

- › Determine characteristics of the open space user group. The number of workers and other daytime users in the study area will be calculated based on reverse journey-to-work census data and other appropriate data sources. If warranted for the analysis, the number of residents in the study area will be based on 2010 census data compiled for census tracts comprising the open space study area.
- › Inventory existing open spaces within the open space study area. The condition and usage of existing facilities will be described based on the inventory and field visits. Jurisdiction, features, user groups, quality/condition, factors affecting usage, hours of operation, and access will be included in the description of facilities. Acreage of these facilities will be determined and total study area acreage calculated. The percentage of active and passive open space will also be calculated. A map will be provided that shows the locations of open spaces keyed to the inventory.
- › Based on the inventory of facilities and study area population, open space ratios will be calculated for the daytime populations and compared to City guidelines to assess adequacy. As per the *CEQR Technical Manual*, open space ratios are expressed as the amount of open space acreage per 1,000 user population.
- › Assess expected changes in future levels of open space supply and demand in the 2030 analysis year, based on other planned development projects within the open space study area. Any new open space or recreational facilities that are anticipated to be operational

by the analysis year will also be accounted for. Open space ratios will be calculated for future No-Action conditions and compared with existing ratios to determine changes in future levels of adequacy.

- › Assess the effects on open space supply and demand resulting from increased worker populations and new publicly accessible space added by the With-Action condition. The assessment of the Proposed Actions' impacts will be based on a comparison of open space ratios for the future No-Action versus future With-Action conditions. In addition to the quantitative analysis, qualitative analysis will be performed to determine if the changes resulting from the Proposed Actions constitute a substantial change (positive or negative) or an adverse effect to open space conditions. The qualitative analysis will assess whether the study area is sufficiently served by open spaces, given the type, capacity, condition, and distribution of open space and the profile of the study-area population.

Figure 8 Open Space Study Area Map



Task 5: Shadows

A shadows analysis assesses whether new building mass resulting from the Proposed Actions would cast shadows on sunlight-sensitive publicly accessible resources or other resources of concern, such as natural resources, and the significance of these shadows. This chapter will examine the potential for significant and adverse shadow impacts because of the Proposed Project. Generally, the potential for shadow impacts exists if a project would result in new structures or additions to buildings resulting in structures over 50 feet in height that could cast shadows on important natural features, publicly accessible open space, or on historic features that are dependent on sunlight. New construction or building additions resulting in incremental height changes of less than 50 feet can also potentially result in shadow impacts if they are located adjacent to, or across the street from, a sunlight-sensitive resource.

The Proposed Project would result in a structure greater than 50 feet in height (approximately 1,646 feet) and therefore a shadow analysis is warranted. To analyze the potential for significant adverse shadows impacts, the EIS will analyze the With-Action condition massing to analyze the projected shadowing effects of the Proposed Project on sunlight-sensitive uses, which may include designated and eligible architectural resources as well as publicly accessible open spaces. The EIS will disclose the range of shadow impacts, if any, which are likely to result from the Proposed Project. The shadows analysis will include a Tier 1 through Tier 3 screening assessment to identify whether shadows cast by the Proposed Project could reach sunlight-sensitive resources.

- › A Tier 1 Screening Assessment will be conducted to determine the With-Action condition's longest shadow study area, which is defined as the area within 4.3 times the height of the Proposed Project (the longest shadow that would occur on December 21, the winter solstice). A base map that illustrates the location of the Development Site in relation to the sunlight-sensitive resources within the longest shadow study area will be developed.
- › A Tier 2 Screening Assessment will be conducted to determine the areas that cannot be shaded by the Proposed Project, which in New York City is the area that lies beyond 108 degrees either side of true north from the southern-most portion of the Development Site. A base map that illustrates the location of the Development Site in relation to the sunlight-sensitive resources, within the longest shadow study area, that can be shaded by the Proposed Project will be developed.
- › A Tier 3 Screening Assessment will be conducted to determine if shadows from the With-Action condition would, in absence of intervening buildings, reach a sunlight-sensitive resource on representative analysis days: December 21 (the winter solstice), March 21/August 21 (the spring/fall equinox), May 6 (half-way between the equinoxes and the summer solstice), or June 21 (the summer solstice). The projected shadow will be modeled with a three-dimensional computer modeling software to calculate sun angles and shadows that could be cast by the Proposed Project to determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the Proposed Project. A summary table will list the shadow entry and exit times for each sunlight sensitive resource on each representative analysis day that would occur in the absence of intervening buildings.

If the Preliminary Assessment indicates that a detailed shadows analysis is warranted, the detailed analysis would include the following:

- › The detailed shadow analysis will establish a baseline condition (No-Action condition) within a three-dimensional modeling program that accounts for the No-Action shadows condition. The No-Action shadows condition will be compared to the future shadows conditions that would result from the Proposed Project (With-Action condition). The analysis will illustrate the shadows cast by existing or future buildings and distinguish the additional (incremental) shadow projected to be cast by the With-Action condition.
- › The detailed analysis will be documented with graphics comparing No-Action and With-Action shadows on sunlight sensitive resources that warrant detailed analysis. Graphics will illustrate the shadows that result in the No-Action condition and the shadows projected to result in the With-Action condition, with incremental shadow outlined in a contrasting color. A summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource will be provided.
- › The significance of any shadow impacts on sunlight-sensitive resources will be assessed. If any significant adverse shadow impacts are identified, mitigation strategies will be identified and assessed.

Task 6: Historic and Cultural Resources

This chapter will assess the potential for the Proposed Actions to result in significant adverse impacts on historic and cultural resources, including both archaeological and architectural resources. Archaeological resources are physical remains, usually subsurface, of the prehistoric, Native American, and historic periods—such as burials, foundations, artifacts, wells, and privies. Architectural resources generally include historically important buildings, structures, objects, sites, and districts. Historic and cultural resources include designated New York City Landmarks (NYCLs) and Historic Districts; properties calendared for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); properties listed on the State and/or National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR-eligible), or properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHLs); and potential historic resources (i.e., properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements).

Archaeological Resources

Archaeological resources are considered only in those areas where new in-ground disturbance is likely to occur. As described above, the Development Site contains the existing 1-million-gsf, 1,300-room Hyatt hotel. The area below the hotel has previously been disturbed and contains an extensive network of MTA circulation areas. Therefore, as no new in-ground disturbance is anticipated, an assessment of archaeological resources would not be warranted.

Architectural Resources

For the analysis of architectural resources, the EIS will identify and map known and potential architectural resources within a 400-foot study area. The EIS will consider the potential for

the Proposed Project to result in any direct, physical effects and/or visual or contextual impacts on any identified architectural resources.

Federal regulations, which have become a widely recognized standard, define an adverse effect as the introduction of tangible and intangible elements that compromise or diminish the characteristics for which an historic or cultural resource has been determined significant. Per CEQR, the project's effects on resources should be compared with the future No-Action conditions to assess impacts. Thus, impact assessment is directly related to the Proposed Project and how it would affect the distinguishing characteristics of any resources identified. The assessment asks three major questions: (1) would there be a physical change to the property?; (2) would there be a physical change to its setting, such as context or visual prominence (also known as indirect impacts)?; and (3) if there would be a physical change to the property or setting, is the change likely to alter or eliminate the significant characteristics of the resource that make it important? Impacts may result from both temporary (e.g., related to the construction process) and permanent (e.g., related to the long-term or permanent result of the proposed project or construction project) activities.

Within the 400-foot study area, there are 11 designated architectural resources located within the Study Area, two of which are also in the Project Area. There are also 20 individual structures previously determined as eligible for NYCL and/or the S/NR within the study area, including: GCT at 77 East 42nd Street, the Park Avenue Viaduct which extends from Park Avenue from East 40th Street to East 46th Street, the Graybar Building at 420 Lexington Avenue, Grand Central Terminal Post Office at 450 Lexington Avenue, the Chrysler Building at 395 Lexington Avenue, the Pershing Square Building at 125 Park Avenue, the Bowery Savings Bank Building at 120 East 42nd Street, the Chanin Building at 374 Lexington Avenue, the Socony-Mobile Building at 150 East 42nd Street, the Pershing Square Viaduct (portion of Park Avenue Viaduct) that extends from Park Avenue from East 40th Street to GCT, the Yale Club at 50 Vanderbilt Avenue, the Chemist Club at 550-52 East 41st Street, the Lincoln Building at 60 East 42nd Street, the St. Agnes Rectory at 141 East 43rd Street, East 45th Street Bridges (portion of Park Avenue Viaduct), the Loft Building at 299 Madison Avenue, Phillip Morris Headquarters at 118-120 Park Avenue, the Pan Am/Met Life Building at 200 Park Avenue, the Lefcourt Colonial Building at 295 Madison Avenue, and 52 Vanderbilt/Manhattan Savings Bank at 52/56 Vanderbilt Avenue.

Task 7: Urban Design and Visual Resources

Urban design is the totality of components that may affect a pedestrian's experience of public space. An assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. The Proposed Project would result in a physical change to the streetscape that will change the pedestrian experience, and therefore a preliminary assessment of urban design and visual resources will be provided in the EIS.

The urban design study area will be the area within 400 feet of the Development Site, the same as that used for the land use analysis. For visual resources, the view corridors within the study area from which such resources are publicly viewable will be identified. The preliminary assessment will consist of the following:

- › Based on field visits, the urban design and visual resources of the directly affected area and adjacent study area will be described using text, photographs, and other graphic material, as necessary, to identify critical features, use, bulk, form, and scale.
- › In coordination with the Land Use analysis, the changes expected in the urban design and visual character of the study area due to known development projects in the future No-Action condition will be described.
- › Potential changes that could occur in the urban design character of the study area due to the Proposed Project will be described. The analysis will focus on the Proposed Project's elements such as street wall height, setback, and building envelope. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources, including views of/to resources of visual or historic significance.

The preliminary assessment will determine whether the Proposed Project, in comparison to the No-Action condition, would create a change to the pedestrian experience that is sufficiently significant to require greater explanation and further study. A detailed analysis would be warranted if the Proposed Project would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstructing view corridors, or competing with icons in the skyline.

A detailed analysis will be prepared if warranted based on the preliminary assessment. Examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline, as described in the *CEQR Technical Manual*. The detailed analysis would describe the Development Site and the urban design and visual resources of the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the Proposed Project condition, in comparison to the future without the Proposed Project condition, focusing on the changes that could negatively affect a pedestrian's experience of the area.

If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

Task 8: Hazardous Materials

A hazardous materials assessment determines whether a proposed action may increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. The potential for significant impacts related to hazardous materials can occur when: (a) elevated levels of hazardous materials exist on a site and the project would increase pathways to human or environmental exposures; (b) a project would introduce new activities or processes using hazardous materials and the risk of human or environmental exposure is increased; or (c) the project would introduce a population to potential human or environmental exposure from off-site sources.

The hazardous materials assessment discloses if the Development Site may have been adversely affected by present or historical uses at or adjacent to the site. A Phase I Environmental Site Assessment (ESA) would be prepared for the site, in accordance with the

American Society for Testing and Materials (ASTM) standards. The results of the Phase I ESA would determine if any conditions are present at the Development Site that may warrant further investigations (a Phase II ESA). However, if, due to potential physical constraints on the Development Site, it is not feasible to conduct the required Phase II ESA analysis at the present time, accordingly, it is anticipated that an (E) Designation, in accordance with the *CEQR Technical Manual*, Section 11-15 (Environmental Requirements) of the Zoning Resolution of the City of New York and Chapter 24 of Title 15 of the Rules of the City of New York governing the placement of (E) designations would be placed as part of the environmental review for development of the site, requiring a Phase II ESA and subsequent Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) be prepared prior to any construction in association with the Proposed Project.

Accordingly, the site-specific information related to hazardous materials will be reviewed and summarized in the hazardous materials chapter of the EIS. Any documentation of hazardous waste and other recognized environmental conditions (RECs), along with recommendations for mitigation or further investigation, will also be included in the hazardous materials assessment.

Task 9: Water and Sewer Infrastructure

The water and sewer infrastructure assessment determines whether a proposed action may adversely affect the City's water distribution or sewer system and, if so, assesses the effects of such actions to determine whether their impact is significant. The *CEQR Technical Manual* outlines thresholds for analysis of an action's water demand and its generation of wastewater and stormwater. As described in the EAS for the Proposed Actions, an analysis of the City's water supply is not warranted as the Proposed Project would not result in a demand of more than one million gallons per day (gpd) and the Project Area is not located in an area that experiences low water pressure. However, water demand estimates will be provided in the EIS to inform the wastewater and stormwater conveyance and treatment analysis.

The threshold of preliminary wastewater and stormwater analysis for projects in Manhattan with combined sewers is 1,000 residential units or 250,000 sf or more of commercial, public facility, and institution and/or community facility space. As the Proposed Project would include an increment of up to 904,210 gsf of commercial space, an assessment of wastewater and stormwater conveyance systems is required. The water and sewer infrastructure analysis will consider the potential for significant adverse impacts resulting from the Proposed Project, with deference to whether the Proposed Project or the no hotel scenario being evaluated for conservative analysis purposes would have a higher overall demand. The New York City Department of Environmental Protection (DEP) will be consulted in the preparation of this assessment.

Water Supply

- › The existing water distribution system serving the Project Area will be described based on information obtained from DEP's Bureau of Water Supply and Wastewater Collection.
- › Water demand generated on the Project Area under existing conditions will be estimated, and No-Action and With-Action conditions will be projected.

Wastewater and Stormwater Infrastructure

- › The appropriate study area for the assessment will be established in accordance with the guidance of the *CEQR Technical Manual* and in consultation with DEP. The Proposed Project's directly affected area is entirely located within the service area of the Newtown Creek Wastewater Treatment Plant (WWTP).
- › The existing stormwater drainage system and surfaces (pervious or impervious) on the Project Area will be described, and the amount of stormwater generated on the site will be estimated using DEP's volume calculation worksheet.
- › The existing sewer system serving the Project Area will be described based on records obtained from DEP. The existing flows to the Newtown Creek WWTP, which serves the directly affected area, will be obtained for the latest twelve-month period, and the average dry weather monthly flow will be presented. Information on existing sewer infrastructure in the area, including sanitary, storm, and combined sewer mains, regulators, interceptor sewers, outfalls, and other principal components of the local system will be provided based on available records.
- › Any changes to the stormwater drainage plan, sewer system, and surface area expected in the future without the Proposed Actions (i.e., the No-Action condition) will be described, as warranted.
- › Future stormwater generation from the Proposed Project compared to the No-Action condition will be assessed to determine the Proposed Project's potential to result in impacts. The stormwater assessment will discuss any planned sustainability elements and best management practices (BMPs) that are intended to reduce stormwater runoff from the site. Changes to the Project Area's surface area (pervious or impervious) will be described, runoff coefficients and runoff for each surface type/area will be presented. Volume and peak discharge rates of stormwater from the site will be determined based on the DEP volume calculation worksheet.
- › Sanitary sewage generation for the Project Area will also be estimated. The effects of the incremental demand on the system will be assessed to determine if there will be any impact on operations of the Newtown Creek WWTP.

Task 10: Transportation

This section of the EIS will evaluate whether the Proposed Project would create significant impacts on vehicular traffic, parking, transit services, pedestrian circulation, or traffic safety. Should significant impacts be identified per *CEQR Technical Manual* criteria, the EIS will evaluate improvements to mitigate those impacts. The transportation analysis will include the subtasks outlined below.

Travel Demand Analysis

Trip generation projections will be developed by travel mode for each of the land uses comprising the Proposed Project, using trip generation rates, temporal distributions, modal splits, average vehicle occupancies, and in/out splits that are published in the *CEQR Technical Manual*, US Census data, New York City Department of Transportation (DOT) survey data, EISs for other similar development uses and locations, databases available from the Institute of Transportation Engineers (ITE) or other professional reference materials. This will be done for the weekday AM, midday, and PM peak hours.

This process begins with a Level 1 screening analysis to determine whether vehicle, transit, and/or pedestrian trip thresholds outlined in the *CEQR Technical Manual* are exceeded, thus indicating the need for additional analyses. The Level 1 screening analysis will produce peak hour person trip projections and vehicle trip projections for the three transportation analysis hours and determine if additional (Level 2) screening analyses are needed.

The second part of the travel demand analysis, if needed, is a Level 2 screening analysis for vehicular, transit, and pedestrian trips—the distribution and assignment of trips through the study area’s roadway network, subway and bus services, and pedestrian network as well as the determination of whether specific intersections, subway and/or bus lines, or pedestrian locations exceed CEQR screening thresholds. If Level 2 screening thresholds are exceeded, specific traffic and transportation locations are identified which require counts and detailed quantitative analyses.

A Travel Demand Analysis (TDA) Technical Memorandum has been prepared that documents the assumptions and analysis findings. The TDA Technical Memorandum provides the framework of assumptions for the analyses undertaken in the EIS. Level 2 screening thresholds are exceeded for vehicle, subway transit, and pedestrian trips but not for bus transit trips. The scope for detailed analyses for these travel modes are detailed below.

Traffic Analysis

- › Based on the TDA Technical memorandum, it is expected that a traffic study area consisting of approximately 15 intersections will be utilized for detailed traffic counts and analyses. The analysis locations are primarily located along key roadways surrounding the site such as 42nd Street and Lexington Avenue.
- › Obtain traffic count data at traffic analysis locations. Where applicable, available information from recent studies in the vicinity of the study area will be compiled, including data from agencies such as DOT and DCP.
- › Identify the weekday AM, midday, and PM peak hours and prepare traffic volume maps for each of the three traffic peak hours.
- › Inventory streets and intersections for street and lane widths, lane use designations, posted parking regulations and parking maneuvers, signal phasing and timing, and other factors needed to calculate intersection capacities.
- › Determine existing traffic conditions for intersections being analyzed, including existing volume-to-capacity (v/c) ratios, average vehicle delays, and levels of service for individual traffic movements and lane groups, and for the intersection approaches, using the latest approved Synchro analysis software.
- › Develop future No-Action traffic volumes using the annual background traffic growth rate cited in the *CEQR Technical Manual* plus traffic expected to be generated by significant development projects expected to be operational near the Development Site by its analysis year.
- › Identify any proposed changes to the street network expected to occur by the analysis year and incorporate changed intersection capacity or operational conditions attributable to those changes.
- › Determine future No-Action traffic conditions for the intersections being analyzed.

- › Develop future With-Action traffic volumes by adding project-generated traffic assignments to the future No-Action traffic volumes.
- › Determine future With-Action traffic conditions for the intersections being analyzed and identify significant traffic impacts, based on changes to traffic levels of service, using criteria stipulated in the *CEQR Technical Manual*.

Parking Analysis

- › Inventory the amount of existing off-street parking at public parking lots and garages within a five-minute (one-quarter mile) walk of the Development Site. This will include the location, capacity, and midday utilization of such facilities on a typical weekday midday period (when parking in a business area is frequently at peak occupancy).
- › Determine the parking demand expected to be generated by the Proposed Project on a typical weekday based on hour-by-hour forecasts of daily auto trips for the Development Site. Based on these forecasts and any changes to on-site accessory parking capacity, determine whether available off-street parking spaces in the area would be sufficient to accommodate the projected demand.

Transit Analysis

Subways

Based on the Proposed Project's proximity to the 42nd Street – Grand Central subway station, a detailed analysis will be conducted at this station. The 42nd Street – Grand Central subway station is serviced by the 4, 5, 6, 7, and S (shuttle) subway lines.

- › Identify the volume of subway riders using the analysis station using ridership data obtained from MTA/New York City Transit at each station's critical stairways, escalators, and fare-control areas during the weekday AM and PM commuter peak hours.
- › Evaluate future ridership increases for the EIS analysis year, including annual background ridership growth plus ridership from other significant development projects that would be completed near the project site by the analysis year, and evaluate future No-Action conditions for critical subway stairwells, escalators, and fare control areas.
- › Assign project-generated trips to the analysis station and develop With-Action volumes for the stations' critical elements, evaluate those critical station elements and fare control areas, and identify the potential for significant impacts. The Proposed Project transit improvements will be incorporated in the With-Action conditions analysis.
- › Identify the maximum load point along the subway lines using line-haul ridership data obtained from MTA/New York City Transit and identify the potential for significant impacts.

Buses

- › Identify and describe the local bus routes and bus stops serving the Development Site — the M1, M2, M3, M4, M42, M101, M102, and M103—and their hours of operation and frequency of service. If the CEQR thresholds for analysis are exceeded on any individual bus route (i.e., an increase of 50 or more bus passengers on a single bus line in one direction), further analysis of that route will be undertaken consistent with CEQR methodologies to determine the potential for significant adverse impacts.

- › Assign project-generated bus trips to study area bus routes and bus stops and determine whether there would be significant impacts on bus load levels.

Pedestrian Analysis

- › Obtain pedestrian count data at intersections along key walking routes between the Development Site and subway stations, bus stops, and other key destinations in the traffic study area. Based on the TDA Technical Memorandum, it is expected that the pedestrian study area would consist of approximately 15 key intersection elements (crosswalks, sidewalks, and corner reservoir areas). Where applicable, available pedestrian count data from recent studies in the study area vicinity will be compiled, including data from agencies such as DOT and DCP.
- › Establish the specific peak pedestrian hours to be analyzed for weekday AM, midday, and PM conditions. Determine existing pedestrian conditions using Highway Capacity Manual (HCM) procedures and in accordance with *CEQR Technical Manual* protocols.
- › Develop future No-Action pedestrian volumes using the annual background traffic growth rate cited in the *CEQR Technical Manual* plus pedestrian traffic expected to be generated by significant development projects expected to be operational near the Development Site by its analysis year.
- › Identify any proposed changes to the street network expected to occur under No-Action conditions by the analysis year and incorporate changed capacity or operational conditions attributable to those changes on pedestrian conditions.
- › Develop future With-Action pedestrian volumes by adding project-generated pedestrian assignments to the future No-Action pedestrian volumes.
- › Identify significant pedestrian impacts, if any, using criteria stipulated in the *CEQR Technical Manual*.

Safety

This section of the EIS will include a review of vehicular and pedestrian crash data for the most recent three-year period for which such data are available, and a summary of the number and severity of crashes by year for each of the traffic study area intersections. The analysis will determine whether any of the analysis intersections are considered high accident locations according to *CEQR Technical Manual* criteria and will also assess whether traffic generated by the Proposed Project would contribute materially to safety risks at such locations. The EIS will identify potential safety improvements at the high accident locations, if warranted.

Task 11: Air Quality

Consistent with the *CEQR Technical Manual*, air quality analyses for a Proposed Project focus on the following areas of potential concern:

- › Potential impacts from mobile sources introduced by a project;
- › Emissions from a project's parking facilities;
- › Potential impacts from stationary sources introduced by a project, such as emissions from a project's heating, ventilation, and air conditioning (HVAC) system; and

- › Potential impacts on a proposed project from either manufacturing/processing facilities or large/major sources that are located near the project site.

The number of incremental vehicular trips introduced by the project will likely be below the *CEQR Technical Manual* CO-based screening threshold of 140 vehicles per hour and the PM_{2.5}-based screening threshold of 23 heavy duty trucks (or equivalent) per hour would not be exceeded. Therefore, the EIS is not expected to include a detailed analysis of mobile sources; however, if these thresholds are exceeded based on the results of the traffic analysis, a detailed analysis will be provided.

The Proposed Project would not introduce any parking, and therefore, an assessment of emissions from such a facility is not warranted.

The HVAC system in the Proposed Building plans to use Con Edison steam. Therefore, no local emissions are expected from the HVAC system and no HVAC air quality analysis is anticipated.

The EIS stationary source air quality analysis will include an assessment of the potential for manufacturing/processing facilities and large/major sources that are located near the Development Site to affect the project. This analysis will include a field survey of the area within 400 feet of the Development Site to identify any processing or manufacturing facilities. Permit information will be reviewed. If any sources are identified, an industrial source screening analysis consistent with CEQR guidance will be performed. A similar search will be conducted for a major or large facility located within a 1,000-foot radius of the Development Site, and if identified, these sources will be modeled to estimate the impact of such sources on the proposed development.

Task 12: Greenhouse Gas Emissions and Climate Change

Increased greenhouse gas (GHG) emissions are changing the global climate and predicted to lead to wide-ranging effects on the environment—including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be felt at the local level. Since the Proposed Project exceeds the 350,000 sf development threshold in accordance with the *CEQR Technical Manual*, GHG emissions generated by the Proposed Project will be quantified, and an assessment of the project's energy consumption (using Table 15-1 of the *CEQR Technical Manual*) and consistency with the City's established GHG reduction goal will be performed as part of the EIS. To that end, the proposed development will be designed following the 2020 Energy Conservation Construction Code of NYS (20 ECCCNY) and Local Law 97. The project is expected to use Con Edison steam for its HVAC. Electric heating and cooling are considered as an alternative. The evaluation will be made to assess GHG reductions based on these project choices. Approximately 11 percent of additional energy savings, if needed, could be obtained if the project design uses volunteer guidance from NYSEDRA NYStretch Energy Code 2020.

Task 13: Noise

Per the 2014 *CEQR Technical Manual*, a noise analysis is required if an action would generate substantial mobile or stationary sources of noise that could affect existing receptors or would introduce new noise-sensitive receptors that would be located in an area with high

ambient noise levels. Mobile sources include vehicular traffic; stationary sources include rooftop equipment, such as emergency generators, cooling towers, and other mechanical equipment.

The proposed building is not anticipated to include any substantial stationary source noise generators, such as unenclosed cooling or ventilation equipment, loudspeaker systems, stationary diesel engines, or other similar types of uses. The design and specifications for mechanical equipment—such as heating, ventilation, and air conditioning—would incorporate sufficient noise reduction to comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code. This will ensure that mechanical equipment does not result in any significant increases in noise levels, either by itself or cumulatively with other project noise sources.

A new approximately 10,000-gsf open-air publicly accessible space would be created on the second floor of the Proposed Project. As the No-Action development on the site would be required to include an enclosed, 5,729-gsf, ground-floor publicly accessible space, the Proposed Project would result in an incremental increase of 4,271 gsf of such space. The With-Action condition would create a larger unenclosed passive open space than the No-Action condition and would accommodate additional users. Per *CEQR Technical Manual* guidance, only outdoor areas dedicated or recognized by local appropriate officials for activities requiring special qualities of serenity and quiet are considered sensitive to noise. The proposed publicly accessible space would not be considered sensitive to ambient noise as a noise receptor, and since the proposed publicly accessible space would not be an active open space resource such as a playground, it would not be considered a noise source.

- › The proposed building would introduce new noise-sensitive land uses (i.e., hotel and commercial office). The noise analysis will evaluate whether these land uses would be in an acceptable ambient noise environment. To characterize existing conditions, noise measurements would typically be conducted at the Development Site at ground-level for 20-minutes in duration during the weekday AM, midday, and PM time periods when schools are in session including simultaneous traffic counts. Due to COVID-19, the New York City Department of Transportation paused data collection on March 11, 2020, including noise measurements, due to potential changes in traffic patterns. Existing ambient noise conditions will be characterized based on previous noise measurements conducted in the area as part of other recent Environmental Assessment Statements (EASs) or EISs. Existing noise measurements in the area have been conducted as part of the Greater East Midtown Rezoning EIS (CEQR No. 17DCP001M) and the Vanderbilt Corridor and One Vanderbilt EIS (CEQR No. 14DCP188M). Since the predominant source of noise during these measurements was traffic, they would not be substantially different than normal traffic conditions today. As noise relates to traffic volumes, a doubling of traffic relates to a three decibel increase in noise. Small changes in traffic between the date of these measurements in 2014 and 2016 would result in negligible differences in noise. The noise analysis will include an evaluation of these previous noise measurements and how the conditions (i.e. measurement location and traffic conditions) correspond to the noise exposure at the Development Site. The existing noise exposure on each façade of the proposed Development Site will be determined based on these prior measurements.

As described in the Transportation Section above, a detailed traffic analysis will be conducted to determine No-Action and With-Action traffic conditions. Based on the

transportation analysis, the number of incremental passenger car equivalents (PCEs) between the No-Action and With-Action conditions will be analyzed to determine if the project has the potential to significantly increase (i.e., double) the number of PCEs thereby potentially increasing noise by 3 dB or more at nearby receptors and resulting in significant noise impact. If PCEs would double with the With-Action condition, a detailed traffic noise analysis will be undertaken as part of the EIS.

- › A screening analysis will be conducted to determine whether the Proposed Actions could result in exceedances of noise guidelines.

Based on the results of the prior noise monitoring and the mobile and stationary source analyses, With-Action L_{10} noise levels at the new noise-sensitive land uses at the Development Site will be evaluated and sufficient window/wall sound attenuation requirements will be identified, as needed, to achieve acceptable interior noise conditions.

Task 14: Public Health

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a Proposed Project, and if so, to identify measures to mitigate such effects. According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for the specific technical area or areas.

Task 15: Neighborhood Character

The character of a neighborhood is the result of a combination of various contributing elements, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other physical features that include traffic and pedestrian patterns and noise. This chapter of the EIS will use information from other EIS chapters to assess whether any identified significant adverse impacts or combination of moderate effects in the areas of land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise would have the potential to affect neighborhood character. If warranted, based on an evaluation of the Proposed Project's effects, an assessment of neighborhood character will be prepared following *CEQR Technical Manual* methodologies. This analysis would consist of describing the predominant factors that contribute to the defining character of the neighborhood within a 400-foot study area, summarizing changes in the character of the neighborhood that can be expected in the future No-Action condition, and evaluating the Proposed Project's potential to affect the defining features of the neighborhood.

Task 16: Construction

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community and people passing through the area. Construction impacts are usually important when construction activity could affect traffic conditions, community noise patterns, air quality conditions, and mitigation of hazardous materials. The construction schedule and an estimate of activity on-site for both the No-Action building and the proposed With-Action development will be described. Based on this information, an assessment of the potential impacts of construction activities will be prepared comparing the two construction scenarios. If necessary or warranted, quantitative analyses may be conducted. Technical areas to be analyzed include:

- › **Transportation Systems:** This assessment will consider losses in lanes and sidewalks, around the Development Site, and effects on other transportation services, if any, during the construction periods, and identify the increase in vehicle trips from construction workers and deliveries. Based on the trip projections of activities associated with peak construction, an assessment of potential impacts during construction will be provided by comparing the project generated construction trips between the proposed and No-Action building on the Development Site (Level 1 screening assessment). Where appropriate, the relevant mitigation measures will be discussed. Due to the Development Site's proximity to GCT and the Grand Central subway station and the inclusion of transit improvements in the proposed development, construction coordination that will be undertaken with MTA/NYCT will be discussed.
- › **Air Quality:** The construction air quality impact section will include emission profile estimates for the entire construction period by phase on a monthly basis. Emission estimates will be made for each piece of diesel equipment taking into account details such as engine size, emission tier, load and utilization factors, etc. Emission from construction trucks and from dust generating activities will also be included. The resultant emission profile will be compared with the similar profiles of Greater East Midtown (GEM) construction and GO Broome construction. Should Proposed Development construction emissions be smaller than those of the comparison projects, the conclusion of no significant air quality impacts will be drawn. If construction emissions are higher, a detailed construction analysis for the Proposed Development will be conducted.
- › The construction chapter will also contain a discussion of both mobile source emissions from construction trucks, worker and delivery vehicles, and on-road fugitive dust emissions. It will discuss measures to reduce impacts and may include components such as: diesel emission reduction; clean fuel; best available tailpipe reduction technologies; utilization of equipment that meets specified emission standards; and fugitive dust control measures, among others.
- › **Noise:** The construction noise impact section will contain a discussion of noise from each phase of construction activity for the Proposed Development. Appropriate recommendations will be made to comply with DEP Rules for Citywide Construction Noise Mitigation and the New York City Noise Control Code.
- › **Other Technical Areas:** As appropriate, other areas of environmental assessment—such as historic resources, hazardous materials, and neighborhood character—will be analyzed for potential construction-related impacts.

Task 17: Mitigation

Where significant adverse project impacts have been identified, feasible measures to mitigate those impacts will be identified. These measures will be developed and coordinated with the responsible City/State agencies as necessary. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

Task 18: Alternatives

CEQR requires that alternatives to the Proposed Project be identified and evaluated in an EIS so that the decision-maker may consider whether alternatives exist that would minimize or avoid adverse environmental effects. The selection of alternatives to a proposed project is determined by taking into account the nature of the specific project, its stated purpose and need, potential impacts, and the feasibility of potential alternatives. Consistent with CEQR, a No-Action Alternative will be considered. In addition, if any significant adverse impacts are identified, a No Unmitigated Significant Adverse Impact Alternative will be considered, which includes an assessment of a project that would result in no unmitigated impacts. Additional alternatives to the Proposed Actions will also be considered once the full extent of the Proposed Actions' impacts has been identified. The alternatives analysis will be qualitative, except where significant adverse impacts of the Proposed Actions have been identified.

Task 19: EIS Summary Chapters

In accordance with CEQR guidelines, the EIS will include the following summary chapters to the Proposed Action, where appropriate:

- › **Unavoidable Adverse Impacts:** This chapter will summarize any significant adverse impacts that are unavoidable if the Proposed Actions are implemented regardless of the mitigation employed (or if mitigation is not feasible).
- › **Growth-Inducing Aspects of the Proposed Actions:** This chapter will summarize the "secondary" impacts of Proposed Actions that trigger further development.
- › **Irreversible and Irretrievable Commitments of Resources:** This chapter will summarize the Proposed Actions and its impacts in terms of the loss of environmental resources (use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term.
- › **Executive Summary:** The executive summary will use relevant material from the body of the EIS to describe the Proposed Actions, its environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Actions.

Appendix A: Travel Demand Analysis Technical Memorandum



Project Commodore

Travel Demand Analysis Technical Memorandum

November 20, 2020

Introduction and Summary of Key Findings

This memorandum summarizes the travel demand assumptions and transportation screening analysis for the redevelopment of the Grand Hyatt Hotel at the northwest corner of Lexington Avenue and East 42nd Street, in Midtown Manhattan. It provides a detailed description of the project analysis framework and travel demand assumptions used to determine the number of additional trips generated by the Proposed Project. The project is expected to be completed in 2030.

As described below, detailed analyses of traffic, subway, and pedestrian conditions will be required per *CEQR Technical Manual* guidelines and will be included in the EIS. Detailed traffic analysis was identified for 15 intersections in the weekday AM, midday, and PM peak hours. For transit, a detailed analysis will be conducted for the 42nd Street - Grand Central station elements and subway lines; no detailed bus or rail analyses would be required as the number of trips generated by those modes do not exceed the Level 1 screening thresholds. For pedestrians, analyses will be needed at selected pedestrian elements along 42nd Street between Lexington and Madison Avenues.

Analytical Framework

The Proposed Project would redevelop the project site with approximately 2,108,820 square feet (sf) of office space, 452,950 sf of hotel space (500 rooms), and 43,370 sf of retail space located on the cellar, ground floor, and second floor of the Proposed Project. The project would also introduce 16,000 sf of publicly accessible open space. The Proposed Project would also provide transit and public realm improvements to improve circulation and reduce congestion at Grand Central Terminal (GCT) and the Grand Central 42nd Street subway station; these improvements are being discussed and finalized with the MTA and DCP. Absent the Proposed Project (the No-Action condition), the Development Site could be redeveloped with approximately 1,682,630 sf of office space, 18,300 sf of ground floor retail space, and 5,729 sf of publicly accessible open space.

The incremental difference between the future No-Action and future With-Action conditions is the basis of the transportation impact analyses of the EIS. **Table 1** summarizes the No-Action condition, With-Action condition, and the incremental net change of component sizes by land use. The Proposed Project consists of an increase of 426,190 sf of office space, 500 hotel rooms (452,950 sf), 25,070 sf of local retail space, and about 0.24 acre (10,271 sf) of publicly accessible open space, compared to the No-Action condition.

Table 1 Table 1: Development Increment for Analysis

Use	No-Action Condition	With-Action Condition	Increment
Office	1,682,630 sf	2,108,820 sf	+426,190 sf
Hotel	0 rooms or 0 sf	500 rooms or 452,950 sf	+500 rooms or +452,950 sf
Local Retail	18,300 sf	43,370 sf	+25,070 sf
Publicly Accessible Open Space (Passive Open Space)	0.13 acre or 5,729 sf	0.37 acre or 16,000 sf	+ 0.24 acre or +10,271 sf

CEQR Transportation Analysis Screening

According to the 2014 CEQR Technical Manual procedures for transportation analysis, a two-tiered screening process is to be undertaken to determine whether a quantified analysis is necessary. The first step, the Level 1 (Trip Generation) screening, determines whether the volume of peak hour person and vehicle trips generated by the Proposed Project would remain below the minimum thresholds for further study. These thresholds are:

- › 50 peak hour vehicle trip ends;
- › 200 peak hour subway/rail or bus transit riders; and
- › 200 peak hour pedestrian trips.

If the Proposed Project results in increments that would exceed any of these thresholds, a Level 2 (Trip Assignment) screening assessment is usually performed. Under this assessment, project-generated trips that exceed Level 1 thresholds are assigned to and from the site through their respective networks (streets, bus and subway lines, sidewalks, etc.) based on expected origin-destination patterns and travel routes.

Level 1 Screening Assessment (Trip Generation)

The travel demand factors used to calculate the projected number of trips were obtained primarily from the 2014 CEQR Technical Manual, US census journey-to-work data, and information from recently-certified New York City environmental impact studies such as the *Greater East Midtown Rezoning FEIS (2017)* and *M1 Hotel Zoning Text Amendment FEIS (2018)*. **Table 2** provides the travel demand assumptions used for the weekday AM, midday, and PM peak hours.

Table 2 Table 2: Travel Demand Characteristics

	Office	Hotel	Local Retail	Passive Open Space
Weekday Person Trip Gen Rate	18.0 ¹	9.4 ¹	205 ¹	44 ¹
	<i>per 1,000 SF</i>	<i>per Room</i>	<i>per 1,000 SF</i>	<i>per acre</i>
Linked Trip Credit	0%	0%	25%	0%
Temporal Distribution				
AM Peak	12% ¹	8% ¹	3% ¹	3% ¹
Midday Peak	15% ¹	14% ¹	19% ¹	5% ¹
PM Peak	14% ¹	13% ¹	10% ¹	6% ¹
Modal Split	AM, PM / MD			
Auto	8.4%/2% ^{2,3}	6% ⁴	6% ⁵	5% ⁶
Taxi	2.0%/3% ^{2,3}	32% ⁴	1% ⁵	1% ⁶
Bus	13.8%/6% ^{2,3}	2% ⁴	1% ⁵	3% ⁶
Subway	47.1%/6% ^{2,3}	18% ⁴	1% ⁵	4% ⁶
Rail	19.3%/0% ^{2,3}	2% ⁴	0% ⁵	0% ⁶
Walk	9.4%/83% ^{2,3}	40% ⁴	91% ⁵	87% ⁶
Vehicle Occupancy				
Auto	1.13 ²	1.80 ⁴	1.65 ⁴	2.90 ⁷
Taxi	1.40 ³	2.00 ⁴	1.40 ⁴	3.00 ⁷
Directional Split (In/Out)				
AM Peak	96%/4% ³	39%/61% ⁴	50% ⁴	55% ⁷
Midday Peak	48%/52% ³	54%/46% ⁴	50% ⁴	50% ⁷
PM Peak	5%/95% ³	65%/35% ⁴	50% ⁴	45% ⁷
Weekday Delivery Trip Gen Rate				
	0.32 ¹	0.06 ⁴	0.35 ¹	0.01 ⁷
	<i>per 1,000 SF</i>	<i>per 1,000 SF</i>	<i>per 1,000 SF</i>	<i>per acre</i>
Delivery Temporal Distribution				
AM Peak	10% ¹	12% ⁴	8% ¹	6% ⁷
Midday Peak	11% ¹	9% ⁴	11% ¹	6% ⁷
PM Peak	2% ¹	1% ⁴	2% ¹	1% ⁷

Delivery trip directional distribution: 50% in / 50% out

Source:

¹ 2014 CEQR Technical Manual

² 2012-2016 American Community Survey reverse journey-to-work data for Manhattan Census Tracts 78, 80, 82, 88, 90, 92, 94, 98, 100, and 102

³ Greater East Midtown Rezoning FEIS (2017)

⁴ M1 Hotel Zoning Text Amendment FEIS (2018) – Manhattan below 59th Street site

⁵ NYCDOT survey of local retail in Manhattan transit zone

⁶ Special West Chelsea District Rezoning and High Line Open Space EIS (2005)

⁷ Brooklyn Bridge Park FEIS (2005)

Office

A trip generation rate of 18.0 daily person trips per 1,000 sf for weekday was used for the office use and was obtained from the *2014 CEQR Technical Manual*. Temporal distributions of 12 percent, 15 percent, and 14 percent for the weekday AM, midday, and PM peak hours, respectively, were also obtained from the 2014 CEQR Technical Manual. The weekday AM, and PM peak hour modal splits of 8.4 percent by auto, 2.0 percent by taxi, 13.8 percent by bus, 47.1 percent by subway, 19.3 percent by rail, and 9.4 percent by walk were obtained from 2012-2016 American Community Survey reverse journey-to-work data for Manhattan Census Tracts 78, 80, 82, 88, 90, 92, 94, 98, 100, and 102. The weekday midday peak hour modal split used was 2 percent by auto, 3 percent by taxi, 6 percent by bus, 6 percent by subway, and 83 percent by walk. Vehicle occupancies of 1.13 persons by auto and 1.40 by taxi were obtained from the 2012-2016 American Community Survey reverse journey-to-work data and the *Greater East Midtown Rezoning FEIS (2017)*, respectively. The directional distributions of 96 percent "in", 48 percent "in", and 5 percent "in" were used for the weekday AM, midday, and PM peak hours, respectively, and were based on the *Greater East Midtown Rezoning FEIS (2017)*.

For office delivery trips, a trip generation rate of 0.32 daily truck trips per 1,000 sf and temporal distributions of 10 percent, 11 percent, and 2 percent for the weekday AM, midday, and PM peak hours, respectively, were based on the *2014 CEQR Technical Manual*.

Hotel

Trip generation rates and temporal distributions for the hotel use were obtained from the *2014 CEQR Technical Manual*. The trip generation rate of 9.4 person trips per room for the weekday and temporal distributions of 8 percent, 14 percent, and 13 percent during the weekday AM, midday, and PM peak hours were assumed. Modal splits, vehicle occupancies, and directional distributions were obtained from the *M1 Hotel Zoning Text Amendment FEIS (2018)* for the Manhattan below 59th Street site. The weekday modal splits used were 6 percent by auto, 32 percent by taxi, 2 percent by bus, 18 percent by subway, 2 percent by rail, and 40 percent by walk with vehicle occupancies of 1.80 persons per auto and 2.00 persons per taxi. The directional distributions used were 39 percent "in", 54 percent "in", and 65 percent "in" for the weekday AM, midday, and PM peak hours, respectively.

For hotel delivery trips, daily trip generation rates of 0.06 per room and a temporal distribution of 12 percent, 9 percent, and 2 percent for the weekday AM, midday, and PM peak hours, respectively, were obtained from the *M1 Hotel Zoning Text Amendment FEIS (2018)* for the Manhattan below 59th Street site.

Local Retail

For the local retail use, trip generation rates and temporal distributions were obtained from the *2014 CEQR Technical Manual*. The trip generation rate of 205 person trips per 1,000 sf for the weekday and temporal distributions of 3 percent, 19 percent, and 10 percent during the weekday AM, midday, and PM peak hours were assumed. It is anticipated that a portion of these trips would be "linked" trips (e.g., a trip with multiple purposes, such as stopping at a retail store while commuting to or from work, or at lunch time); a credit of 25 percent was assumed as a linked trip credit. Modal splits were obtained from New York City Department of Transportation surveys of local retail in Manhattan transit zones; the modal splits used were 6 percent by auto, 1 percent by taxi, 1 percent by bus, 1 percent by subway, and 91 percent by walk. Vehicle occupancies, and directional distributions were obtained from the *M1 Hotel Zoning Text*

Amendment FEIS (2018) for the Manhattan below 59th Street site. Vehicle occupancies of 1.65 persons per auto and 1.40 persons per taxi were used and the directional split was 50 percent "in" for all peak hours.

For retail delivery trips, daily trip generation rates of 0.35 daily truck trips per 1,000 sf and a temporal distribution of 8 percent, 11 percent, and 2 percent for the weekday AM, midday, and PM peak hours, respectively, were obtained from the *2014 CEQR Technical Manual*.

Passive Open Space

Trip generation rates and temporal distributions for the passive open space were obtained from the *2014 CEQR Technical Manual*. The trip generation rate of 44 person trips per acre for the weekday and temporal distributions of 3 percent, 5 percent, and 6 percent during the weekday AM, midday, and PM peak hours were assumed. Modal splits were obtained from the *Special West Chelsea District Rezoning and High Line Open Space (2009)*. The modal splits used were 5 percent by auto, 1 percent by taxi, 3 percent by bus, 4 percent by subway, and 87 percent by walk. Vehicle occupancies, and directional distributions were obtained from the *Brooklyn Bridge Park FEIS (2005)*. The vehicle occupancies of 2.90 persons per auto and 3.00 persons per taxi were used. The directional distributions used were 55 percent "in", 50 percent "in", and 45 percent "in" for the weekday AM, midday, and PM peak hours, respectively.

For passive open space delivery trips, daily trip generation rates of 0.01 per acre and a temporal distribution of 6 percent, 6 percent, and 1 percent for the weekday AM, midday, and PM peak hours, respectively, were obtained from the *Brooklyn Bridge Park FEIS (2005)*.

Level 1 Screening Results

Transit and Pedestrians

The increased number of person trips generated by the Proposed Project are provided in **Table 3** and would be expected to exceed the *2014 CEQR Technical Manual* Level 1 screening thresholds for subway and pedestrian trips during their analysis peak hours, and for rail trips during only the PM peak hour. Bus trips would not exceed the Level 1 screening thresholds and further analyses are not needed for those modes.

- › During the weekday AM peak hour, the project would generate 137 bus trips, 502 subway trips, 186 rail trips, and 1,168 pedestrian trips (walk plus bus, subway and rail).
- › During the weekday midday peak hour, the project would generate 90 bus trips, 195 subway trips, 13 rail trips, and 2,182 pedestrian trips (walk plus bus, subway and rail).
- › During the weekday PM peak hour, the project would generate 164 bus trips, 619 subway trips, 219 rail trips, and 1,698 pedestrian trips (walk plus bus, subway and rail).

Since the number of peak hour subway and rail trips, and the number of combined peak hour pedestrian trips expected to be generated by the Proposed Project exceed the CEQR thresholds of 200 pedestrian trips per hour, a Level 2 trip assignment is needed to determine the scope of the detailed pedestrian and subway transit analyses.

Table 3 Proposed Project Trip Increment Summary – Person Trips

Mode	Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Auto	86	20	106	54	52	106	41	111	152
Taxi	66	75	141	135	119	254	130	90	220
Bus	126	11	137	44	46	90	17	147	164
Subway	444	58	502	101	94	195	98	521	619
Rail	174	12	186	7	6	13	18	201	219
Walk	195	148	343	933	951	1,884	339	359	696
Total	1,091	324	1,415	1,274	1,268	2,542	643	1,427	2,070

Vehicles

Table 4 summarizes the total peak hour vehicular volumes (“ins” plus “outs”) for the Proposed Project. The Proposed Project would result in an hourly trip increment of 217 vehicles per hour (vph) during the weekday AM peak hour, 251 vph in the weekday midday peak hour, and 274 vph in weekday PM peak hour. Since the volume of vehicle trips generated by the Proposed Project would exceed the 50-vehicle trip threshold during all peak hours, a Level 2 trip assignment is needed to determine the scope of the detailed traffic analysis.

Table 4 Projected Trip Increment Summary – Vehicle Trips

Mode	Weekday AM Peak Hour			Weekday Midday Peak Hour			Weekday PM Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Auto	72	13	85	35	34	69	24	90	114
Taxi	57	57	114	83	83	166	79	79	158
Truck	9	9	18	8	8	16	1	1	2
Total	138	79	217	126	125	251	104	170	274

Level 2 Screening Assessment (Trip Assessment)

As shown above, the number of trips generated by the Proposed Project would exceed the 2014 CEQR Technical Manual Level 1 screening thresholds for vehicle, subway, and pedestrian trips during the peak hours analyzed. Project-generated trips were assigned through the surrounding street network based on expected routes to and from the project site.

Transit and Pedestrians

Transit and pedestrian trips were assigned through the pedestrian network based on logical and direct travel routes to and from the project site from neighborhood attractions, commuter rail stations, subway stations and/or bus stops, to determine if the number of additional pedestrian trips generated by the project would exceed 200 peak hour pedestrian trips at key pedestrian elements (e.g. crosswalks, sidewalks, corner reservoir areas) approaching the site – the threshold for detailed pedestrian analysis. The

project site is bordered by the Park Avenue viaduct to the west, Lexington Avenue to the east, East 42nd Avenue to the south, and the Graybar Building to the north.

The project site is well served by MTA local and express bus service and by commuter bus service such as the North Fork Express, Bee-Line Bus, and Monsey Trails. Bus transit options within the project site vicinity include Manhattan buses such as M1, M2, M3, M4, M42, M101, M102, Queens buses such as the Q32, and express bus services such as the QM21, QM31, QM32, QM34, QM35, QM36, QM40, QM42, QM44, SIM6, SIM11, X27, X28, X37, X38, X63, X64, and X68. Based on 2006-2010 American Community Survey reverse journey-to-work data for commuters using buses to travel to workplaces in the study area, it is estimated that approximately 46 percent of bus trips originate from New Jersey and were assigned to the M42 bus route to travel to and from the Port Authority Bus Terminal, 20 percent originate from within Manhattan and were assigned to the M1, M2, M3, M4 bus routes, 13 percent originate from Queens and were assigned to the Q32 and express bus routes, 11 percent originate from Staten Island and were assigned to either of the two Staten Island express bus routes, 5 percent originate from the Bronx and were assigned to use the M101 and M102 bus routes, and 5 percent originate from Brooklyn and were assigned to the express bus routes.

The 42nd Street - Grand Central station is the City's major commuter hub, providing access to subways and commuter rail service in the heart of Midtown Manhattan. The 4, 5 and 6 subway lines serve riders to and from the Bronx and Brooklyn as well as Upper and Lower Manhattan. The No. 7 Flushing line provides service between Flushing, Queens and West Midtown (Times Square and Hudson Yards) after stopping at GCT. And, the Times Square Shuttle operates between GCT and Times Square. The Proposed Project would generate an increase of 502 and 619 new subway trips during the weekday AM and PM peak hours, respectively. The project would provide a direct internal access point to the 42nd Street-Grand Central subway station; it is assumed that all subway trips will use this internal connection and not need to use the street network. A detailed analysis will be conducted at this subway station.

GCT is the busiest Metro-North station and is in the process of expanding. As part of the East Side Access project, a new commuter rail connection will be constructed for the Long Island Rail Road at GCT – providing LIRR commuters with direct train service to GCT as well as to Penn Station—with an expected opening date in late 2022. It is assumed that all rail trips generated by the Proposed Project will use the internal connection provided and will not need to use the street network. Once rail trips are distributed to the different rail options, it is not expected that rail trips would exceed thresholds for further analyses.

Walk-only pedestrian trips were distributed evenly in all directions due to the centrality of the project site and the number of attractions in the project site vicinity and then assigned throughout the network.

Based on the pedestrian assignments described above, detailed pedestrian level of service analysis will be performed at the following pedestrian elements (crosswalk, corners, and sidewalks):

- › Crosswalks and Corners:
 - Lexington Avenue and East 42nd Street – all crosswalks and corners
 - Madison Avenue and East 42nd Street – northeast corner and north and east crosswalks

- › Sidewalks:
 - West side of Lexington Avenue between East 42nd and 43rd Streets
 - North side of East 42nd Street between Park and Lexington Avenues

- North side of East 42nd Street between Vanderbilt and Park Avenues
- North side of East 42nd Street between Madison and Vanderbilt Avenues

Pedestrian analyses will be performed at these elements for the weekday AM, midday, and PM peak hours.

Traffic

Project-generated vehicle trips were assigned through the surrounding street network based on expected routes to and from the project site, the configuration of the street network, and parking facilities within the project site vicinity. Since the Proposed Project would not provide parking on-site, auto trips were assigned to park at nearby off-street parking facilities.

Office auto trip distributions were based upon 2012-2016 American Community Survey reverse journey-to-work data for Manhattan census tracts 78, 80, 82, 88, 90, 92, 94, 98, 100, and 102. Within New York City, approximately 8 percent of the auto trips are assumed to originate from Manhattan, 15 percent from Queens, 7 percent from Brooklyn, 5 percent from the Bronx, and 3 percent from Staten Island. New York counties to the north of New York City (Westchester, Yonkers, and Upstate New York) make up approximately 14 percent of office trips while trips from Long Island are approximately 14 percent of office trips. Approximately 30 percent of office trips are assumed to originate from out of state areas to the west (New Jersey and Pennsylvania) and approximately 4 percent from Connecticut.

Most office auto trips were distributed to use East River and Hudson River crossings. Approximately 34 percent of trips (Queens, Long Island, Brooklyn, and Connecticut trips) were assigned to the Queens-Midtown Tunnel (24 percent) and the Ed Koch Queensboro Bridge (10 percent) crossing the East River to access the study area. Approximately 27 percent of the trips (New Jersey and Staten Island trips) were assigned to the study area using the Lincoln Tunnel. Trips using the highways from the north, such as the Franklin D. Roosevelt (FDR) Drive and Henry Hudson Parkway (Route 9A), account for approximately 29 percent of office trips. FDR Drive office trips from the south account for approximately 5 percent of the trips. The remaining trips would use local north-south streets including Lexington Avenue, Park Avenue, and Second Avenue.

The distribution of auto trips that would be generated by hotel and local retail were based on the distributions identified in the *Greater East Midtown Rezoning FEIS (2017)*. Hotel trips were assigned to the regional airports (JFK Airport, LaGuardia Airport, and Newark Airport) and local attractions. Approximately 10 percent of hotel auto trips would originate from the north, 25 percent from the south, 45 percent from the east, and 20 percent from the west. The local retail use is expected to serve the immediate surrounding area; these trips were assigned along local streets in the study area.

Taxi pick-ups and drop-offs were assigned along the 42nd Street and Park Avenue viaduct frontages. Delivery trips were assigned along New York City Department of Transportation's (NYCDOT) designated truck routes such as 42nd Street, Lexington Avenue, and Third Avenue. Delivery trips were assigned along truck routes as long as possible until reaching the project site's loading area, which is accessed from East 45th Street under the northbound Park Avenue viaduct.

Based on the vehicular traffic assignments described above, and in consultation with DCP and NYCDOT, detailed level of service analyses would be performed at the following intersections:

1. Second Avenue and East 40th Street
2. Second Avenue and East 42nd Street

3. Third Avenue and East 40th Street
4. Third Avenue and East 42nd Street
5. Lexington Avenue and East 40th Street
6. Lexington Avenue and East 42nd Street
7. Lexington Avenue and East 43rd Street
8. Lexington Avenue and East 44th Street
9. Lexington Avenue and East 45th Street
10. Lexington Avenue and East 46th Street
11. Park Avenue and East 40th Street
12. Madison Avenue and East 42nd Street
13. Fifth Avenue and East 42nd Street
14. Sixth Avenue and West 42nd Street
15. Broadway and West 42nd Street

Traffic analyses will be performed for the weekday AM, midday, and PM peak hours.

Appendix B: Air Quality Analysis Protocol Memorandum



Project Commodore

Air Quality Analysis Protocol

November 20, 2020

Introduction

An Environmental Impact Statement (EIS) will be prepared for the proposed development of 2,108,820 gross square feet (gsf) of office space, a 452,950 gsf hotel with 500 rooms, a 16,000-sf publicly accessible space, and 43,370 gsf of retail on the cellar, ground, and second floors of the building proposed on the block between East 42nd Street, the Park Avenue Viaduct and Lexington Avenue. The Proposed Development would also include significant improvements to the public realm, including subway and mass transit improvements to enhance circulation and reduce congestion at Grand Central Terminal and the Grand Central – 42nd Street subway station.

The air quality analysis will be conducted under the *2014 CEQR Technical Manual (CEQR TM)* guidelines supported by the most current EPA and NYSDEC recommendations and regulations as applicable to the Proposed Development under CEQR. The air quality analysis will include an assessment of the potential impacts of emissions from the mobile sources introduced by the project and from the stationary sources associated with the Proposed Development—heating, ventilation and air conditioning (HVAC) systems of the proposed building, as well as from any industrial and manufacturing facilities and large and major sources in the study area.

The key issues that will have the potential to impact air quality are:

1. The potential impacts by the project-generated traffic to result in significant adverse air quality impacts at the nearby intersections (mobile source analysis);
2. The potential for stationary source air emissions from the Heating Ventilating and Air Conditioning (HVAC) systems of the Proposed Development to significantly impact existing and future (No-Action) sensitive land uses (stationary source analysis);
3. The potential of existing industrial and/or manufacturing sources to adversely impact the Proposed Development (stationary source analysis);
4. The potential for existing large or major sources to adversely impact the Proposed Development (stationary source analysis).

Mobile Source – Microscale Analysis

The preliminary traffic analysis indicated that the CEQR threshold of 140 trips generated by a project at any intersection will not be exceeded. The project is expected to generate very few heavy-duty diesel vehicle trips, which, together with the equivalent emissions from other vehicles, are not expected to exceed the $PM_{2.5}$ CEQR TM threshold. No parking is associated with the project. A CEQR mobile source screening analysis will be conducted to assess CO and PM impacts from mobile sources. No detailed

analysis is anticipated to be required for the project under the *CEQR TM* guidance. However, if these thresholds are exceeded based on the results of the screening analysis, a detailed analysis will be provided

Stationary Source Analysis

HVAC Analysis

The Proposed Development will create approximately 2.1 million square feet of office, hotel, retail and public space. The HVAC systems of this building plan to use steam that is provided in this area by Con Edison. Therefore, no boiler will be installed and no emissions exhausted. As such, no air quality impacts are expected from the HVAC systems of the Proposed Development and no air quality analysis for the HVAC impacts will be required for the project.

Industrial Source Analysis

A number of industrial permits have been issued to buildings within the 400-foot radius of the Proposed Development. Investigation of the permits indicate that most of these permits are for registered emergency engines/generators and not for the manufacturing or processing facilities. Such sources are not expected to have significant air quality impacts, and thus will not be analyzed. The remaining land uses associated with industrial permits will be further reviewed. NYCDEP permit records will be obtained and assessed to determine whether further analysis is required from those sources.

Emissions and Dispersion Modeling

Once the air permits are obtained from the NYCDEP, the screening analysis following the *CEQR TM* will be conducted for the manufacturing and processing sources. Should a cumulative analysis be needed, it will be conducted for such pollutants and such sources that warrant it.

Compliance Criteria

The results of the industrial screening analysis will be compared to the New York State Department of Environmental Conservation's (NYSDEC) DAR-1 Annual Guideline Concentration (AGC), Short-term Guideline Concentration (SGC), cancer risk and hazard index to determine impacts' significance. Should the screening analysis results exceed any of these thresholds, a more detailed analysis using the AERSCREEN or AERMOD and following the *CEQR TM* procedures will be conducted.

Large and Major Source Analysis

Large or major sources are those that have a state or federal permit to operate. The *CEQR TM* requires an air quality assessment if such a source is located within a 1,000-foot radius of the proposed project site. The available information sources, including NYSDEC permit database, will be used to identify "major" (with Title V permits) or "large" (with State Facility permits) sources within a 1,000-foot radius of the Proposed Development site. Should such sources be found, a detailed air quality analysis using the latest version of the EPA-recommended dispersion model, AERMOD, will be conducted to determine impacts of these sources on the Proposed Development.

Appendix C: Noise Analysis Protocol Memorandum



Project Commodore

Noise Analysis Protocol

November 20, 2020

Introduction

An Environmental Impact Statement (EIS) will be prepared for the Proposed Development of 2,108,820 gross square feet (gsf) of office space, a 452,950-gsf hotel with 500 rooms, 16,000 sf of publicly accessible spaces, and 43,370 gsf of retail on the cellar, ground and second floors of the building proposed on the block between East 42nd Street, Vanderbilt and Lexington Avenues. As such, the Proposed Development will introduce new noise-sensitive land uses to the project site. In accordance with the *2014 CEQR Technical Manual (CEQR TM)* guidelines, it is necessary to determine whether these new uses will be introduced into a high ambient noise environment and whether window/wall attenuation will be required.

Based on the Draft Scope of Work (DSOW) and the Travel Demand Assumptions (TDA) Technical Memorandum, the traffic study area is expected to include detailed traffic counts and analyses at approximately 14 intersections. The analysis locations are primarily located along key roadways surrounding the site such as 42nd Street and Lexington Avenue. With the potential for changes in traffic volumes, there is the potential for the With-Action noise conditions to increase relative to existing conditions. Therefore, a mobile source noise screening analysis will be conducted.

Existing Noise Conditions

To characterize existing conditions, noise measurements would typically be conducted at the Development Site at ground-level for 20-minutes in duration during the weekday AM, midday, and PM time periods including simultaneous traffic counts.

Due to COVID-19, the New York City Department of Transportation paused data collection on March 11, 2020, including noise measurements, due to potential changes in traffic patterns. New York City schools were suspended on March 16, 2020, Governor Cuomo issued an executive order on March 20, 2020 that mandated businesses not deemed essential to utilize work from home procedures, and schools were officially closed on April 11, 2020. Therefore, it has not been possible to conduct noise measurements and there is a potential risk that such data collection may not be possible in the fall of 2020 when school normally resumes in full and traffic conditions are acceptable for noise measurements.

Existing ambient noise conditions can, however, be characterized based on previous noise measurements conducted in the area as part of other recent Environmental Assessment Statements (EASs) or EISs.

As shown in **Figure 1** and **Table 1**, existing noise measurements in the area have been conducted as part of the Greater East Midtown Rezoning EIS (CEQR No. 17DCP001M) and the Vanderbilt Corridor and One Vanderbilt EIS (CEQR No. 14DCP188M). Since the predominant source of noise during these measurements was traffic, they would not be substantially different than normal traffic conditions today. As noise relates to traffic volumes, a doubling of traffic relates to a three decibel increase in noise. Small

Table 1. Existing Ambient Noise Measurements

Site	Measurement Location	Applicable Façade of Project Site	Existing Noise Level (L10, dBA)		
			Morning	Midday	Afternoon
A	East 42 nd Street and 2 nd Avenue (Greater East Midtown Site 5)	South	79.0	80.9	75.7
B	East 41 st Street and Lexington Avenue (Greater East Midtown Site 11)	East	78.3	76.3	77.1
C	East 49 th Street and Lexington Avenue (Greater East Midtown Site 7)	East	76.4	76.4	78.1
D	East 45 th Street and 3 rd Avenue (Greater East Midtown Site 6)	North	79.0	77.0	77.7
E	Vanderbilt Avenue between East 42 nd Street and East 43 rd Street (One Vanderbilt Site 1)	West	70.3	71.5	71.3
F	East 42 nd Street between Madison Avenue and Vanderbilt Avenue (One Vanderbilt Site 2)	South and West	77.1	75.7	77.5

Sources: Greater East Midtown, Measurements conducted by STV on September 13 and 29, 2016.
One Vanderbilt, Measurements conducted by AKRF on June 20, 2013 and June 25, 2014.

Previous measurements conducted on 42nd Street and Lexington Avenue will be representative of the noise exposure on the project site since the measurements were conducted on nearby blocks along the same roadways surrounding the project site. The measurement on Vanderbilt Avenue is representative of the noise exposure on Park Avenue as it relates to traffic and proximity to Grand Central Terminal. The measurement on East 45th Street is representative of the noise exposure on the north façade of the project site based on its exposure to that street.

Based on these previous noise measurements, the loudest existing L10 noise levels at the ground level of each façade of the Proposed Development are as follows:

- South façade 80.9 dBA (L10)
- East façade 78.3 dBA (L10)
- North façade 79.0 dBA (L10)
- West façade 77.5 dBA (L10)

These existing measurement results will be used in the mobile source noise analysis, which will evaluate the increase in noise from traffic levels as predicted in the detailed traffic analysis.

Mobile Source Analysis

As described in the TDA Technical Memorandum, the traffic study area is expected to include detailed traffic counts and analyses at approximately 14 intersections. The analysis locations are primarily located along key roadways surrounding the site such as 42nd Street and Lexington Avenue. A mobile source noise screening analysis based on passenger car equivalents (PCEs) will be conducted to determine the No-Action and With-Action noise conditions. It is assumed that the existing noise measurement results are representative of the existing traffic conditions upon which the traffic analysis will be based.

Stationary Source Analysis

The proposed building is not anticipated to include any substantial stationary source noise generators, such as unenclosed cooling or ventilation equipment, loudspeaker systems, stationary diesel engines, or other similar types of uses. The design and specifications for mechanical equipment—such as heating, ventilation, and air conditioning—would incorporate sufficient noise reduction to comply with applicable noise regulations and standards, including the standards contained in the revised New York City Noise Control Code. This will ensure that mechanical equipment does not result in any significant increases in noise levels, either by itself or cumulatively with other project noise sources. Therefore, no stationary source analysis is warranted.

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