

DEPARTMENT OF CITY PLANNING CITY OF NEW YORK

ENVIRONMENTAL ASSESSMENT AND REVIEW DIVISION

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August 28, 2009

NOTICE OF COMPLETION OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

53 West 53rd Street

Project Identification
CEQR No. 09DCP004M
ULURP Nos. 09041ZSM, 09042ZSM
SEQRA Classification: Type I

Lead Agency
City Planning Commission
22 Reade Street
New York, NY 10007

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Pursuant to City Environmental Quality Review (CEQR), Mayoral Executive Order No. 91 of 1977, CEQR Rules of Procedure of 1991 and the regulations of Article 8 of the State Environmental Conservation Law, State Environmental Quality Review Act (SEQRA) as found in 6 NYCRR Part 617, a Final Environmental Impact Statement (FEIS) has been prepared for the action described below. Copies of the FEIS are available for public inspection at the office of the undersigned. The proposal involves actions by the City Planning Commission and Council of the City of New York pursuant to Uniform Land Use Review Procedures (ULURP). A public hearing on the Draft Environmental Impact Statement (DEIS) was held on July 22, 2009. Written comments on the DEIS were requested and were received by the Lead Agency until August 3, 2009. This FEIS incorporates responses to the public comments received on the DEIS and additional analysis conducted subsequent to the completion of the DEIS.

A. PROJECT DESCRIPTION

INTRODUCTION

The proposed project at 53 West 53rd Street would create a new building near the western end of the Midtown block bounded by West 53rd and 54th Streets and Fifth Avenue and Avenue of the Americas. The approximately 786,562 gross-square-foot (gsf), 1,250-foot-tall building would provide approximately 68,097 gsf for The Museum of Modern Art (MoMA), including gallery, storage, and mechanical space; between 518,645 and 618,465 gsf of residential space; and between 100,000 and 200,000 gsf of hotel space. The project is expected to have an approximately 44-month construction period and be complete by 2013.

To develop the proposed building, W2005/Hines West Fifty-Third Realty, LLC (the applicant) is seeking two special permits (described under "Proposed Actions" below), which require approval from the New York City Planning Commission (CPC) and are subject to review under the Uniform Land Use Review Procedure (ULURP) and City Environmental Quality Review (CEQR). The New York City Department of City Planning (DCP) is acting as the CEQR lead agency for this proposal.

Absent approval of the proposed actions, the applicant would develop either of two as-of-right projects, which could be built without any discretionary approvals: the Previously Approved Project or the Expanded Development Scenario, which are described below under "Analysis Framework for Environmental Review."

DEVELOPMENT SITE AND PROJECT SITE

The project site is a combined zoning lot which includes:

- The development site (Lots 5-8, 66, 69, 165, and a portion of Lot 58 on Block 1269), which is vacant and located near the western end of the block;
- The American Folk Art Museum (Lot 9);
- MoMA (Lots 11-14, 20, and 58), which occupies most of the midblock;
- A residential high-rise building (Museum Tower) on West 53rd Street (Lot 7501); and
- St. Thomas Church at the corner of Fifth Avenue and West 53rd Street (Lot 30).

The project block also contains a 40-story commercial office building that fronts on the Avenue of the Americas and a 26-story commercial office building at the southwest corner of Fifth Avenue and West 54th Street, neither of which are part of the project site. The project site lies in several different commercial zoning districts: C5-2.5, C5-P, C5-3, and C6-6. The project site is also located within the Special Midtown District.

PROPOSED ACTIONS

Two discretionary actions are proposed:

• To facilitate the proposed project, the applicant is seeking a special permit pursuant to Sections 74-79 and 81-212 of the New York City Zoning Resolution (ZR) to allow the transfer of 136,000 square feet of unused floor area from the University Club, a New York City Landmark (NYCL) located at 1 West 54th Street, to the project site for utilization on the development site and incorporation into the proposed building. Section 74-79 permits

the transfer of development rights from lots occupied by landmark buildings to adjacent lots.

• In addition, in connection with the use of 275,000 square feet of development rights from St. Thomas Church through a zoning lot merger (which has not yet occurred), the applicant is seeking a special permit pursuant to ZR Sections 74-711 and 81-277. The special permit would allow the distribution of floor area without regard to zoning district boundaries.

It would also allow the modification of certain bulk requirements relating to the Special Midtown District's height and setback requirements, which would enable the proposed project to extend beyond the limits of the zoning envelope for a more usable and efficient floor plate and better circulation around the elevator and stair shafts at the proposed building's narrow upper levels; pedestrian circulation space requirements, which would accommodate the unique constraints of this site and design of the proposed building and rear yard equivalent requirements, which would enable the proposed building to rise in a tapering spire above an 85-foot streetwall.

ZR Section 74-711 permits the modification of the use and bulk regulations governing zoning lots that contain landmarks provided that certain conditions are met. The application must include a report from the New York City Landmarks Preservation Commission (LPC) stating that a program has been established to preserve the landmark building and that this maintenance program or any use or bulk modifications will contribute to a preservation purpose.

Both the University Club and St. Thomas Church are New York City Landmarks. On May 13, 2008, LPC voted to issue favorable reports regarding the Continuing Maintenance Programs for the University Club and St. Thomas Church and regarding the relationship between the landmarks and the proposed project. Certificates of No Effect (CNEs) were issued by LPC for St. Thomas Church on October 6, 2008 and the University Club on November 28, 2008. On October 22 and November 28, 2008, LPC issued reports to CPC in support of the project's application for these special permits.

PROJECT PROGRAM AND DESIGN

OVERVIEW

The applicant intends to develop the 53 West 53rd Street building to include approximately 68,097 gsf of museum-related space and 718,465 gsf of space that would be divided between hotel and residential use. 1 The hotel use would occupy between 100,000 and 200,000 gsf of space and include approximately 7,000 gsf of associated restaurant space. The residential use would occupy between 518,465 and 618,465 gsf of space. The project sponsor has stated that no more than 150 residential units and 120 hotel rooms would be constructed. (However, for purposes of environmental review, it is assumed that the proposed project would include up to 300 residential units and 167 hotel rooms; see "Analysis Framework for Environmental Review," below).

¹ The museum space use, which would connect to the existing MoMA building, was approved as part of a previous project and would be permitted without the proposed actions. However, the entire building envelope is under review since the proposed actions (e.g., pedestrian circulation space, building setback waivers, etc.) would apply to the full site.

MOMA SPACE

The proposed building would expand and connect MoMA's existing gallery space into a new wing of galleries on the second, fourth, and fifth floors of the proposed project. The new second floor would have the same double height space as in the museum's current galleries; there would be no third floor. These new galleries would enable MoMA to showcase more works of art from its permanent collection, as well as special exhibitions. MoMA would have approximately 9,400 gsf of below-grade space, which would connect to its existing basement space, as well as some sixth-floor mechanical space.

HOTEL AND RESIDENTIAL USE

As currently contemplated, the hotel portion of the project would be located above the museum portion and include a substantial number of suites. The residential use would be located above the hotel portion of the building. An amenity floor of approximately 16,672 gsf, to be shared by the hotel and residential uses, would be located within the building. The restaurant and kitchen would be located on the first and second basement level. The main hotel lobby would be located on West 53rd Street, just west of the American Folk Art Museum. A through-block lobby to allow hotel patrons to enter and exit on West 54th Street would also be provided. The residential entrance would be located on West 54th Street west of the secondary hotel entrance. A residential service entrance would be located west of the residential entrance. The project's required loading dock would be located on West 54th Street just west of the existing MoMA loading docks.

BUILDING DESIGN

The proposed building would rise to a height of approximately 1,250 feet, including a decorative spire. The building would have a faceted, tapered shape, resulting in smaller floorplates at the higher levels of the building. Plans call for the building's structural frame to be expressed on its façade in a pattern of crisscrossing beams. The building would slope back on one side to yield views past the Museum Tower, and its northeast corner would be cut away to conform to zoning regulations. The building is expected to be clad with gray glass and aluminum mullions. The building's design is by Pritzker Prize-winning architect Jean Nouvel.

RENOVATION AND MAINTENANCE OF UNIVERSITY CLUB AND ST. THOMAS CHURCH

As a condition of the ZR Section 74-79 special permit described earlier, the landmark University Club building would be renovated to a sound, first-class condition, and a Continuing Maintenance Plan for the landmark would be established. Likewise, as a condition of the ZR Section 74-711 special permit, St. Thomas Church would be renovated to a sound, first-class condition, and a Continuing Maintenance Plan would be established to guarantee that the landmark remains in such condition forever. The work at St. Thomas includes the largest stained glass restoration project ever undertaken in the United States, and is also, in dollar terms, one of the largest restoration programs ever associated with a 74-711 application.

The owners of St. Thomas Church and the University Club would enter into a restrictive declaration that would run with the deeds on the properties in perpetuity. As part of the restrictive declaration, each building owner has agreed to put aside 5 percent of the proceeds from the sale of its development rights in a dedicated account to provide for the future maintenance of the buildings. Each owner would be required to conduct a façade inspection at

least once every five years, and any work necessary to maintain the exterior elements of the building in a sound first-class condition would be required to be undertaken at the expense of the owner. LPC will also have the right to access the buildings to conduct inspections of its own, and will be empowered to undertake repairs (at the owner's expense) if the owner fails to maintain the building in sound first-class condition.

As mentioned above, on May 13, 2008, LPC voted to issue favorable reports regarding the Continuing Maintenance Programs for the University Club and St. Thomas Church and regarding the relationship between the landmarks and the proposed project.

PROJECT PURPOSE AND NEED

Among the applicant's goals and objectives for this project is the addition of a unique tower to the Midtown Manhattan skyline. The proposed building would complement and enhance the architectural heritage represented on West 53rd Street, which includes the 1939 MoMA building designed by Goodwin and Stone, the Philip Johnson wing from 1953, César Pelli's Museum Tower from 1984, the 2004 expanded MoMA building by Yoshio Taniguchi. This block also includes the American Folk Art Museum, designed by Tod Williams and Billie Tsien and, across the street is Eero Saarinen's "Blackrock" (CBS Building).

RECENT DEVELOPMENT HISTORY

MoMA has been located in this block since 1932 and has put forward various proposals since its founding to build new and expanded facilities on its property. Most recently, in 2001, MoMA sought a special permit to facilitate the museum's expansion into a new building designed by Yoshio Taniguchi. In 2007, MoMA sought certain modifications of the earlier special permit in connection with a proposed 250,000-gsf building to be located on the current development site. This building, which was approved, is described below as the Previously Approved Project (see "Analysis Framework for Environmental Review" below).

For this project, MoMA sought a modification to its special permit to facilitate development of a six-story, infill structure on the West 54th Street frontage at the west end of MoMA's then-zoning lot. The modification, approved by the CPC on March 26, 2007, permitted the site plan and related drawings approved in 2000 to be amended to show this infill building, which would have utilized floor area that was not used in the 2001 museum expansion.

ANALYSIS FRAMEWORK FOR ENVIRONMENTAL REVIEW

In disclosing impacts, the EIS considers the proposed project's potential adverse impacts on the environment. Because the proposed project would be operational in 2013, its environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives assess current conditions and forecast these conditions to 2013 for the purposes of determining potential impacts. The EIS will provide a description of "Existing Conditions" for the 2008 analysis year and assessments of future conditions without the proposed project ("Future Without the Proposed Project") and with the proposed project ("Probable Impacts of the Proposed Project").

The future without the proposed project in all technical areas assumes that none of the discretionary actions are approved. In this case, the project sponsor has stated that the development site will be developed with either of two as-of-right projects that can be built

without any discretionary approvals. These two projects are referred to as the Previously Approved Project and the Expanded Development Scenario.

PREVIOUSLY APPROVED PROJECT

The Previously Approved Project would be a 250,000-gsf building to be located on Lots 5, 6, 7, 8, 66, and 69 of Block 1269 and a smaller infill building to be located on Lot 165 and a portion of Lot 58. Together, these buildings would contain 68,097 gsf of museum-related space, 180,000 gsf of commercial office use, and 10,000 gsf of ground-floor retail space. The larger building would be 285 feet in height with an office entrance on West 53rd Street and retail entrances on both West 53rd and 54th Streets. Access to the museum-related space would be provided through the existing MoMA entrances on the second, fourth, and fifth floors. The 6-story infill building would link internally the existing MoMA space to the additional gallery space to be constructed in the larger building.

EXPANDED DEVELOPMENT SCENARIO

The Expanded Development Scenario would create a 1,089-foot-tall, 508,013-gsf building containing 68,097 gsf of museum-related space, 125,679 gsf of hotel use, and 314,236 gsf of residential space with an entrance on West 53rd Street. Access to the museum-related space would be provided through the existing MoMA entrances, with connections at the second, fourth, and fifth floors.2

INCREMENT FOR ANALYSIS

As mentioned above, the project sponsor has stated that no more than 150 residential units and 120 hotel rooms would be constructed as part of the proposed project. However, for the purposes of environmental review, it is conservatively assumed that the proposed project would include up to 300 residential units and 167 hotel rooms. This provides a reasonable worst-case assumption for purposes of analysis. The applicant will enter into a Restrictive Declaration to be recorded against the project's zoning lot, which will require that the proposed building be built in accordance with the plans and drawings approved as part of the special permit approval, and will tie the issuance of certificates of occupancy for certain floors in the proposed building to the completion of the restoration work to St. Thomas Church and the University Club proposed in connection with the Section 74-711 and 74-79 special permits. The Restrictive Declaration will also contain certain conditions on the project imposed as a result of the ULURP and CEQR review processes, including the requirement that no more than 167 hotel units and no more than 300 residential units will be constructed on the development site.

In each of the technical areas of this EIS discussed below in this "Executive Summary," the proposed project is compared to both No Build scenarios (to the Previously Approved Project and to the Expanded Development Scenario).

² This no action scenario will contain more floor area than the Previously Approved Project because the zoning lot for this scenario will include the existing MoMA zoning lot, the American Museum of Folk Art, and St. Thomas Church. It will be smaller than the proposed project because it would not use development rights from the University Club, and it would not use all of the development rights from St. Thomas Church (see "Purpose and Need"). In addition, the height and setback requirements of the C5-P zoning district effectively limit the amount of floor area that can be developed on the development site on an as-of-right basis.

Table S-1 summarizes the increments for analysis.

Table S-1
Increment for Analysis

Use		Reasonable Worst-Case Development Scenario (RWCDS)	Increment (Comparison of RWCDS to Previously Approved Project)	Increment (Comparison of RWCDS to Expanded Development Scenario)			
-	Museum	- 68,097	 No increment 	 No increment 			
space							
	Hotel use	 167 rooms (100,000 to 200,000 gsf, including 7,000 gsf of restaurant use) 	- 167 hotel rooms	- 62 hotel rooms			
- use	Residential	300 residential units(518,465 to 618,465 gsf)	- 300 residential units	- No increment			
	Commerci	- 0	- (180,000)	- 0			
al office			(111,111,	_			
-	Retail	- 0	- (10,000)	- 0			
-	Note: Sq	uare footages are in gsf.					

PUBLIC REVIEW PROCESS

The actions described above in "Proposed Actions" are subject to both the City's ULURP and CEQR procedures, which involve review by the local Community Board, Manhattan Borough President, the CPC, and the City Council. Approvals are required from CPC and the City Council. The environmental review process provides a means for decision-makers to systematically consider the proposed actions' environmental effects along with other aspects of project planning and design, to propose reasonable alternatives, and to identify (and, when practicable, mitigate) significant adverse environmental impacts. The process also facilitates the public's involvement by providing the opportunity to comment on the Draft EIS (DEIS).

B. PROBABLE IMPACTS OF THE PROPOSED PROJECT

LAND USE, ZONING, AND PUBLIC POLICY

The proposed project would not result in any significant adverse impacts to land use, zoning, or public policy.

LAND USE

The proposed project would be consistent with the land uses found in the surrounding area. Specifically, the proposed project would not result in any changes to the land uses on the project and transfer sites, and these sites would continue to contain a mix of museum, institutional, and residential uses. In the study area, the proposed project's uses would be consistent with the uses on the project block and within the immediately surrounding area, including the block's concentration of museum uses, including MoMA and AFAM. Furthermore, the proposed building's residential component would be compatible with existing residential development in the area, including Museum Tower, just east of the development site, and the residential uses along West 54th Street across from the project site (the Rockefeller Apartments and row houses). Finally, the hotel component of the proposed project would be consistent with the concentration of hotel uses surrounding the project site (including the Hilton and Sheraton).

ZONING AND PUBLIC POLICY

The proposed project would not have any impacts on zoning and it would also be consistent with and supportive of established public policy.

Overall, the proposed project's use would comply with existing zoning, and the transfer of unused development rights would fund the maintenance of two landmark buildings (University Club and St. Thomas Church). The project would provide an active and engaging addition to the street frontage, and the design strategy would shift floor area from the lower-density C5-P portion of the development site to the higher density C5-2.5 portion of the site. The proposed project would also be compatible with the applicable goals of the Special Midtown District. Specifically, the proposed project would conform to the area's historic and architectural character (see "Historic Resources" below).

SOCIOECONOMIC CONDITIONS

The proposed project was evaluated to determine if it could have any adverse impacts on population and housing characteristics, economic activity, and the commercial real estate market within the area most likely to be affected by the proposed project. As summarized below, the proposed project would not result in significant adverse socioeconomic impacts due to direct or indirect changes in residential and economic activity.

DIRECT RESIDENTIAL AND BUSINESS DISPLACEMENT

Currently, the development site does not contain any residential uses. Therefore, the proposed project would not directly displace any residential populations. Likewise, because there are no businesses on the development site that would be displaced by the proposed project, no further analysis is warranted.

INDIRECT RESIDENTIAL DISPLACEMENT

Although the proposed project would add population in the study areas, this population would not have different socioeconomic characteristics compared with the existing population. The proposed project would not directly displace uses or properties that have had a blighting effect on property values in the area, nor would it directly displace enough of one or more components of the population to alter the socioeconomic composition of the study areas. The proposed project would also not introduce a substantial amount of a more costly type of housing compared with existing housing, and it would not introduce a "critical mass" of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood. Finally, the proposed project would not introduce a land use that could offset positive trends in the study areas, impede efforts to attract investment to the area, or create a climate for disinvestment. Therefore, the proposed project would not cause significant adverse impacts resulting from indirect residential displacement, and detailed analysis is not warranted.

INDIRECT BUSINESS AND INSTITUTIONAL DISPLACEMENT

The proposed project would not increase commercial property values and rents within the primary or secondary study areas sufficiently to make it difficult for some categories of businesses to remain in the area. Therefore, the proposed project would not result in significant adverse impacts due to indirect business displacement, and a detailed analysis is not warranted.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

The proposed project would not directly displace any businesses, nor would it result in significant adverse impacts due to indirect business displacement. Therefore, the proposed project does not have the potential to have an adverse impact on specific industries within the study areas, and there would be no significant impact on specific industries.

COMMUNITY FACILITIES

The proposed project would not exceed any of the preliminary screening analysis thresholds presented in the *CEQR Technical Manual* for evaluating a proposed project's potential impacts on community schools, health care, day care, libraries, and fire and police protection services facilities. Therefore, the proposed project would not have significant adverse impacts on any of these community facilities.

OPEN SPACE

Overall, the proposed project would not result in any direct or indirect significant adverse open space impacts.

The proposed project would not add any publicly accessible open space or parkland to the study area, nor would it displace any open space. Therefore, the total amount of open space in the future with the proposed project would remain unchanged from the future without the proposed project. The proposed project would introduce an estimated 462 residents and 75 workers to the development site. In comparison with the Previously Approved Project, the proposed project would decrease the study area's total worker population by 670 employees and increase the study area's residential population by 462 residents. In comparison with the Expanded Development Scenario, the proposed project would increase the study area's total worker population by 36 employees, and there would be no change to the study area's residential population.

Table S-2 compares open space ratios in the future without the proposed project (assuming completion of either the Previously Approved Project or the Expanded Development Scenario) with the ratios in the future with the proposed project.

In the study area, the proposed project would slightly decrease the total open space ratio (by less than 2 percent) when compared with the Previously Approved Project. There would be no change in open space ratios when compared with the Expanded Development Scenario. The passive open space ratio for residents in the study area would remain well above the City's guideline values. Although the passive open space ratios for the total study area population and the active open space ratio for residents in the future with the proposed project would continue to be below the levels recommended by the city, the *CEQR Technical Manual* recognizes these goals are not feasible for many areas of the city, and they are not considered impact thresholds. The projected decrease of less than 2 percent is not considered to be significant. Therefore, the proposed project would not result in a significant adverse open space impact.

Table S-2
Open Space Ratios Summary

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		Open Space Ratios							Percent Change							
							Future Without the Proposed							Future Without to Future		
				Project						with the Proposed Project						
Ratio	Gı	City uideline		xisti nditi	~	A	eviou oprov Projec	ed	Dev	panded elopment cenario	with Prop	ure the osed ject	Previ Appr	ously	Exp Devel	ge from anded opment enario
 Total/Resid 			-		3.3	-		3.			-	3		-		
ents	-	2.5		3			20			3.14	1	4	1.8%		-	0%
 Passive/Re 			1		2.0	-		1.			-	1		-		
sidents	_	0.5		1			93		-	1.90	9	00	1.8%		_	0%
	-	Weighte														
		d:				1										
 Passive/Tot 	_	0.17 /	-		0.0	-		0.			-	0	. -	0		
al Population	0.1	7 / 0.17*		9			09			0.09		9	.0%		_	0%
 Active/Resi 			-		1.3	-		1.			-	1		-		
dents		2.0		1_			26		-	1.23	2	:3	1.8%		-	0%

Notes: Ratios in acres per 1,000 people.

SHADOWS

Compared with the Previously Approved Project, the proposed project would result in significant adverse impacts on the Fifth Avenue Presbyterian Church on the June 21 analysis day. The proposed project would not result in any significant adverse impacts on any other analysis days compared with the Previously Approved Project. Further, compared with the Expanded Development Scenario, the proposed project would not result in any significant adverse shadow impacts.

Compared with the Previously Approved Project, the plaza at 767 Fifth Avenue, the 1325 Sixth Avenue galleria, the Flatotel galleria, and the Upper East Side Historic District would experience less than an hour of incremental shadow; likewise, no significant adverse impacts on these resources would occur.

Compared with the Previously Approved Project (as shown in **Table S-3**), Central Park, the 1301, 1330, and 1345 Sixth Avenue plazas, and the south facades of the Rockefeller Apartments and the Fifth Avenue Presbyterian Church would each experience more than an hour of incremental shadow from the proposed project on at least one analysis day. The incremental shadows on Central Park, the Rockefeller Apartments, and the 1345 Sixth Avenue plaza would not be considered significant. The proposed project would result in significant adverse impacts on the Fifth Avenue Presbyterian Church on the June 21 analysis day. Incremental shadow would fall across one or more windows of the Fifth Avenue Presbyterian Church for a total duration of an hour and 20 minutes on the June 21 analysis day. The extent and duration of new shadow would cause a significant adverse impact to this architectural resource on June 21. The duration of incremental shadow would not cause a significant adverse impact on the other analysis days.

^{*} Weighted average combining 0.15 acres per 1,000 non-residents and 0.50 acres per 1,000 residents. Because this guideline depends on the proportion of non-residents and residents in the study area's population, it is different for existing, No Build, and Build conditions. Each of these ratios is listed in this table.

Compared with the Expanded Development Scenario (as shown in **Table S-4**), Central Park and the plazas at 1330 Sixth Avenue, 1345 Sixth Avenue, and 1301 Sixth Avenue would each experience more than an hour of incremental shadow on at least one analysis day. None of these incremental shadows would be significant. In addition, the Flatotel galleria, the Rockefeller Apartments, the Fifth Avenue Presbyterian Church, and the Upper East Side Historic District would be cast in less than an hour of incremental shadow; however, no significant adverse impacts on these resources would occur.

Table S-3
Incremental Shadow Durations: Proposed Project Compared with
Previously Approved Project

				Troviously [1]	pproved rrojeci
	Resource	March 21 8:36 AM-5:29 PM EDT	May 6 7:27 AM-6:18 PM EDT	June 21 6:57 AM-7:01 PM EDT	December 21 8:51 AM-2:53 PM EST
			OPEN SPACES		
-	Central Park				- 11:00 AM- 2:53 PM Total: 3h 53m
- plaza	767 Fifth Avenue	- 4:15 PM- 4:45 PM Total: 30m	-		_
- galleria	1325 Sixth Avenue	- 9:45 AM- 10:00 AM Total: 15m	- 10:00 AM- 10:45 AM Total: 45m	- 10:40 AM- 10:50 AM Total: 10m	
-	Flatotel galleria		- 9:30 AM- 10:00 AM Total: 30m	- 9:30 AM- 10:30 AM Total: 30m	
- plaza	1301 Sixth Avenue		- 9:15 AM- 9:45 AM Total: 30m	- 8:00 AM- 10:30 AM Total: 2h 30m	
- plaza	1330 Sixth Avenue		- 9:15 AM- 11:45 AM Total: 2h 30m	- 9:45 AM- 12:00 PM Total 2h 15m	
- plaza	1345 Sixth Avenue	- 10:30 AM- 10:45 AM 11:30 AM- 12:45 AM Total: 1h 30m	- 11:15 AM- 12:45 PM Total: 1h 30m	- 12:00 PM- 12:45 PM Total: 45m	
		I	HISTORIC RESOURCE	ES	
•	Rockefeller ents – south facade	_	- 4:35 PM- 5:00 PM Total: 25m	- 4:10 PM- 5:25 PM Total: 1h 15m	-
	Fifth Avenue erian Church*	<u> </u>	- 4:40 PM- 5:20 PM Total: 40m	- 3:50 PM- 5:10 PM Total: 1h 20m	· · · · · · · · · · · · · · · · · · ·
- Historic	Upper East Side District	- 4:00 PM- 4:30 PM 5:00 PM- 5:15 PM Total: 45m			- 2:45 PM- 2:53 PM Total: 8m

- Notes:

- EST—Eastern Standard Time
- EDT—Eastern Daylight Time
- March 21 is the equivalent of September 21.
- May 6 is the equivalent of August 6.
- * Duration represents time that new shadow would fall on shadow-sensitive windows, rather than on façade as whole.

Table S-4 **Incremental Shadow Durations: Proposed Project Compared with Expanded Development Scenario**

	Resource	March 21 8:36 AM-5:29 PM EDT	May 6 7:27 AM-6:18 PM EDT	June 21 6:57 AM-7:01 PM EDT	December 21 8:51 AM-2:53 PM EST
			OPEN SPACES		
	Central Park	<u> </u>	- -		- 11:00 AM-2:53 PM Total: 3h 53m
- plaza	1330 Sixth Avenue	- <u>-</u>	- 9:00 AM- 11:45 AM Total: 2h 45m	- 9:45 AM 12:15 PM Total: 2h 30m	_
-	Flatotel galleria	<u> </u>	- 9:45 AM- 10:00 AM Total: 15m	- 9:45 AM– 10:00 AM Total: 15m	
- plaza	1301 Sixth Avenue		- 9:30 AM- 9:45 AM Total: 15m	- 8:00 AM- 10:30 AM Total: 2h 30m	Salaba
 plaza	1345 Sixth Avenue	- 10:30 AM- 11:00 AM 11:25 AM-12:15 PM Total: 1h 20m	- 11:15 AM- 12:45 PM Total: 1h 30m	- 12:00 PM- 12:45 PM Total: 45m	-
		- H	IISTORIC RESOURCE	S	
_ Apartm	Rockefeller ents—south façade		- 4:35 PM- 5:00 PM Total: 25m	- 4:10 PM- 4:50 PM Total: 40m	
	Fifth Avenue terian Church—sun- re windows		- 4:35 PM- 4:45 PM Total: 10m	- 4:15 PM- 4:20 PM Total: 5m	_
- Historic	Upper East Side : District	- 4:00 PM- 4:30 PM 5:00 PM- 5:15 PM Total: 45m			- 2:45 PM- 2:53 PM Total: 8m

- EST-Eastern Standard Time
- EDT—Eastern Daylight Time
- March 21 is the equivalent of September 21.
 - May 6 is the equivalent of August 6.

HISTORIC RESOURCES

The proposed project would not result in any significant adverse physical, contextual, or visual impacts on St. Thomas Church, the University Club, or any other architectural resources within the study area. Rather, as summarized below, the proposed project would result in the renovation and continuing maintenance programs for both St. Thomas Church and University Club.

DEVELOPMENT, PROJECT, AND TRANSFER SITES

As part of the proposed special permits pursuant to ZR Sections 74-79 and 74-711 (see "Project Description," above), an LPC report on the proposed restoration work to St. Thomas Church and the University Club and the relationship between the proposed building and these landmarks is required. In connection with the 74-711 special permit, LPC must find that the proposed bulk and use modifications would relate harmoniously to St. Thomas Church. In addition, the special permits require that a Continuing Maintenance Plan (CMP) be established for the University Club and St. Thomas Church that would be legally enforceable by LPC under the provisions of a restrictive declaration.

As part of the restrictive declaration, each building owner has agreed to put aside 5 percent of the proceeds from the sale of its development rights in a dedicated account to provide for future building maintenance. Each owner would be required to inspect the facade at least once every five years and to undertake any work necessary at their own expense to maintain the exterior building elements in a sound first-class condition. LPC would also have the right to access the buildings to conduct its own inspections and undertake repairs (at the owner's expense) if the owner fails to maintain the building in sound, first-class condition. These CMPs would ensure that the landmark structures would be restored to a sound, first-class condition.

On October 6, 2008, LPC issued a Certificate of No Effect (CNE) for the exterior and interior repair and restoration of the limestone tracery at 18 stained glass windows and three chancel windows, as well as for the removal of two through-wall louvers and associated sleeves and mechanical equipment, and restoration of the openings. The LPC had previously issued a CNE for additional restorative work on the stained glass windows at St. Thomas. On November 28, 2008, LPC issued a CNE for restorative work and other general, non-restoration work at the University Club, including new windows at secondary facades; removal and/or replacement of mechanical equipment, fixtures, and their supports; sidewalk replacements; mortar work; and the modification of modern infill at the West 54th Street entrance to replace the large expanse of glazing above these doors.

On May 13, 2008, LPC voted to issue favorable reports regarding the CMPs for the University Club and St. Thomas Church and regarding the relationship between the landmarks and the proposed project. In reports dated October 22 and November 28, 2008, LPC noted that in reaching its decision to issue a favorable report to CPC, it found that the proposed restorative work would bring St. Thomas Church and the University Club up to sound, first-class condition and aid in the buildings' long-term preservation, and that the implementation of a cyclical maintenance plan would ensure the continued maintenance of the buildings in a sound, first-class condition. Furthermore, LPC found that due to the distance between the development site and St. Thomas Church and the University Club, the proposed bulk waiver would have no effect on the relationship between the proposed building and the church, or between the proposed building and the club.

Finally, because both the University Club and St. Thomas Church are located more than 90 feet from the proposed development site, neither resource would be significantly affected by construction activity for the proposed project. According to the New York City Department of Buildings (DOB) *Technical Policy and Procedure Notice* (TPPN) #10/88, 90 feet is the

distance within which architectural resources have the potential to be affected by construction activity, such as vibrations (i.e., from construction blasting or pile driving) or from falling objects, subsidence, collapse, or damage from construction machinery.

STUDY AREA

As described above, LPC voted to issue favorable reports regarding the relationship between the University Club and St. Thomas Church and the proposed project; therefore the project's design would also be considered compatible with other study area architectural resources. The proposed building, like the previously approved building and the Expanded Development Scenario building, is expected to alter the context of the architectural resources in the surrounding area. Along West 54th Street, the anticipated cladding materials (glass and aluminum), transparency, and modern, angular design of the proposed building would provide a strong contrast to the historic masonry structures on the north side of the street, including the Rockefeller Apartments as well as several historic rowhouses. However, this contrast would clearly identify the proposed building (as well as the previously approved building and the Expanded Development Scenario building) as new, and the building would be consistent with the other modern buildings on the project block, including MoMA and the Financial Times Building, which also stand in contrast to the north side of the street. As part of the Restrictive Declaration, certain design elements, including cladding materials, will be required to be as shown on the ULURP drawings. Furthermore, the proposed special permit to distribute floor area without regard to zoning district boundaries and to modify the alternative height and setback regulations, the requirements for pedestrian circulation space, and the rear yard equivalent requirements would allow the proposed building to move floor area away from the low-rise historic buildings on the north side of West 54th Street.

The proposed building would be considerably taller than the Previously Approved Project and approximately 161 feet taller than the Expanded Development Scenario building; however, there are already a number of tower structures in the study area. Within this context, the height of the tower structure—particularly in comparison to the Expanded Development Scenario building—would not be readily apparent, particularly at street level.

Like the Expanded Development Scenario building, the proposed building would create a new backdrop to views of the CBS Building from Sixth Avenue, particularly views from south of the building, looking north. However, the anticipated reflective materials and style of the proposed building and the Expanded Development Scenario building would be clearly different from those of the CBS Building, and thus would allow the CBS Building to retain its individual visual identity and essential character. The scale of this architectural resource would be lessened in these views; however, in comparison to the Expanded Development Scenario building, the somewhat greater height and different massing of the proposed building, would not significantly alter the context of surrounding views to the CBS Building. Further, in comparison to the Expanded Development Scenario building's tower, which would set back at several stages but maintain a mostly rectangular configuration, the proposed building's tower would be faceted and would taper to a narrow point. The special permit for modification of the rear yard equivalent requirements would enable the tower to take this form. This tapering would lessen the tower's perceived height and bulk, particularly at the east and west elevations. The building would slope back on one side to yield views past the Museum Tower, and its northeast corner would be cut away to conform to zoning regulations.

The proposed building's anticipated cladding materials would be consistent with those of the Previously Approved Project and the Expanded Development Scenario buildings, as well as of other modern structures in the area. The proposed project would not block any important views of any architectural resources.

Although the plaza of the CBS Building is located within 90 feet of the development site (the distance within which architectural resources have the potential to be affected by construction, as described above), the tower itself is not. Therefore, the proposed project is not anticipated to have any adverse physical impacts on this resource. The Warwick Hotel, at 1340 Sixth Avenue, is located within 90 feet of the development site, as is the CBS Building and 41 West 54th Street. The CBS Building is a NYCL and LPC has determined that the Warwick Hotel and 41 West 54th Street appear S/NR- and NYCL-eligible; therefore, the project would avoid potential adverse physical impacts on these architectural resources through the implementation of a construction protection plan developed in consultation with LPC. None of the other architectural resources in the study area are close enough to be affected by ground-borne construction vibrations or other potential construction-related issues.

URBAN DESIGN AND VISUAL RESOURCES

At a height of 1,250 feet, the proposed 53 West 53rd Street project would stand nearly as tall as the Empire State Building. It would also be unique in form, a spire-shaped tower, in Midtown Manhattan.

In comparison to either the Previously Approved Project or the Expanded Development Scenario, the proposed project would not result in any significant adverse impacts to urban design and visual resources. The proposed uses of the development site would be different in the Previously Approved Project compared to the Expanded Development Scenario and the proposed project, but in each scenario they would be consistent with building uses that are prevalent in the surrounding area. However, the proposed project and the Expanded Development Scenario would be unique by having residential uses in a high-rise building, as other tall buildings are generally commercial. The Previously Approved Project, the Expanded Development Scenario, and the proposed project would fully utilize the development site, reinforce the existing streetwalls of West 53rd and 54th Streets, and are expected to enliven those streets with additional pedestrian activity. The building's structural frame would be expressed on the exterior of the building at street level, and would contribute to the building's anticipated active visual presence on West 53rd and 54th Streets.

At approximately 1,250 feet, the proposed building would be 965 feet taller than the Previously Approved Project and approximately 161 feet taller than the Expanded Development Scenario building. The proposed building, like the Expanded Development Scenario building would be the tallest structure within the primary study area; however, there are already a number of tower structures this area, including on the north side of West 54th Street, which also includes low-scale structures. Towers within the 400-foot study area include the Museum Tower directly to the east (approximately 5923 feet tall), the 40-story

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³ Heights of existing buildings represent heights above curb. They were determined using models created by Fugro EarthData, Inc. EarthData's 3D models were constructed from aerial surveys, using photogrammetry and CAD modeling. They feature architectural massing, including parapets and rooftop mechanical structures, as

building directly to the west (approximately 496 feet tall), the landmarked CBS Building across West 53rd Street (approximately 498 feet tall), and the New York Hilton Hotel across Sixth Avenue (approximately 492 feet tall), In addition, there are approximately 59 buildings taller than 400 feet in the ¼-mile study area and many of these are iconic skyscrapers. Of these buildings, 15 are 600 feet or more in height. The nearest buildings of 1,200 feet or more in height—the Empire State Building and the Bank of America—are beyond the ¼-mile study area. These buildings are not located in the midblock; however, it should be noted that in comparison to the buildings, the proposed building (as well as the previously-approved building and the Expanded Development Scenario building) would occupy a much smaller floorplate and thus would have a substantially smaller overall bulk. It should also be noted that the development site is not a typical "midblock" location because it is located very close to Sixth Avenue, with approximately 43 percent of its total lot area located in the zoning district along Sixth Avenue, which allows for larger (higher) development.

In comparison to the Expanded Development Scenario building's tower, which would set back at several stages but maintain a mostly rectangular configuration, the proposed building's tower would be faceted and would taper to a narrow point. This tapering would lessen the tower's perceived bulk, particularly at the east and west elevations. The building would slope back on one side to yield views past the Museum Tower, and its northeast corner would be cut away within the C5-P zoning district.

Both the Expanded Development Scenario building and the proposed building would be visible from more distant points; however, only the towers of the buildings would be visible in these locations, and they would be part of the overall skyline of high-rise buildings in Midtown Manhattan. The proposed building's anticipated cladding materials would be consistent with those of the previously approved building and the Expanded Development Scenario building, as well as those of other modern structures in the area. Plans call for the building's structural frame to be behind the glass, and the intent of the design is that the transition between the glass skin and the structure would not be visible.

There are no visual resources located on the development site, and as the site is privately owned and not accessible to the public, there are no notable views from it. Therefore, the proposed project would not have any adverse impacts to on-site visual resources or views from the development site to visual resources. Many sidewalk-level views in the 400-foot study area closest to the development site would be altered by the proposed project, as the height and unique spire-shaped form of the proposed building would be more prominent in surrounding views than those of the previously-approved building. The proposed building would become an important feature in sidewalk-level views west on West 54th Street across the MoMA sculpture garden area and in sidewalk-level views east and west on the south side of West 53rd Street. The proposed building would be noticeable from Sixth Avenue in the vicinity of West 53rd and 54th Streets, especially due to the CBS Building being set back from Sixth Avenue and West 52nd and 53rd Streets. Like the Expanded Development Scenario building, the proposed building would create a new backdrop to views of the CBS Building from this location. However, the anticipated reflective, transparent materials and

well as topographically accurate ground features. They are accurate to within a meter both vertically and horizontally.

modern style of the proposed building and the Expanded Development Scenario building would be clearly different from those of the CBS Building, and thus would allow this historic structure to retain its individual visual identity.

The proposed building, like the Previously Approved Project and the Expanded Development Scenario building, would be visible from West 52nd Street across the CBS Building plaza. It would be much taller and more slender (having smaller floor-plates) than the many large-scale tower buildings in the area, and it would be unique in its shape and different in its use from the office towers. Nevertheless, these changes would not have an adverse impact on urban design and visual resources. The change in these views between the Expanded Development Scenario and the proposed project would not be adverse. In comparison to the Previously Approved Project and the Expanded Development Scenario, the proposed building would not obstruct any views to visual resources in the 400-foot study area. Further, the proposed project would be a new visual resource.

Within the 1/4-mile study area, the proposed building, similar to the Expanded Development Scenario building, would be visible for long distances along the south sidewalk of 53rd Street and the north sidewalk of 54th Street. In these views, it would be one of many tall buildings framing the view corridors and would be viewed as part of the overall skyline of high-rise buildings in Midtown Manhattan. Nevertheless, it would be taller and slimmer, particularly in the higher reaches of its spire. Further, from views east on 53rd Street, the intervening Museum Tower would partially obscure views of the proposed building. From most other locations within the 1/4-mile study area, the proposed building would be considerably less visible, or not visible at all, due to intervening buildings and distance, although the upper floors of the building could potentially be seen above shorter buildings, depending on the viewer's location and the height and bulk of intervening buildings. As with the Expanded Development Scenario building, it is likely that the proposed building would be visible from the northern portion of Grand Army Plaza, where it would appear in the background behind the 687-foot-tall Solow Building at 9 West 57th Street—a midblock building—and the 653foot-tall building at 712 Fifth Avenue. From this location both its narrow, tapering façade and its more rectilinear north façade would be visible. The proposed building would also be visible from multiple locations in Central Park. Given its distance and its location behind many shorter but closer buildings, its height would be less apparent. Nevertheless, it would be the tallest of a number of tall buildings in the skyline in these views. Overall, the proposed building would create a new, visually unique addition to the skyline, but would not have any significant adverse impacts on surrounding views or visual resources.

NEIGHBORHOOD CHARACTER

Neighborhood character is an amalgam of the many components that give an area its distinctive personality, including land use; street layout; scale, type, and style of development; historic features; patterns and volumes of traffic; noise levels; and other physical or social characteristics that help define a community. As summarized elsewhere in this "Executive Summary," the proposed project would not result in any significant adverse impacts to historic resources, urban design and visual resources, socioeconomics, traffic, air quality, or noise. As with either of the scenarios in the future without the proposed project, the proposed project would be compatible with surrounding uses, which include museums, residential uses, commercial office buildings, and retail uses. Therefore, the proposed project would not result in significant adverse impacts on neighborhood character.

HAZARDOUS MATERIALS

The Phase I and Phase II Environmental Site Assessments identified an apparent underground fuel oil storage tank beneath Lot 66 and historic urban fill containing elevated concentrations of some semi-volatile organic compounds and metals beneath the development site. Due to the identified subsurface contamination, remedial measures to avoid adverse impacts during excavation for the proposed project would include conducting soil disturbance in accordance with a Remedial Action Plan/Construction Health and Safety Plan, proper handling and disposal of excavated soil, and other measures to prevent unnecessary or unacceptable hazards to construction workers and the surrounding community from hazardous materials. With these measures, no significant adverse impacts related to hazardous materials would be expected during or after the proposed construction.

INFRASTRUCTURE

The proposed project would place new demands on the City's infrastructure. However, there would be no potential for significant adverse impacts because the proposed project would not have an exceptionally large incremental demand for water or requirement for sanitary sewage and wastewater disposal, compared with either of the two as-of-right development scenarios that could be built in the future without the project.

Specifically, the proposed project would generate a demand for 131,436 gallons per day (gpd) of water. Compared with the Previously Approved Project, the proposed project would create an incremental demand for 86,812 gpd; compared with the Expanded Development Scenario, the proposed project would create an incremental demand for 28,222 gpd. This added demand would not overburden the City's water supply or the local conveyance system. The proposed project would also comply with the City's water conservation measures as mandated by Local Law 19.

Likewise, the proposed project is assumed to generate about 131,436 gpd of wastewater, which would not cause the North River and Wards Island WPCPs to exceed their design capacities or SPDES permit flow limit. The proposed project would also not overburden the local or interceptor conveyance system. There would be no increase in stormwater flows as the project site is currently either paved or occupied by buildings, and there would be no increase in the impervious surface area with the proposed project.

SOLID WASTE AND SANITATION SERVICES

Because the proposed project would not generate a large amount of solid waste, when compared with conditions in the future without the proposed project, there would be no potential for significant adverse impacts on solid waste and sanitation services. The proposed project would generate 18,928 pounds of solid waste per week, an incremental increase of 5,550 pounds per week over the Previously Approved Project and approximately 6,114 pounds per week more than the Expanded Development Scenario. This would be a minimal increase in New York City's waste stream.

In addition, by accommodating source separation of recyclables, the proposed project would also comply with the City's recycling program.

ENERGY

The proposed project would not significantly affect the transmission or generation of energy; therefore, there would be no potential for significant adverse impacts on energy.

The proposed project would create a total demand for 124,331 million BTUs of energy per year. Con Edison or another power company would provide electricity, gas, or steam to heat, cool, and light the proposed project. Compared with the Previously Approved Project, the proposed project would create an incremental energy demand for 105,304 million BTUs per year. Compared with the Expanded Development Scenario, the proposed project would create an incremental energy demand for 55,877 million BTUs per year. Compared with the approximately 327 trillion BTUs of energy consumed annually within Con Edison's New York City and Westchester County service area, each of these incremental increases would be considered a negligible increment.

The proposed project would comply with the New York State Energy Conservation Construction Code Act, which requires that new and renovated buildings be designed to ensure adequate thermal resistance to heat loss and infiltration. In addition, the code provides requirements for the design and selection of mechanical, electrical, and illumination systems. In compliance with the code, the building's basic designs would incorporate all required energy conservation measures, including meeting the code's requirements relating to energy efficiency and combined thermal transmittance.

TRAFFIC AND PARKING

As summarized below, the proposed project would not cause any significant impacts on traffic conditions and parking resources.

TRAFFIC

Compared with the Previously Approved Project, the proposed project would result in net increments of 8, 21, and 2 vehicle trips during the weekday AM, midday, and PM peak hours, respectively. Compared with the Expanded Development Scenario, the proposed project would generate net increments of 10, 17, and 14 vehicle trips during the weekday AM, midday, and PM peak hours, respectively. Since these incremental trips are below the CEQR Technical Manual threshold of 50 peak hour vehicle trips, a detailed quantitative traffic analysis is not warranted, and the proposed project, therefore, would not result—in—any significant adverse traffic impacts.

PARKING

There are 26 off-street public parking facilities within the parking study area with a combined capacity of 4,527 spaces and utilization rates of 74, 81, 65, and 37 percent during the AM, midday, PM, and overnight time periods, respectively. The proposed project would generate a daily parking demand of up to 150 spaces. Since there is currently an abundance of available parking capacity (863 to 2,818 spaces) within ¼-mile of the development site, there would be an adequate amount of off-street parking spaces to accommodate the projected parking demand. Therefore, the proposed project would not result in a significant adverse parking impact to the area's parking resources.

PEDESTRIAN SAFETY

The small incremental vehicular and pedestrian trips associated with proposed project are not expected to result in perceptible effects on pedestrian-automobile conflicts. Therefore, a more detailed analysis of reportable accident records identifying those with bicycle/pedestrian-related injuries is not warranted, and no adverse impacts are projected.

TRANSIT AND PEDESTRIANS

Based on the travel demand estimates for the proposed 53 West 53rd Street project, trip increments associated with the proposed project would not exceed the *CEQR Technical Manual* threshold of 200 peak hour person trips at transit (i.e., bus or subway) facility or pedestrian element (i.e., sidewalks, crosswalks, or corners) in the vicinity of the development site. Therefore, a detailed transit and pedestrians analysis is not warranted, and the proposed project would not cause any significant adverse transit and pedestrian impacts.

AIR QUALITY

No significant adverse air quality impacts would result with the proposed project. The proposed project would not have the potential for significant adverse stationary source air quality impacts because it would use central steam and electric chillers for heating, ventilation, and air conditioning (HVAC) systems. Likewise, the proposed emergency generator would not be operated continuously and would not constitute a significant long-term source of air pollution.

In addition, the proposed project would not have the potential to result in significant adverse impacts on air quality from mobile sources as the proposed project would not exceed the CEQR threshold of 75 peak hour trips at any intersection.

Finally, an assessment of the potential impacts on the proposed project from heat and hot water systems serving large existing buildings in the study area was undertaken since the proposed project would be taller than other buildings with a 400-foot radius. The *CEQR Technical Manual* HVAC screening analysis was performed for the existing building HVAC systems, identified as the most likely to cause potential air quality impacts on the development site (based on their floor area, height, and proximity). The total gross floor area for each existing building analyzed is below the maximum development size shown in the *CEQR Technical Manual*. Therefore, there would be no potential for significant adverse air quality impacts associated with the emissions from HVAC systems from existing buildings on the proposed project.

NOISE

The proposed project would not result in any significant adverse noise impacts. It would not generate sufficient traffic to have the potential to cause a significant mobile source noise impact. In terms of noise abatement requirements for the proposed project, the *CEQR Technical Manual* has set noise attenuation quantities for residential buildings based on exterior $L_{10(1)}$ noise levels to maintain interior noise levels of 45 dBA $L_{10(1)}$ or lower for residential, hotel, and museum uses and 50 dBA $L_{10(1)}$ or lower for commercial office uses. The proposed project would include well sealed double-glazed windows and central air conditioning. The north (West 54th Street) and south (West 53rd Street) facades of the

proposed building would require 30 dBA of window/wall attenuation. All façades of the proposed building will be designed with a composite Outdoor-Indoor Transmission Class (OITC) to meet the 30 dBA window/wall attenuation requirements. The proposed project's design measures would provide sufficient attenuation to achieve the CEQR interior noise level requirements. In addition, the building mechanical system (i.e., heating, ventilation, and air conditioning systems, which are expected to include chillers) would be designed to meet all applicable noise regulations (i.e., the New York City Noise Control Code and the New York City Department of Buildings code) and to avoid any significant increase in ambient noise levels.

CONSTRUCTION IMPACTS

Construction of the proposed project is expected to last approximately 44 months. Based on current plans, construction activities would begin in late 2009 and be completed in 2013. Construction of the building would generally involve three phases, which would overlap at certain times: excavation and foundations, superstructure core and shell, and interior construction and finishing. Since there are no standing structures on the development site, there would be no substantial demolition, although connections would need to be made to the existing MoMA complex.

There would be no significant adverse impacts as a result of the project's construction. However, as with most development in New York City, construction of the proposed project may be disruptive to the surrounding area for certain periods throughout the construction period, and short-term, temporary effects on land use, historic resources, hazardous materials, traffic and transportation, air quality, and noise would result, as summarized below:

- Land Use—Certain construction activities, such as excavation and exterior construction, may be disruptive and cause some inconvenience to the surrounding residential and museum uses. Construction would not alter surrounding land uses, and access to surrounding land uses would be maintained throughout the construction period.
- **Historic Resources**—DOB's Technical Policy and Procedure Notice (PPN) #10/88 addresses procedures for avoiding damage to historic structures from adjacent construction. Under the TPPN, a construction protection plan must be provided to the New York City LPC for review and approval before construction of the proposed project. With these measures in place, it is unlikely that there would be any adverse physical impacts on any historic resources near the development site.
- Hazardous Materials—To avoid the potential for exposure to contamination from on-site sources during construction, legal requirements for excavation and construction activities, as well as hazardous materials requirements associated with the Restrictive Declaration for Lots 5 to 8, would be closely followed. Potential hazardous materials impacts would be avoided by performing construction activities in accordance with all applicable state and city requirements. All activities involving disturbance of existing soils would be conducted in accordance with a NYCDEP-approved Remedial Action Plan/Health and Safety Plan.
- Traffic and Transportation—Construction activities would generate maximum vehicle trips during the peak periods of 6-7 AM and 3-4 PM, while typical commuter peak hours would take place during 8-9 AM and 5-6 PM. Compared to the Previously Approved Project and Expanded Development Scenario, the proposed project is expected to result in

fewer than 50 vehicle trips in an hour through any area intersection; therefore, in accordance with the *CEQR Technical Manual*, a quantified analysis of construction traffic is not required, and no significant adverse traffic impacts would occur as a result of construction. Construction activities would generate an estimated maximum daily parking demand of up to 100 spaces during peak construction. However, this parking demand could be fully accommodated by the off-street spaces available within a ¼-mile radius, where more than 2,000 spaces are available overnight and more than 1,000 spaces are available during the AM commuter peak period.

Significant interruptions of traffic are not expected during the construction period. Wherever possible, deliveries and other construction activities would take place during off-peak travel hours. While truck staging is expected on the north and south sides of the construction site (i.e., West 53rd and 54th Streets between Fifth and Sixth Avenues), moving lanes of traffic would be available at all times. To the extent that there would be any disruption in traffic flow, the changes would be relatively minor and short-term. In addition, there could be various parking lane and/or sidewalk closures associated with the project's construction on West 53rd and 54th Streets for the width of the development site. Appropriate protective measures would be implemented to ensure pedestrian safety.

- Transit—Approximately 30 percent of the construction workers predicted to commute via auto, and the remaining 70 percent are expected to travel to and from the project site via transit. At peak construction, there would be approximately 380 construction-related transit trips during the 6-7 AM and 3-4 PM construction peak hours, respectively. Since the study area is well served by mass transit, only nominal increases in transit demand would be experienced along each of those routes and at each of the transit access locations during hours outside of the typical commuter peak periods.
- Air Quality—Appropriate fugitive dust control measures would be employed to avoid adverse air quality impacts, including watering of exposed areas and dust covers for trucks. In addition, all necessary measures would be implemented to ensure that the New York City Air Pollution Control Code regulating construction-related dust emissions is followed. In addition, best practices would be used to reduce the amount of fugitive particulate matter emissions from non-road and dust from demolition and excavation. Finally, increases in mobile source emissions would be minimized by incorporating traffic maintenance requirements into the construction contract documents.
- Noise—A site-specific noise mitigation plan, in full compliance with the New York City Noise Control Code, would be developed and implemented. This plan would include required source controls, path controls, and receptor controls. In addition, appropriate low-noise emission level equipment and operational procedures would be used, when practicable. During periods of extensive excavation activity, measures would be taken to ensure that no structural damage to adjacent structures would occur. Any noise impacts during construction would be temporary and short term.

PUBLIC HEALTH

The proposed project would not cause any significant public health impacts. No significant air quality impacts from increased vehicular traffic or emissions from stationary sources would result from the proposed project, nor would the proposed project be adversely affected by the heat and hot water systems servicing large existing buildings in the study area. In addition, as discussed in "Hazardous Materials" above, applicable regulations would be closely followed

and appropriate measures would be implemented to address the management of soil and groundwater at the project site and to ensure that any subsurface disturbance does not cause unnecessary or unacceptable hazards to construction workers and the surrounding community from hazardous materials. Finally, the proposed project would not create a new source of significant noise or odors.

MITIGATION

In accordance with the *New York City Environmental Quality Review Technical Manual*, where significant adverse impacts are identified, mitigation to reduce or eliminate the impacts to the fullest extent practicable is developed and evaluated.

As described above, the proposed project would not result in any significant adverse shadows impacts as compared with the Expanded Development Scenario. Compared with the Previously Approved Project, the proposed project would result in significant adverse shadow impacts on one historic resource with sun-sensitive features—the Fifth Avenue Presbyterian Church—on the June 21 analysis day. On the June analysis day, incremental shadow would fall across one or more stained-glass windows on the south façade of the Fifth Avenue Presbyterian Church for a total duration of an hour and 20 minutes. The extent and duration of the incremental shadow would cause an unavoidable, significant adverse impact to this resource. Incremental shadows on this resource would not cause a significant adverse impact on the May 6 analysis day, and no incremental shadows would occur on the March 21, September 21, and December 21 analysis days.

Since publication of the DEIS, potential mitigation measures have been studied, as described below. The analysis concludes that at this time there are no practicable measures to mitigate the shadow impact on the church. Therefore, the increase in shadows on the windows of the Fifth Avenue Presbyterian Church which occurs on the summer analysis day, June 21, from 3:50 to 5:10 PM is considered an unavoidable adverse impact.

ALTERNATIVE DESIGN CONFIGURATIONS

A reduction in the proposed building's height was explored, and as stated in Chapter 21, "Alternatives," the building would have to be no taller than 600 feet to eliminate the shadow increments associated with the proposed project. Any development on the project site with a streetwall similar to that of the proposed project and a height of approximately 600 feet would generate some incremental shadows on the Fifth Avenue Presbyterian Church; however, the incremental shadows would be less than those from the proposed project. A building of this size and configuration would not meet the applicant's goals and objectives for the proposed project. Specifically, it would not add to the Midtown Manhattan skyline and complement the architectural heritage represented on West 53rd Street.

In terms of potentially repositioning the tower to reduce the shadow impact, it is not possible to move the tower to another location given the small size of the site (18,560 sf with a width of approximately 97 feet on West 54th Street and only 87 feet on West 53rd Street).

ARTIFICIAL LIGHTING ON THE EXTERIOR

The provision of artificial lighting can be used to mitigate shadow impacts by simulating sunlight conditions on stained glass windows. Exterior lighting could be directed at the

stained glass windows, which would require that lighting be mounted on a nearby building or on the façade of the church itself.

The only buildings from which exterior lighting could be directed are at least 60 feet away and are owned by third parties. Lighting from across the street also raises issues with regard to energy efficiency and light pollution. Given these considerations this mitigation measure is not considered practicable.

Although lighting fixtures could be installed on the exterior of the church, they would be obtrusive, would not be in keeping with the design of the Church, and would therefore not be considered a practicable solution.

INTERIOR LIGHTING

Interior lighting was considered for the church sanctuary because of its unique construction with an outer stone exterior wall and an interior wall—each with windows. Given the existence of the cavities, the potential for installing lighting in between the windows was considered. However, the cavities of the lower windows are only accessible through one hinged partial casement per pair. Therefore, the only way to access these window cavities for installation or maintenance would be to remove sections of the stained glass each and every time.

The cavities of the upper windows are only accessible from above and with difficulty due to the curved form of the ceiling. The cavity between these upper windows is not contiguous and quite shallow from front to back, and also shares space with heating radiators. Given modern lighting technology, it is possible to install lighting fixtures at the bottom of the cavity in the upper windows. Due to the height of the taller upper windows, however, there would be a tendency for light to diminish toward the top. To augment the lighting with fixtures from the top or the side would not be acceptable because the light source would then be visible, especially from the outside through the largely clear glass of the exterior windows. Further, the clear exterior glass would not assist in any way to the distribution of light toward the interior stained glass, but would merely allow the light to pass straight through it; thus, improving the light distribution would require alterations to the historic outer art glass. To effectively light the stained glass with some degree of uniformity, it would be necessary to create a light box where the outer layer would be frosted or etched so as to catch the artificial light and return it to the stained glass. Given the shallow nature of the cavity it would be impossible to introduce such an inner layer without compromising the relationship between the inner and outer historic glazing systems. Lastly, even if long-life LED, latest technology sources were used, such sources can still experience unexpected failures; therefore, access would need to be provided for. Providing such access for maintenance would be very difficult.

Any new lighting system to mitigate the projected shadows would require a sophisticated control system with multiple photo cell sensors and timed programmed sequencing to attempt a balance between the areas with shadow and without shadow. New lighting across the entire façade would produce a purely artificial effect without the regard for the location of the church and, as discussed above, is not practicable as it would not be in keeping with the

exterior design of the church. In addition, it should be noted that since the church windows are largely in shadow from at least September 21 to March 21—in existing conditions—lighting these windows in the summer could appear very artificial in contrast to the appearance of these windows during the rest of the year.

The south-facing rear window of the church chapel is single-glazed and does not have this cavity and, thus, interior lighting for this window is not practicable.

For these reasons, the use of interior lighting to mitigate the project's shadow impact on the Fifth Avenue Presbyterian Church is not considered to be desirable or practicable.

HELIOSTATS

The use of sun-tracking mirrors, or heliostats, also was explored as a potential measure to mitigate the shadow impact on the Fifth Avenue Presbyterian Church. Because the affected windows of the Fifth Avenue Presbyterian Church face south, light would either have to be reflected obliquely by heliostats mounted on a building to the south of the Church or by the use of two sets of heliostats.

In any case multiple heliostats would be required as each makes a spotlight that could only shine in one place at a time. Since heliostats are generally large (approximately eight feet in diameter) they would be not be considered compatible additions to the historic resources to which they might need to be mounted to work. The façade of the church provides no locations to place the heliostats where they would not be obtrusive and would not detract from the appearance of the historic building. The buildings to the south of the church from which the second set of heliostats could be mounted are owned by third parties, and thus are not under the control of the project sponsor.

Further, the spotlight produced by a heliostat would be an intense beam of redirected sunlight that could only shine on a single window at a time. The potential effect on the windows from such lighting would not be an accurate simulation of natural, existing lighting conditions on the Church's stained glass windows.

For these reasons, the use of heliostats to mitigate the project's shadow impact on the Fifth Avenue Presbyterian Church is not considered to be desirable or practicable.

ALTERNATIVES

Consideration of a No Action Alternative, which is mandated by the State Environmental Quality Review Act (SEQRA) and CEQR, is intended to provide the lead and involved agencies with an assessment of the consequences of not selecting the proposed project.

Two No Action Alternatives are addressed: the Previously Approved Project and the Expanded Development Scenario. These alternatives, which are described earlier in the "Project Description" section under "Analysis Framework for Environmental Review," also provide a baseline against which impacts of the proposed project may be compared.

The Previously Approved Project Alternative and the Expanded Development Scenario Alternative assume that the proposed actions would not be implemented and that no other discretionary actions would occur either. Specifically, under either of these alternatives, no special permit pursuant to Sections 74-79 and 81-212 of the New York City ZR to allow the transfer of development rights from the University Club to the project site for utilization on

the development site would occur, and no special permit pursuant to Sections 74-711 and 81-277 in connection with the use of excess development rights from St. Thomas Church would be required. In addition, Continuing Maintenance Programs for both the University Club and St. Thomas Church would not be necessary.

Absent the proposed project, the applicant will construct either the Previously Approved Project Alternative or the Expanded Development Scenario Alternative. However, the Previously Approved Project Alternative would not add to the Midtown Manhattan skyline and neither the Previously Approved Project Alternative nor the Expanded Development Scenario Alternative would complement and enhance the architectural heritage represented on West 53rd Street.

Furthermore, neither the Previously Approved Project Alternative nor the Expanded Development Scenario Alternative would ensure that the University Club and St. Thomas Church be renovated to a sound, first-class condition in accordance with LPC-approved Continuing Maintenance Plans.

The Expanded Development Scenario Alternative would result in the same shadows impacts as the proposed project, but would not result in significant adverse impacts on any of the other technical areas discussed in previous sections of this "Executive Summary." Therefore, this alternative would not result in a reduction of impacts compared to the proposed project. The Previously Approved Project Alternative would not result in any significant adverse impacts on any of the technical areas discussed in previous sections of this "Executive Summary."

Compared with the proposed project, this alternative would not result in any significant adverse impacts to shadows. As described previously, the proposed project has the potential to result in significant adverse shadow impacts to the Fifth Avenue Presbyterian Church. Therefore, an alternative that would not result in those impacts is also analyzed. The No Unmitigated Impact Alternative is a design alternative that would reduce the bulk of the building on the development site to levels where there would be no significant adverse shadow impact on the Fifth Avenue Presbyterian Church. While this alternative would eliminate the shadow increment on the church, it would not substantially meet the goals of the applicant for this project. It would not add to the Midtown Manhattan skyline and it would not complement the architectural heritage represented on West 53rd Street as well as the proposed project, and it would not ensure that the University Club and St. Thomas Church be renovated to a sound, first-class condition in accordance with LPC-approved Continuing Maintenance Plans.

The conclusion of the alternatives analysis is that none of these alternatives would substantially meet the goals and objectives of the proposed project.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

Unavoidable significant adverse impacts are defined as those that meet the following two criteria:

- There are no reasonably practicable mitigation measures to eliminate the proposed action's impacts; and
- There are no reasonable alternatives to the proposed action that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts.

As described above in "Shadows", the proposed project would not result in any significant adverse shadows impacts as compared with the as-of-right Expanded Development Scenario which, unlike the proposed project, would not involve any waivers of setback requirements. Compared with the Previously Approved Project, the proposed project would result in a significant adverse shadow impact on the Fifth Avenue Presbyterian Church, an historic resource, on the June analysis day, when an incremental shadow would fall across one or more stained-glass windows of the Fifth Avenue Presbyterian Church for a total duration of an hour and 20 minutes. The extent and duration of the incremental shadow would be considered a significant adverse impact. Incremental shadows on this resource would not cause a significant adverse impact on the May 6 analysis day, and no incremental shadows would occur on the March 21, September 21, and December 21 analysis days.

Various measures to reduce or eliminate the project's shadow impacts—such as artificial lighting or other measures—have been explored. None of the mitigation measures explored were determined to be practicable. Therefore, the shadows impact on the Fifth Avenue Presbyterian Church on the June 21 analysis day is considered to be an unavoidable significant adverse impact of the proposed project.

GROWTH-INDUCING ASPECTS OF THE PROPOSED PROJECT

The term "growth-inducing aspects" generally refers to the potential for a proposed project to trigger additional development in areas outside the project site that would otherwise not have such development without the proposed project. The *City Environmental Quality Review (CEQR) Technical Manual* indicates that an analysis of the growth-inducing aspects of a proposed project is appropriate when the project:

- Adds substantial new land use, new residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses; and/or
- Introduces or greatly expands infrastructure capacity.

The proposed project would be an approximately 786,562 gsf building providing approximately 68,097 gsf of museum-related space, between 518,645 and 618,465 gsf of residential space, and between 100,000 and 200,000 gsf of hotel space. As described above in "Project Description," by making use of a vacant site next to the Museum of Modern Art (MoMA) in Midtown Manhattan, the project would bring a number of benefits to the cultural and historic resources of New York City. The project would result in additional floor area for MoMA to expand its gallery space. In addition, as a condition of the proposed actions, two New York City landmarks (St. Thomas Church and the University Club) would be renovated to a sound first-class condition. The work at St. Thomas Church includes the largest stained-glass restoration project ever undertaken in the United States.

While the proposed project would contribute to growth in the city and state economies, it would not induce additional notable growth outside the project site. The level of development in the area surrounding the proposed project is controlled by zoning, and there is already a well-established trend in Midtown Manhattan toward residential and commercial redevelopment such that the proposed project would not actually "induce" new growth in the study areas. Rather, the proposed project would reflect and complement current development patterns in this section of Midtown.

The proposed project would improve existing infrastructure on and around the development site, including new sidewalks and connections to water, stormwater, and sewer lines. However, the infrastructure in the study area is already well developed, and improvements associated with the proposed project would not induce additional growth.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

There are a number of resources, both natural and built, that would be expended in the construction and operation of the proposed project. These resources include the materials used in construction; energy in the form of gas and electricity consumed during construction and operation of the proposed project; and the human effort (i.e., time and labor) required to develop, construct, and operate various components of the proposed project.

The resources are considered irretrievably committed because their reuse for some purpose other than the proposed actions would be highly unlikely. Although the proposed project would result in a wider variety of land uses than the currently vacant development site, the land use changes associated with the development of the proposed project may also be considered a resource loss. The proposed project constitutes an irreversible and irretrievable commitment of the development site as a land resource, thereby rendering land use for other purposes infeasible, at least in the near term.

These commitments of land resources and materials are weighed against the public purpose and benefits of the proposed project. As described above in "Project Description" and "Growth-Inducing Aspects of the Proposed Project," by making use of a vacant site next to the Museum of Modern Art (MoMA) in Midtown Manhattan, the project would bring a number of benefits to the cultural and historic resources of New York City. The project would result in additional floor area for MoMA to expand its gallery space. As a condition of the proposed actions, two New York City Landmarks (St. Thomas Church and the University Club) would be renovated to a sound, first-class condition. And the work at St. Thomas Church would include the largest stained-glass renovation project ever undertaken in the United States.

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