962-972 FRANKLIN AVENUE REZONING
Technical Memorandum

TO: **NYC Department of City Planning**

FROM: **Philip Habib & Associates**

RE: **962-972 Franklin Avenue Rezoning (CEQR No. 23DCP165K)**
Assessment of Proposed Modified Project

DATE: **July 23, 2024**

A. INTRODUCTION

Franklin Ave. Acquisition LLC (the "Applicant") is seeking approval of a series of discretionary land use actions to facilitate a new mixed use development at 962-972 Franklin Avenue on Block 1192, Lots 63 and 66, in Brooklyn ("Proposed Development Site"). The land use application, which was certified into public land use review on May 13, 2024, includes three land use actions. The first of these is a zoning map amendment, which would affect approximately 99 percent of the 53,257-square-foot (sf) Proposed Development Site as well as small portions of neighboring tax lots including 1, 46, 77, or 85 (the "Proposed Rezoning Area"). The Proposed Rezoning Area's underlying zoning would be changed from R6A to R8A with a C2-4 commercial overlay for the area within 100 feet of Franklin Avenue. The other two land use actions would include a zoning special permit, to waive parking requirements, and a zoning text amendment, to designate the Proposed Rezoning Area as a Mandatory Inclusionary Housing (MIH) area.

A **Draft Environmental Impact Statement (DEIS)**, prepared by Philip Habib & Associates and subconsultants, was issued by the lead agency, the City Planning Commission (CPC), on May 10, 2024. Please refer to the **DEIS** for a detailed description of the certified application, the Proposed Development Site, Rezoning Area, the development that would be facilitated by the certified application (the "Proposed Project"), and the significant adverse impacts that would occur as a result.

Currently, the application is in the public review process and it is anticipated that it will be reviewed by the CPC in the near future, including a combined public hearing on the application and the **DEIS**, with an FEIS issued following the public hearing and DEIS public comment period prior to the CPC vote on the application. Based on comments from Community Board 9 and others, the Applicant is proposing to amend its land use application to facilitate changes to the Proposed Project; the changed project is referred to as "Modified Project" herein. The amended application would include a modification to the zoning text amendment that is detailed in the following section. To distinguish this modified zoning text amendment from the one in the certified application, the zoning text amendment that would be included in the amended application is referred to as the "Modified Text Amendment."

The FEIS will provide an analysis of and impact determination for the Modified Project. This Technical Memorandum examines whether the Modified Project would result in any new or different significant adverse environmental impacts not already identified in the **DEIS**.

As set forth below, this Technical Memorandum concludes that the Modified Project would not result in any new or increased significant adverse impacts not already identified in the **DEIS**. The Modified Project would reduce certain impacts on the Brooklyn Botanic Garden identified in the DEIS. As detailed in this memo, under the Modified Project as compared to the certified Proposed Project, there would be quantitative reductions ranging between 53 minutes to one hour 25 minutes in the shadow coverage periods for the Brooklyn Botanic Garden's sun-sensitive resources (BBG Resources) collectively for the four analysis days. Six resources would see new shadow coverage for one analysis day ranging between three and 19 minutes, and all incremental shadow coverage would be removed from eight resources.

B. DESCRIPTION OF THE PROPOSED ZONING TEXT AMENDMENT AND MODIFIED PROJECT

Modified Text Amendment

The proposed Modified Text Amendment would modify the underlying height and setback regulations by establishing an absolute height limit for structures within an MIH Area on the block bound by Sullivan Place, Washington Avenue, Montgomery Street, and Franklin Avenue (the "Zoning Text Amendment Boundary"), based on the structure's location relative to the BBG Resources. The height and setback regulations of the underlying zoning district would apply, except that the maximum height of any structure would be limited along an imaginary sloping plane, the location and angle of which are intended to closely align with the angle at which sunlight reaches the BBG Resources, and ensure those resources maintain adequate sunlight throughout the year. Above the imaginary sloping plane, the general provisions for permitted obstructions would not apply, except that parapets and safety rails could penetrate the reduced height limit if they are at least fifty percent open or ninety percent transparent materials.

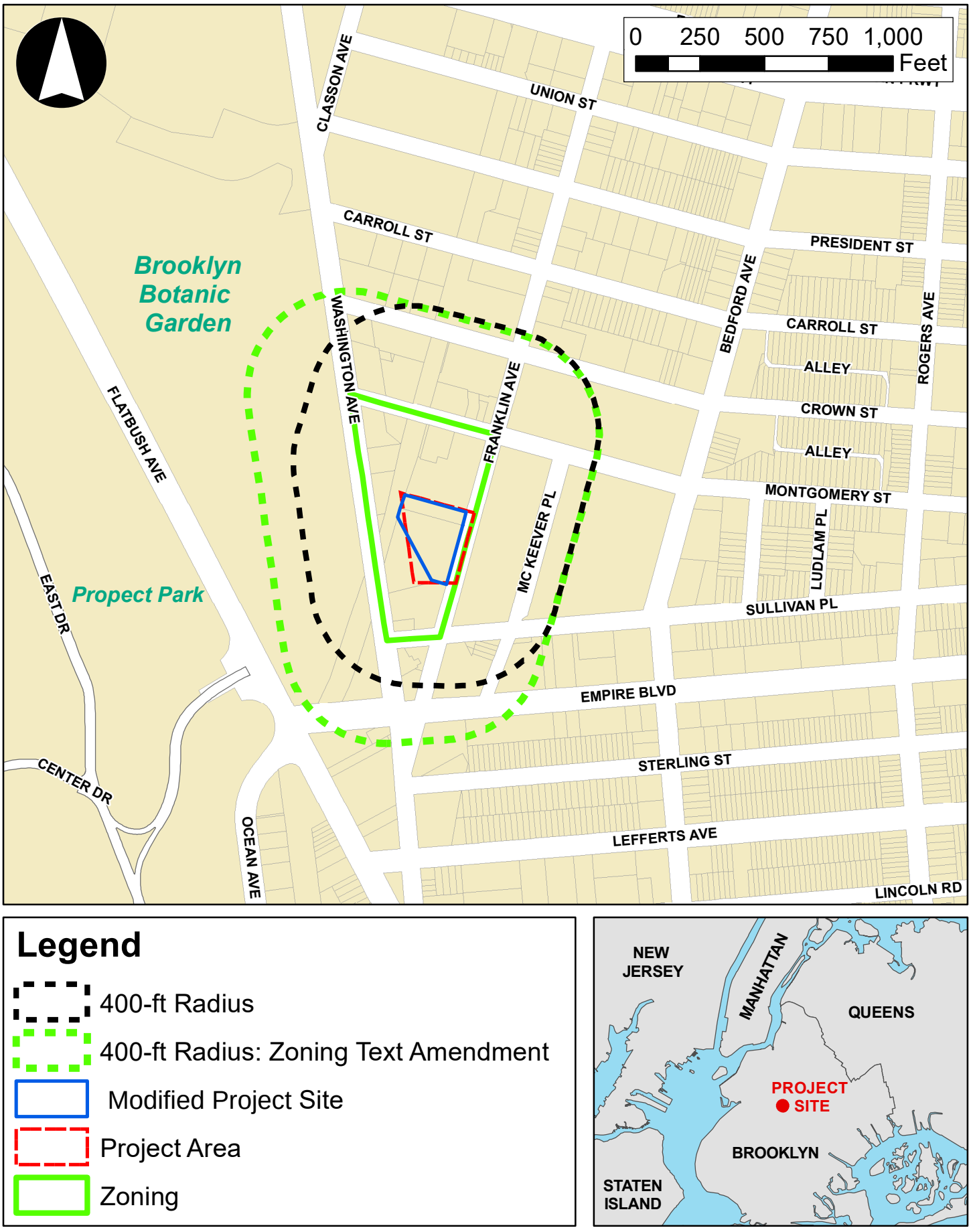
The proposed Modified Text Amendment, if adopted in connection with the other Proposed Actions, would immediately apply to the Development Site. The proposed Modified Text Amendment would apply to future developments on the other properties within the Zoning Text Amendment Boundary if those properties are subsequently designated as MIH Areas. **Figure 1** shows the Modified Project Location.

A copy of the proposed Modified Text Amendment is attached to this memo as **Appendix A**.

Modified Project

Pursuant to the proposed Modified Text Amendment, the Modified Project would be built to the street line and rise 104.3' (10 stories) before setting back 15' along Franklin Avenue. The building would then rise to a total roof height of 145' (14 stories). Toward the rear portion of the building, along the imaginary sloping plane, the Modified Project would step down to a height of 111'-7" (11 stories) at the areas closest to the BBG Resources. The Modified Project would utilize the full 7.2 FAR pursuant to the R8A zoning district with MIH. **Figures 2 and 3** provide birds-eye views of the Modified Project.

Figure 1-1
Modified Project Location



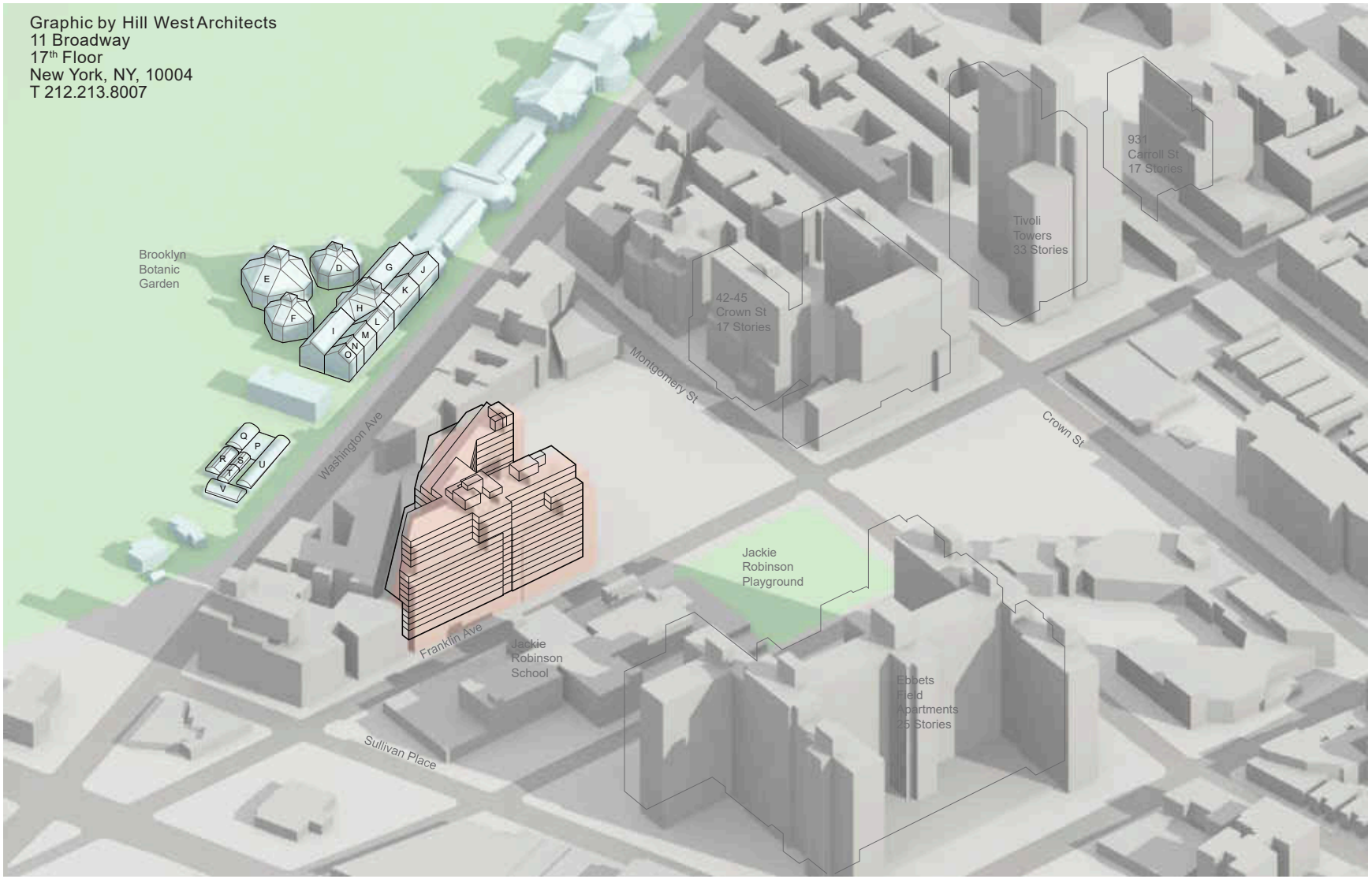


Figure 2

962-972 Franklin Avenue Rezoning

Bird's Eye View to Northwest

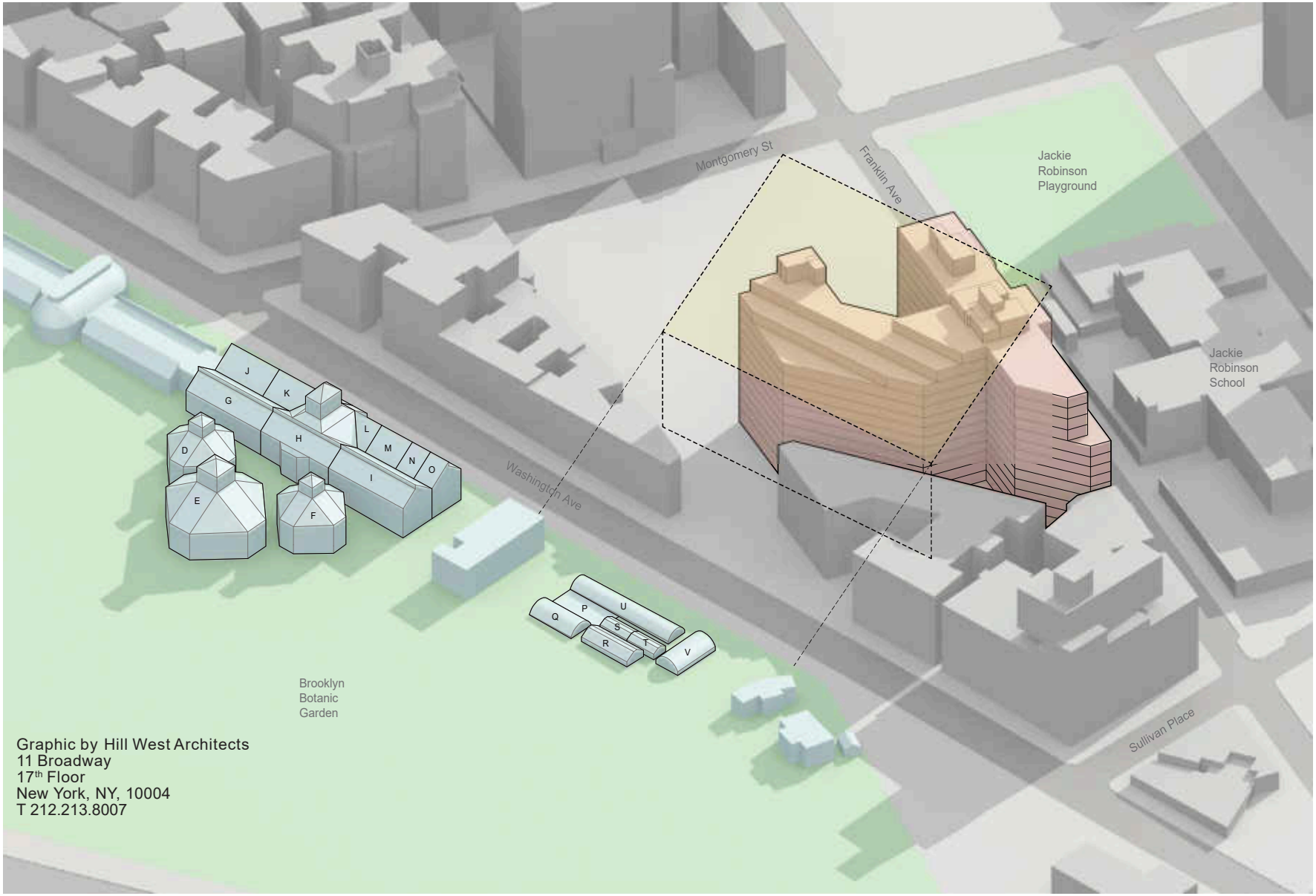


Figure 3

962-972 Franklin Avenue Rezoning

Bird's Eye View to Northeast

Land Use Rationale for the Modified Project

As set forth in detail below, the proposed Modified Text Amendment is necessary because existing bulk controls do not reduce or eliminate the significant adverse open space, shadows, and natural resources impacts identified as a result of the Proposed Actions in the Project Area. The proposed Modified Text Amendment specifically addresses the relationship between building heights and the duration of shadows impacting the BBG Resources. If adopted in connection with the proposed zoning map amendment, this proposed Modified Text Amendment would facilitate the construction of new housing on the Development Site (including permanently affordable housing) in a manner that is both supportive of the City's objectives for new residential density while also minimizing the duration of shadows cast by the Development Site on the BBG Resources.

A. Existing bulk controls are insufficiently tailored to protect the BBG Resources without sacrificing significant density and affordability.

The potential for reduced sunlight to the BBG Resources by new development within the Project Area is driven by two factors: First, the maximum height of a structure dictates the potential reach of shadows; and second, the width of said structure dictates the duration of those shadows over a sun-sensitive resource. As one moves further away from a sun-sensitive resource, structure heights can increase at the rate of the slope at which sunlight reaches the resource without increasing the reduction in sunlight exposure.

With respect to the Modified Project, this means that the portions of the building along Franklin Avenue can be significantly taller than the rear portions of the building without reducing sunlight over those resources.

Existing height and setback regulations are generally not designed to regulate height and setback relative to the angle of the sun. To the extent that zoning enforces setbacks above a certain height, it only does so from a street line (or other lot lines).

Furthermore, while existing height and setback regulations set forth maximum building heights, zoning allows for as-of-right, "permitted obstructions" that may exceed those heights by as much as 55 feet. However, these "permitted obstructions" still have the potential to reduce sunlight on the BBG resources.

The Zoning Resolution contains various discretionary actions that allow agencies like the CPC and BSA to impose site plan and building envelope restrictions beyond those required by zoning. However, these mechanisms only apply when a building seeks relief from or a waiver of bulk regulations, which is not the case here.

The only other existing mechanism to limit the height of new development within the Project Area is to map the entire area with a zoning district with density and bulk controls low enough to avoid obstructing sunlight exposure to sunlight sensitive resources.

According to the applicant, the City's interest in facilitating new housing development , together with the unique cultural importance of the BBG Resources and limits of existing bulk control mechanisms rationalize a zoning text amendment that specifically addresses the complications posed by the proximity of the Project Area to the BBG Resources.

B. The Modified Text Amendment properly addresses the relationship between building height and potential reductions in sunlight.

Unlike open space impacts that are driven by population growth or by direct reductions in open space resources, the potential reduction in sunlight over the BBG resources is strictly a function of the height of a proposed development and its location relative to those resources and is therefore calculable (i.e., the further the structure is from the BBG Resources, the structure can continue to increase in height along the slope of the sunlight before raising the possibility of a reduction in sunlight).

Modified Text Amendment, the Modified Project can fully utilize the density allowed within an R8A zoning district with MIH while also reducing the duration of shadow coverage that such development would cast over the BBG Resources.

Under the proposed Modified Text Amendment, the maximum height of the portions of the Modified Project closest to the BBG Resources would be 111'-7", inclusive of any bulkheads or other structures. The maximum height would only increase to the maximum height of 145' as the building moves further away from the BBG Resources. Importantly, a maximum height of 111'-7" is within the range of permitted heights under the existing R6A zoning district, inclusive of bulkheads and other permitted obstructions. It would also be shorter than the maximum building heights allowed within the existing R8A zoning district along Washington Avenue. At the same time, the Proposed Development would contain significantly more housing, including 119 units of permanently income restricted units pursuant to MIH.

The Applicant therefore submits that the Modified Text Amendments are appropriate and necessary.

C. ENVIRONMENTAL REVIEW OF THE MODIFIED PROJECT

Density-based and Site-based Screening

The Modified Project, which is intended to lessen the shadows effects of the Proposed Project while still addressing its purpose and need would, for reasonable worst case development scenario (RWCDS) purposes have the same development program and Proposed Development Site boundary as analyzed in the **DEIS** for the Proposed Project pursuant to the certified application.

The Modified Text Amendment would only regulate the building envelope and not affect the permitted or built floor area, uses, parking and loading regulations, or any other elements subject to zoning. Accordingly, as is the case for the Proposed Project identified and analyzed in the **DEIS**, under With-Action conditions the Modified Project would include 475 DUs (approximately 419,346 gsf), of which 119 would be permanently affordable DUs, 8,128 gross square feet (gsf) of local retail space, and 71 accessory parking spaces (27,349 gsf), 2,752 gsf of loading area, and 13,920 gsf of mechanical/storage space. Overall, the building would have approximately 471,495 gsf of building area.

As the Modified Project would only change the arrangement of bulk, likewise it would not change With-Action conditions in relation to the boundary of the Proposed Development Site or the location of building entrances for pedestrians or vehicles.

Additionally, given that the Modified Project would have approximately the same amount of gross square footage and would be of a similar height to the Proposed Project analyzed in the **DEIS**, the construction

schedule and duration would be substantially the same and the resulting effects likewise would be the same.

Therefore, for those CEQR impact technical areas where the effects of the Proposed Project are due only to density-based and/or site-based effects without reference to the location of building envelope, the effects of the Modified Project would be identical to the effects identified in the **DEIS** for the Proposed Project pursuant to the certified application. Therefore, further analysis of the Modified Project is not warranted for the following CEQR impact technical areas:

- Socioeconomic Conditions
- Community Facilities and Services
- Open Space (except for Shadows as discussed below)
- Historic and Cultural Resources
- Natural Resources (except for Shadows as discussed below)
- Hazardous Materials
- Water and Sewer Infrastructure
- Solid Waste and Sanitation Services
- Energy
- Transportation
- Greenhouse Gas Emissions and Climate Change
- Noise
- Construction

Conceptual Analysis Screening: Other Sites Potentially Affected by the proposed Modified Text Amendment

The proposed Modified Text Amendment would affect the entire block on which the Proposed Development Site is located. It would modify the underlying height and setback regulations by establishing an absolute height limit based on a structure's location relative to the BBG Resources for future developments if those properties are subsequently designated as MIH Areas through a zoning text amendment to Appendix F of the Zoning Resolution. As such, if any of the other properties on the block besides the Proposed Development Site in the future seek a rezoning to increase permitted residential density, then, consistent with City policy, it is anticipated that such a rezoning would include a zoning text amendment to designate them as an MIH Area.

The existing properties on the block (excluding the Proposed Development Site) and their current conditions are summarized in **Table 1.** As indicated by the table, there are ten other tax lots on the block and the block is split between R6A and R8A zoning districts. Eight of the ten tax lots have existing buildings with residential units, one tax lot is a No-Build residential development site (956 Franklin Avenue), and one tax lot is the Franklin Avenue Shuttle right-of-way owned by NYC Transit. Given the existing conditions on these development sites, it is considered unlikely for the foreseeable future that there would be a rezoning application pursued for some or all of these properties. Therefore, a conceptual analysis for the potential effects of the proposed Modified Text Amendment on future developments on other sites is not warranted for this environmental review. However, in the event that a rezoning is pursued for any or all of these properties in the future with the Proposed Modified Text Amendment in place, it is expected that the imaginary sloping plane would serve to minimize the shadows effects of any new development on the block on the BBG Resources. An impact determination of the shadows effects of such rezonings would be subject to their own environmental reviews at the time that such future action is sought.

Other Technical Areas With Potential Changes in Effects

CEQR impact technical areas that are potentially sensitive to changes in building envelope due a zoning action under the Modified Project include: Land Use, Zoning, and Public Policy; Shadows (and shadows effects on Open Space and Natural Resources); Urban Design and Visual Resources; and Air Quality.

For each of these technical areas, the effects of and impact determinations for the Modified Project, as compared to the Proposed Project analyzed in the **DEIS**, are provided below.

Land Use, Zoning, and Public Policy

As described in **DEIS Chapter 2, "Land Use, Zoning, and Public Policy,"** the Proposed Project would not result in any significant adverse impacts to land use, zoning, or public policy.

The Modified Project would have very similar effects on land use, zoning, and public policy as compared to the Proposed Project. This is because under both scenarios, the underlying zoning and the development program would be the same. While the building massing would differ, the maximum permitted envelope allowed under the Modified Project would be more restrictive than under the Proposed Project with the certified application. The Applicant believes that this unusually restrictive control on bulk is warranted, consistent with the land use rationale presented above, due to the need to balance concerns over shading on the BBG Resources with opportunities to provide additional affordable housing .

While the FEIS will need to provide a qualitative assessment of the proposed Modified Text Amendment, given the area's unique conditions and the purpose of the action, it would not result in significant adverse land use, zoning, and public policy impacts.

Shadows/Open Space/Natural Resources

As described in **DEIS Chapter 3, "Open Space," Chapter 4, "Shadows," and Chapter 5, "Natural Resources,"** the Proposed Project would result in significant adverse impacts due to direct shadows effects on open space and natural resources in the Brooklyn Botanic Garden and Jackie Robinson Playground.

Table 1, Block 1192, Other Properties Subject to the Proposed Modified Text Amendment

Address	Block	Lot	Land Use	ZoneDist 1	ZoneDist2	Lot Area (Sq ft)	Building Area (Sq ft)	Building Height (ft)	Number of Floors	DUs	Built FAR	Max. Permitted FAR (weighted)	Notes
Washington Ave.	1192	1	Transportation/Utility	R6A	R8A	30,080	0	0.0	0	0	0.00	4.57	Franklin Ave. Shuttle R-o-W
975 Washington Ave.	1192	6	Multi-Family Walkup Buildings	R8A		9,920	30,000	46.6	4	44	3.02	6.02	
961 Washington Ave.	1192	14	Multi-Family Walkup Buildings	R8A	R6A	11,079	28,572	46.6	4	40	2.58	6.02	
941 Washington Ave.	1192	18	Mixed Commercial/Residential Buildings	R8A	R6A	21,014	65,000	69.2	6	52	3.09	6.02	
104 Montgomery St.	1192	30	Mixed Commercial/Residential Buildings	R6A	R8A	6,224	12,393	30.1	2	2	1.99	6.02	
956 Franklin Ave.	1192	40	No-build Development pending	R6A		66,613	0	0.0	0	0	0.00	3.00	Formerly Lots 41 & 46
1015 Washington Ave.	1192	77	Multi-Family Elevator	R8A	R6A	28,432	95,000	67.3	6	90	3.34	5.36	New development on Lot 95;
1035 Washington Ave.	1192	85	Mixed Commercial/Residential Buildings	R8A	R6A	28,437	117,250	74.0	6	94	4.12	6.01	Lots 75, 85, & 95 a single
1 Sullivan Pl.	1192	95	Multi-Family Elevator Buildings	R8A		3,057	52,670	0.0	0	52	17.23	6.02	zoning lot
995 Washington Ave.	1192	7501	Mixed Commercial/Residential Buildings	R8A		1,036	3,707	50.0	5	2	3.58	6.02	Formerly Lot 5

As described above, the Applicant is proposing a Modified Project to reduce the significant adverse impacts identified as compared to the Proposed Project. The massing of the building assumes a bulkhead compliant with imaginary sloping plane that would be established on the block under the proposed Modified Text Amendment. As discussed below, the Modified Project would cast shadows on the BBG Resources and Jackie Robinson Playground, but of overall lesser durations than the Proposed Project. As such, the Modified Project would result in significant adverse shadows impacts of lesser magnitude than the Proposed Project.

Following the CEQR shadows methodologies outlined in the *CEQR Technical Manual* and in **DEIS Chapter 4**, **Figures 4a and 4b** present the Tier 3 analysis for the Modified Project. Similar to the conclusions outlined in the **DEIS**, the Tier III Analysis for the Modified Project identifies two sunlight sensitive resources warranting further analysis; the Brooklyn Botanic Garden and the Jackie Robinson Playground.

Brooklyn Botanic Garden

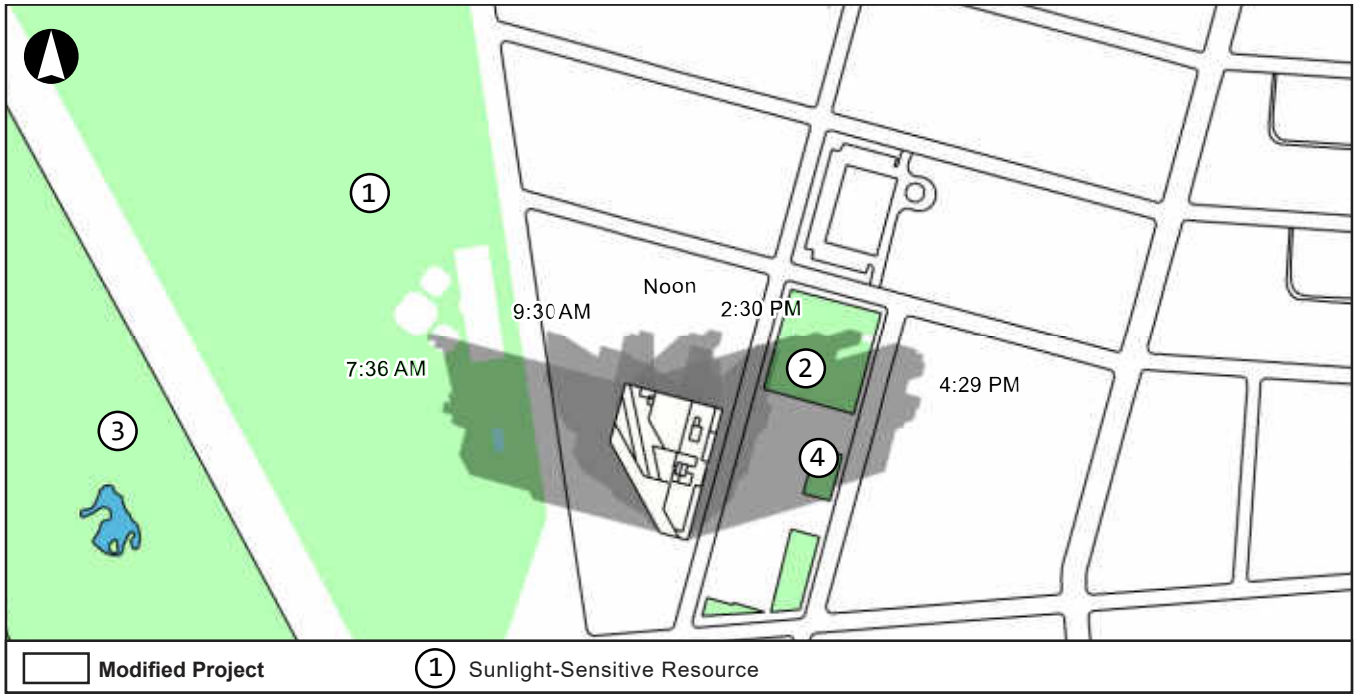
Under the Modified Project, incremental shadows would be cast over several of the affected greenhouses in the Brooklyn Botanic Garden used to propagate plants for desert, tropical, and warm temperate climates that require full, year-round sun including sunlight during the winter months. Incremental shadows from the Modified Project would be cast over parts of this sunlight-sensitive resource on each of the four analysis days. As shown in **Table 2**, incremental shadows from the Modified Project would range on the Brooklyn Botanic Garden from 19 minutes on the December 21 analysis day (8:51 – 9:10 AM) to one hour and 32 minutes on the June 21 analysis day (5:57 – 7:29 AM). Refer to **Figures 5a** through **5f**.

Individual resources within the Brooklyn Botanic Garden (Resources A through V in **Table 2**) would experience incremental shadows ranging from three minutes to one hour and 32 minutes (which is for the largest resource, Resource P, which encompasses Resources Q through V within is limits). Although this is the case, compared to the Proposed Project, the Modified Project would result in decreases of incremental shadow duration of up to 1 hour and 31 minutes (the Tropical & Desert Plant Propagation House) (refer to **Table 2**), with the average decrease in incremental shadows being 37 minutes across all Brooklyn Botanical Garden resources.

The Modified Project would result in up to 19 minutes of increased incremental shadow over the Proposed Project on a few resources within the garden. These include: Resource M, Highland Moist Tropical Orchid Workhouse, +5 minutes on December 21; Resource N, Tropical Plant Propagation House, +9 minutes on December 21; Resource O, Tropical & Desert Plant Propagation House, +3 minutes on December 21; Resource S, Tropical Bonsai House, +6 minutes on March 21/September 21; Resource T, Auxiliary House, +18 minutes on March 21/September 21; and Resource V, Mediterranean Display Plants Tunnel, +19 minutes on March 21/September 21. Although this is the case, the overall impact on the Garden is lessened as illustrated in the prior paragraph. Furthermore, the resources experiencing increased durations under the Modified Project would all experience total incremental shadowing of less than 28 minutes.

Greenhouses within the Brooklyn Botanic Garden are used to propagate plants for desert, tropical, and warm temperate climates that require full, year-round sun including sunlight during the winter months. While the *CEQR Technical Manual* states that six to eight hours of sunlight is necessary for plant survival, the Brooklyn Botanic Garden contains over 18,500 kinds of plants, with globally rare species and native

Analysis Day: March 21 / September 21



Analysis Day: May 6 / August 6

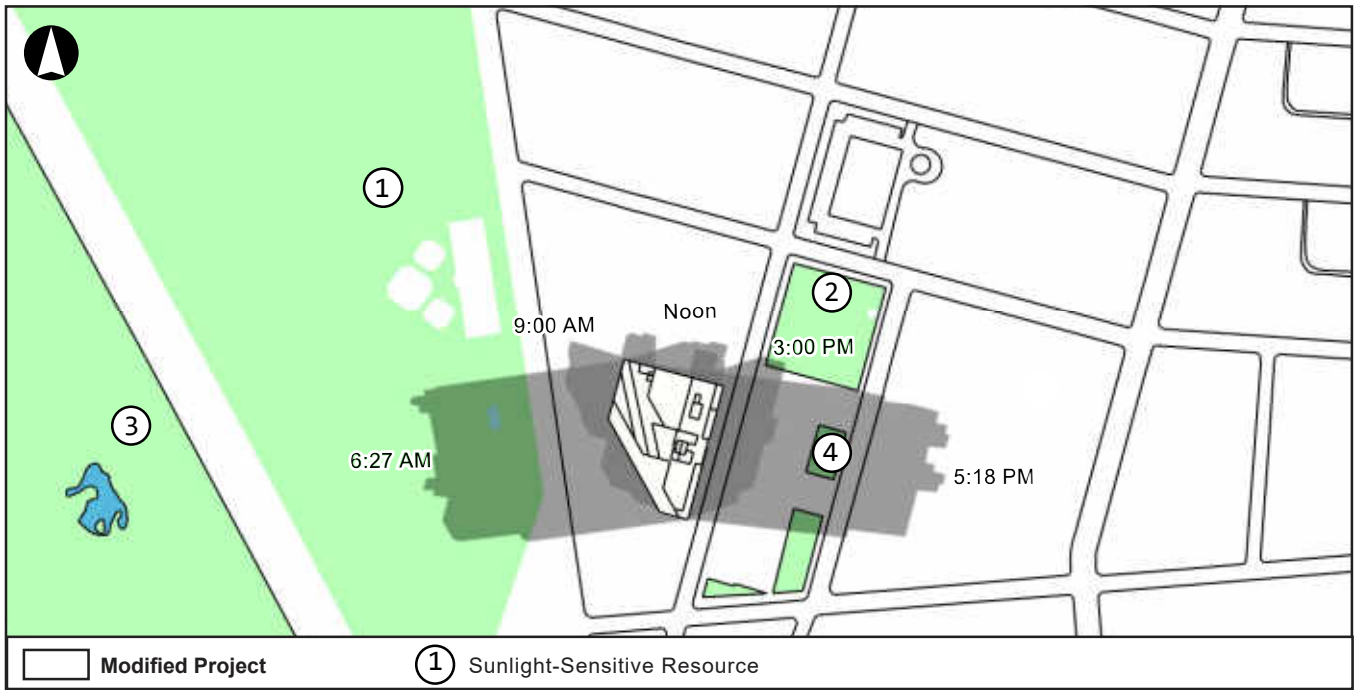
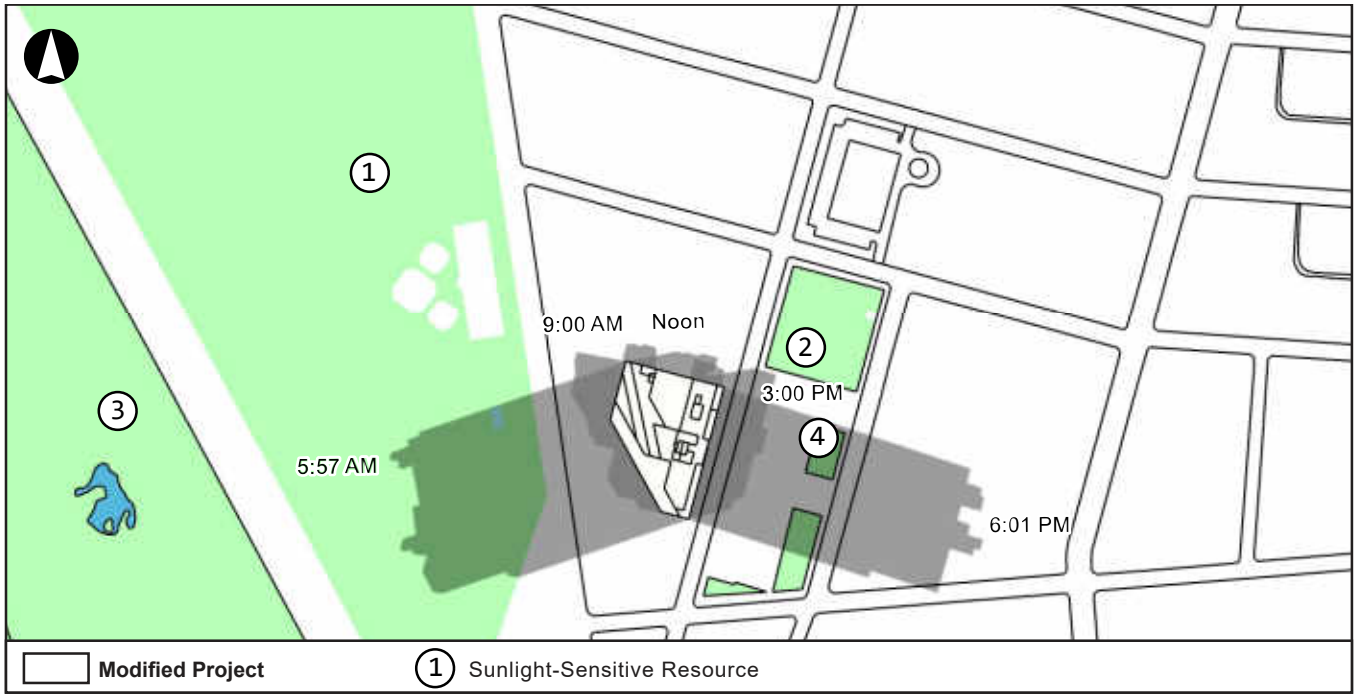


Figure 4b
Shadows Assessment: Tier 3

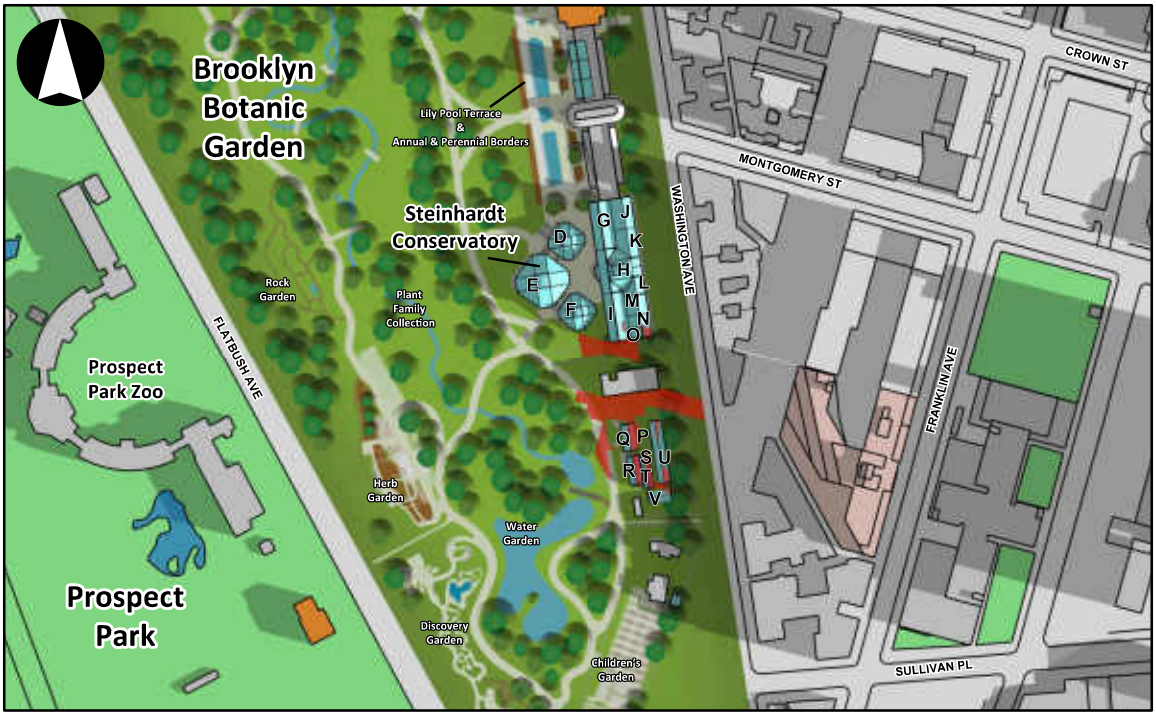
Analysis Day:June 21



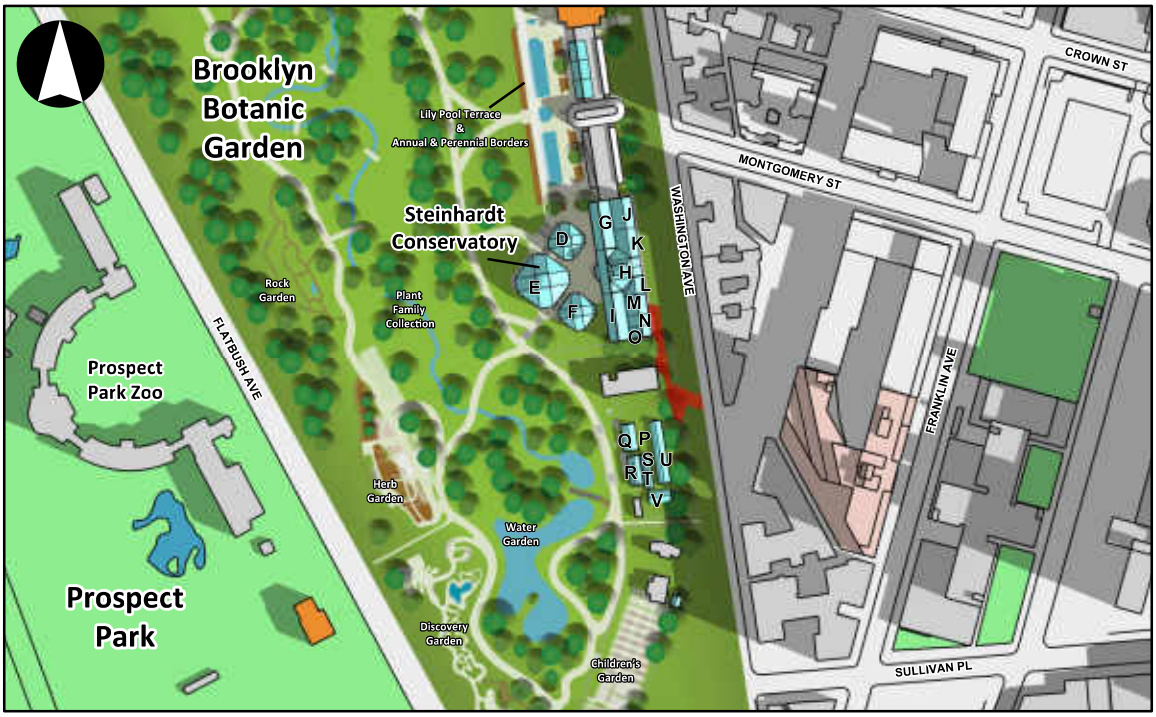
Analysis Day: December 21



Figure 5a
Brooklyn Botanic Gardens
Incremental Shadows on March 21/September 21



7:36 AM



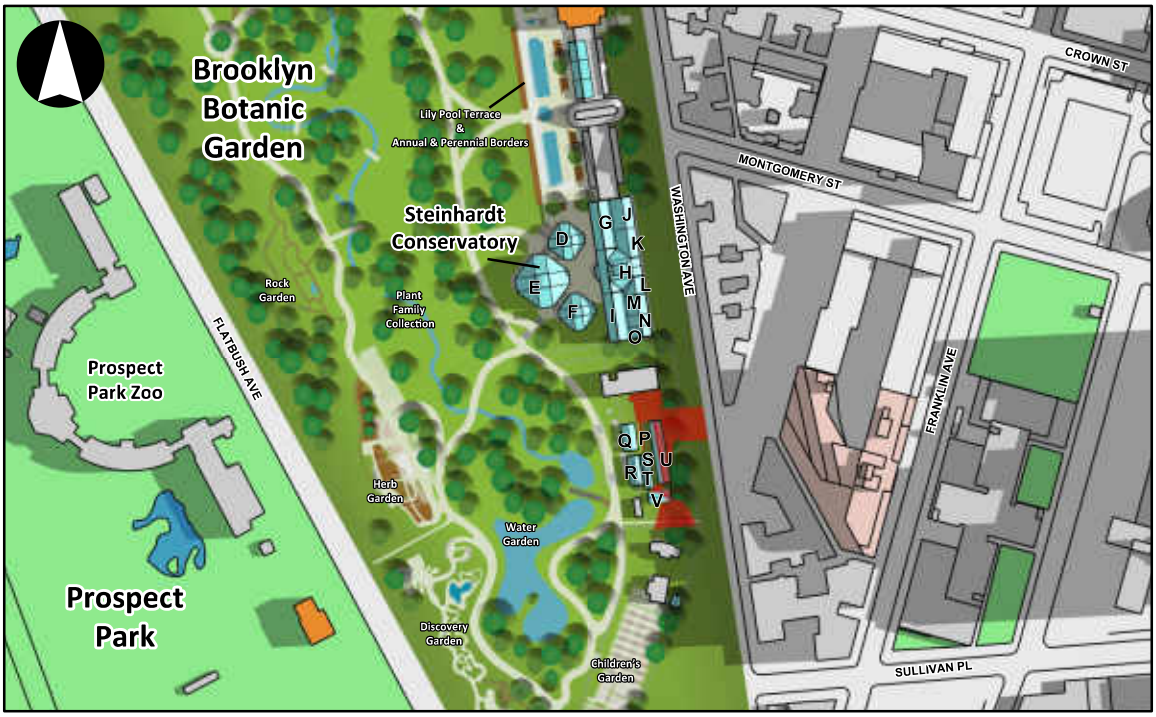
8:15 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

Figure 5b
Brooklyn Botanic Gardens
Incremental Shadows on May 6/August 6



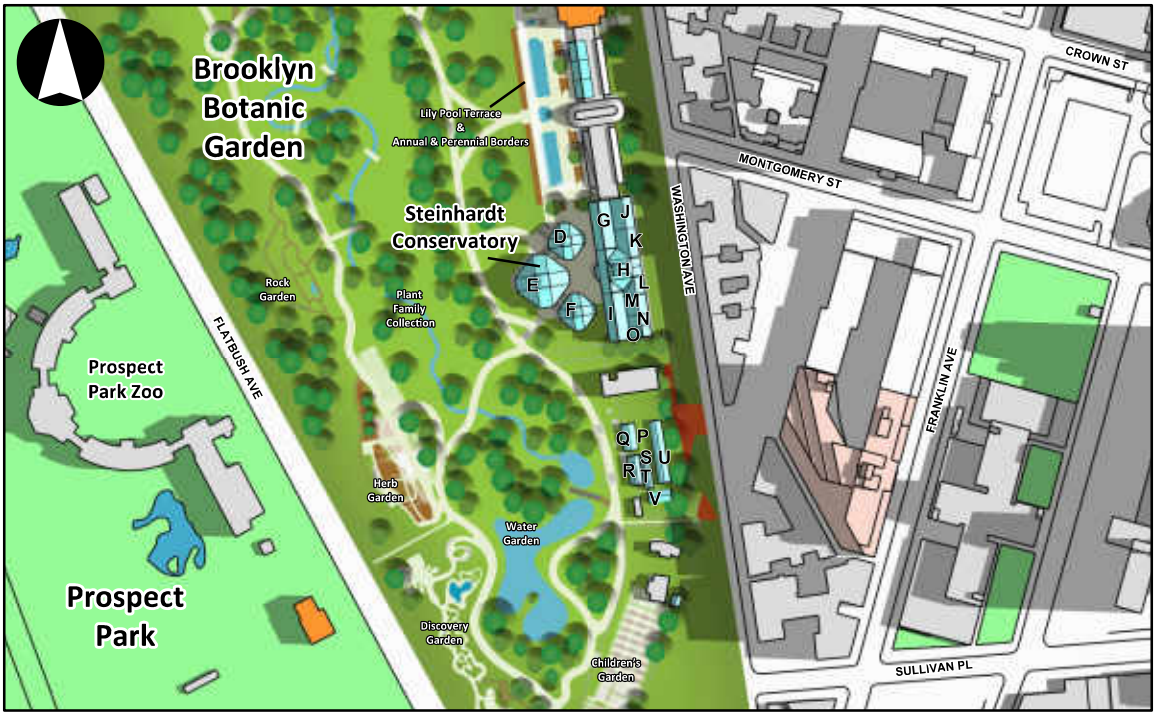
6:27 AM



7:00 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

Figure 5c
Brooklyn Botanic Gardens
Incremental Shadows on May 6/August 6



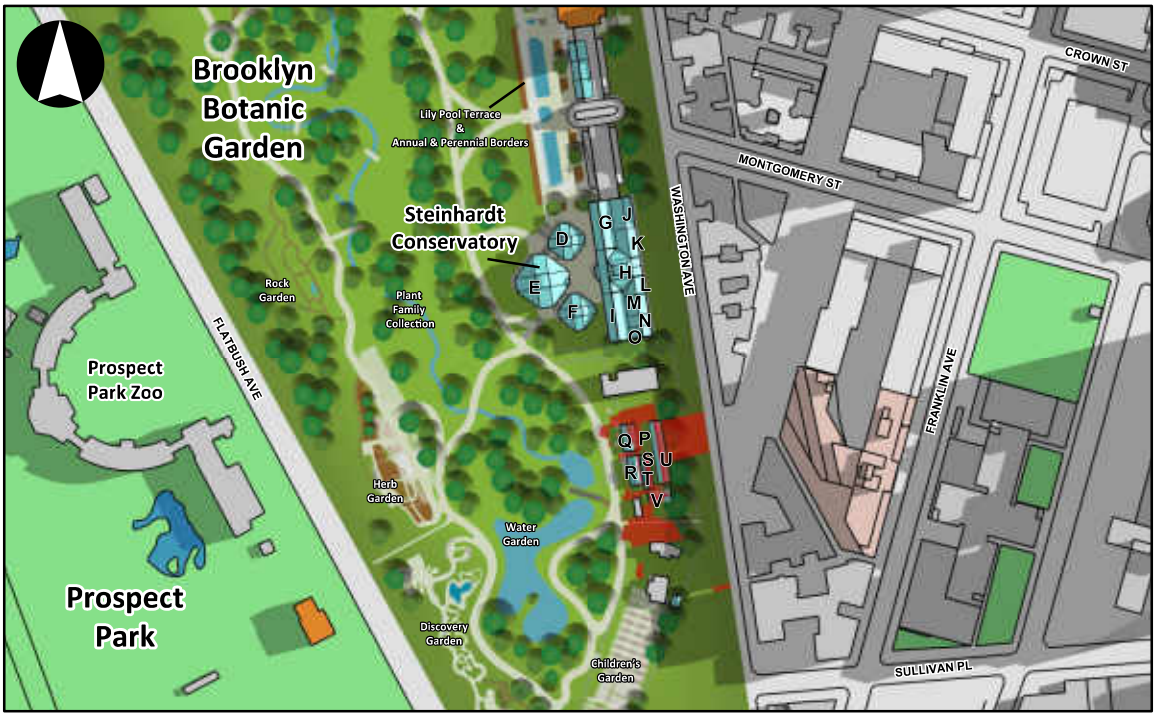
7:30 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

Figure 5d
Brooklyn Botanic Gardens
Incremental Shadows on June 21



5:57 AM



6:30 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

Figure 5e
Brooklyn Botanic Gardens
Incremental Shadows on June 21



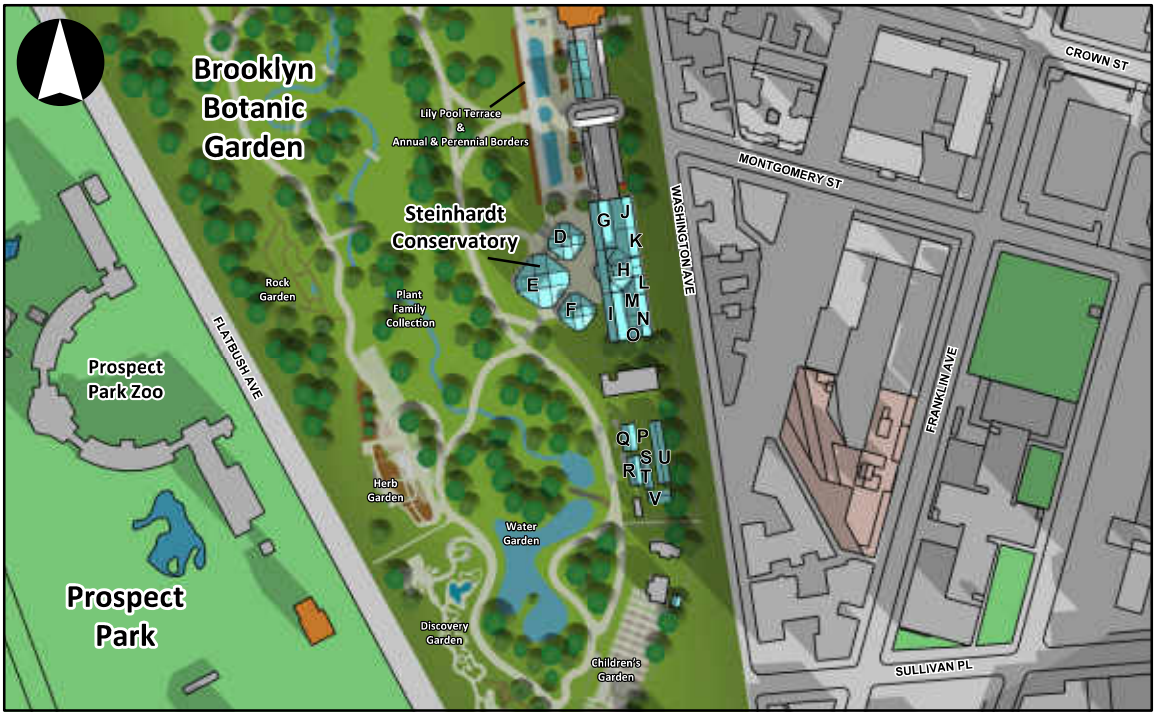
7:00 AM



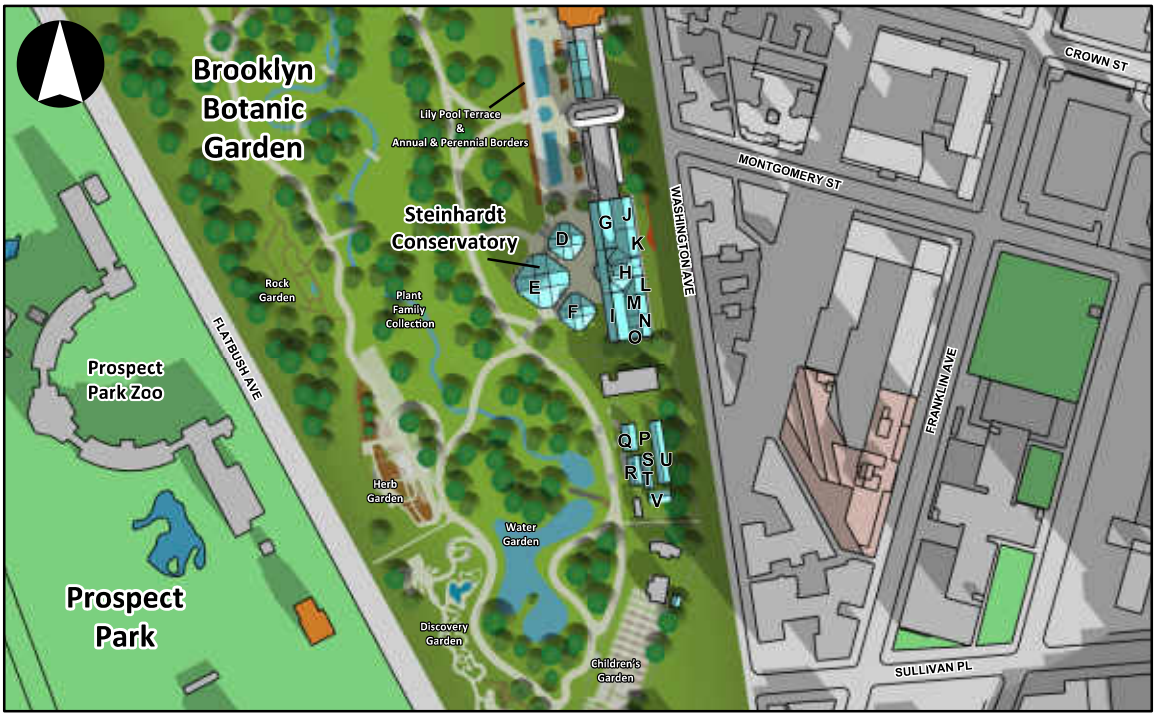
7:30 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

Figure 5f
Brooklyn Botanic Gardens
Incremental Shadows on December 21



8:51 AM



9:15 AM

Modified Project	Open Space	Historic Resource
Greenhouse Facility	Incremental Shadow	Water Feature

rare species. The minimum sunlight needed to constitute survival may not be enough to promote healthy growth of these rare plants. While the Modified Project would result in a reduction of the incremental shadow durations from Proposed Project on a number of sun-sensitive resources in the Brooklyn Botanic Garden, the Modified Project would not eliminate the significant adverse impacts identified in the DEIS due to the unique nature of the BBG resources.

Table 2-2
Incremental Shadow Coverage – Modified Project

Resource #	Resource	Analysis Day	March 21/Sept. 21	May 6/August 6	21-Jun	21-Dec	Incremental Shadow Durations Compared to the Proposed Project (EIS Table 4-6)			
			7:36 AM – 4:29 PM	6:27 AM – 5:18 PM	5:57 AM – 6:01 PM	8:51 AM – 2:53 PM	March 21/Sept. 21	May 6/August 6	21-Jun	21-Dec
1	Brooklyn Botanic Garden	Shadow enter-exit time	7:36 - 8:25 AM	6:27 - 7:42 AM	5:57 - 7:29 AM	8:51 - 9:10 AM	-1 hour 11 minutes	-1 hour 18 minutes	-1 hour 25 minutes	-53 minutes
		Incremental shadow duration	49 minutes	1 hour 15 minutes	1 hour 32 minutes	19 minutes				
2	Jackie Robinson Playground	Shadow enter-exit time	2:16 - 4:29 PM	2:15 - 4:55 PM	-	1:45 - 2:53 PM	-33 minutes	-44 minutes	-1 hour 41 minutes	-10 minutes
		Incremental shadow duration	2 hours 13 minutes	2 hours 40 minutes	-	1 hour 8 minutes				
3	Prospect Park	Shadow enter-exit time	-	-	-	-	-	-	-	-
		Incremental shadow duration	-	-	-	-				
4	P.S. 375K Community Playground	Shadow enter-exit time	-	-	-	-	-	-	-	-
		Incremental shadow duration	-	-	-	-				
A	Education Greenhouse: Desert Plants	Shadow enter-exit time	-	-	-	-	-	-	-	-9 minutes
		Incremental shadow duration	-	-	-	-				
B	Education Greenhouse: Warm Temperate Plants	Shadow enter-exit time	-	-	-	-	-	-	-	-11 minutes
		Incremental shadow duration	-	-	-	-				
C	Education Greenhouse: Tropical Plants	Shadow enter-exit time	-	-	-	-	-	-	-	-13 minutes
		Incremental shadow duration	-	-	-	-				
D	Helen Mattin Warm	Shadow enter-exit time	-	-	-	-	-	-	-	-

	Temperate Pavilion	Incremental shadow duration	-	-	-	-				
E	Tropical Pavilion	Shadow enter-exit time	-	-	-	-	-40 minutes	-	-	-
		Incremental shadow duration	-	-	-	-				
F	Desert Pavilion	Shadow enter-exit time	-	-	-	-	-52 minutes	-	-	-
		Incremental shadow duration	-	-	-	-				
G	C.V. Starr Bonsai Museum	Shadow enter-exit time	-	-	-	-	-	-	-	-27 minutes
		Incremental shadow duration	-	-	-	-				
H	Conservatory Entry House	Shadow enter-exit time	-	-	-	-	-14 minutes	-	-	-16 minutes
		Incremental shadow duration	-	-	-	-				
I	Aquatic House & Orchid Collection	Shadow enter-exit time	-	-	-	-	-1 hour 16 minutes	-	-	-
		Incremental shadow duration	-	-	-	-				
J	Desert, Mediterranean, South African Bulb (Arid) Workhouse	Shadow enter-exit time	-	-	-	8:51 - 9:08 AM	-	-	-	-25 minutes
		Incremental shadow duration	-	-	-	17 minutes				
K	Humid Tropics Workhouse	Shadow enter-exit time	-	-	-	8:51 - 9:10 AM	-	-	-	-18 minutes
		Incremental shadow duration	-	-	-	19 minutes				
L	Lowland Moist Tropical Orchid Workhouse	Shadow enter-exit time	-	-	-	8:51 - 9:06 AM	-41 minutes	-	-	-7 minutes
		Incremental shadow duration	-	-	-	15 minutes				
M	Highland Moist Tropical Orchid Workhouse	Shadow enter-exit time	-	-	-	8:51 - 9:05 AM	-1 hour 21 minutes	-	-	+5 minutes
		Incremental shadow duration	-	-	-	14 minutes				

N	Tropical Plant Propagation House	Shadow enter-exit time	-	-	-	8:51 – 9:00 AM	-1 hour 29 minutes	-	-	+9 minutes
		Incremental shadow duration	-	-	-	9 minutes				
O	Tropical & Desert Plant Propagation House	Shadow enter-exit time	-	-	-	8:51 – 8:54 AM	-1 hour 31 minutes	-	-	+3 minutes
		Incremental shadow duration	-	-	-	3 minutes				
P	Hardy Plant Nursery Yard	Shadow enter-exit time	7:36 - 8:25 AM	6:27 - 7:22 AM	5:57 - 7:29 AM	-	-39 minutes	-1 hour 12 minutes	-1 hour 25 minutes	-
		Incremental shadow duration	49 minutes	1 hour 15 minutes	1 hour 32 minutes	-				
Q	Temperate Bonsai Tunnel	Shadow enter-exit time	7:36 - 7:53 AM	6:27 - 6:58 AM	5:57 - 6:52 AM	-	- 34 minutes	-1 hour	-1 hour 3 minutes	-
		Incremental shadow duration	17 minutes	31 minutes	55 minutes	-				
R	Production House	Shadow enter-exit time	7:36 - 7:48 AM	6:27 - 6:52 AM	5:57 - 6:43 AM	-	-3 minutes	-53 minutes	-58 minutes	-
		Incremental shadow duration	12 minutes	25 minutes	46 minutes	-				
S	Tropical Bonsai House	Shadow enter-exit time	7:36 - 8:04 AM	6:27 - 7:01 AM	5:57 - 6:46 AM	-	+6 minutes	-55 minutes	-1 hour 7 minutes	-
		Incremental shadow duration	28 minutes	34 minutes	49 minutes	-				
T	Auxiliary House	Shadow enter-exit time	7:36 – 7:54 AM	6:27 - 7:04 AM	5:57 - 6:49 AM	-	+18 minutes	-38 minutes	-59 minutes	-
		Incremental shadow duration	18 minutes	37 minutes	52 minutes	-				
U	New York-Native Flora & Temperate Plant Propagation Tunnel	Shadow enter-exit time	7:36 - 8:08 AM	6:27 - 7:20 AM	5:57 - 7:07 AM	-	-34 minutes	-59 minutes	-1 hour 11 minutes	-
		Incremental shadow duration	32 minutes	53 minutes	1 hour 10 minutes	-				
V	Mediterranean Display Plants Tunnel	Shadow enter-exit time	7:36 – 7:56 AM	6:32 - 7:13 AM	5:57 – 7:00 AM	-	+19 minutes	-41 minutes	-40 minutes	-
		Incremental shadow duration	20 minutes	41 minutes	1 hour 3 minutes	-				

Note: All times are Eastern Standard Time; Daylight Savings Time was not accounted for per *CEQR Technical Manual* guidance.
Table indicates the entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource.
[1] Keyed to **Figure 4-3 in the DEIS**.

Jackie Robinson Playground

As shown in **Table 2-2**, the Modified Project would cast incremental shadows on the Jackie Robinson Playground on three of the four representative analysis days. The Modified Project would not cast shadow on the June 21 analysis day, unlike the Proposed Project. Incremental shadow coverage under the Modified Project would last between one hour and 8 minutes and two hours and 40 minutes. Compared to the Proposed Project, the Modified Project would result in decreases of incremental shadow duration between ten minutes and one hour and 41 minutes on the March 21/September 21, May 6/August 6, June 21, and December 21 analysis days. This equates to an average incremental decrease of 47 minutes.

As shown in **Figures 4-6a through 4-6e**, incremental shadows from the Modified Project are expected to cast shadow on a passive area for seating, and areas for active uses including a playground and basketball courts. While the incremental shadows impact on Jackie Robinson Playground would be lessened compared to the Proposed Project, significant adverse impacts would still occur. Incremental shadow from the Modified Project would occur over large portions of the park during the March 21/September 21 and December 21 analysis days. Therefore, as the extent and duration of the incremental shadows would (1) significantly reduce or completely eliminate direct sunlight exposure on any of the sunlight-sensitive resources found within this open space; and (2) would alter the public's use of the park, incremental shadows from the Modified Project on Jackie Robinson Playground would be considered a significant adverse impact, in accordance with *CEQR Technical Manual* methodology.

Urban Design and Visual Resources

As described in **DEIS Chapter 6, "Urban Design and Visual Resources,"** the Proposed Project would not result in any significant adverse impacts to urban design and visual resources.

While the maximum permitted roof height, 145 feet, would be the same under both the Modified Project and the Proposed Project, the Modified Project would be constructed within a smaller maximum permitted building envelope due to stricter controls on bulkheads and other building "obstructions" as described above. As such the Modified Project's effects on urban design and visual resources would be very similar to the Proposed Project.

As with the Proposed Project, the Modified Project would be a building form that is similar to other recent developments in the area, would be constructed on an existing block and would not entail any changes to topography, open space, or natural features in the Project Area or secondary study area. Likewise, as with the Proposed Project, the Modified Project would not obstruct any significant viewsheds in the area, or substantially alter the pedestrian experience in the immediate vicinity of the Project Area.

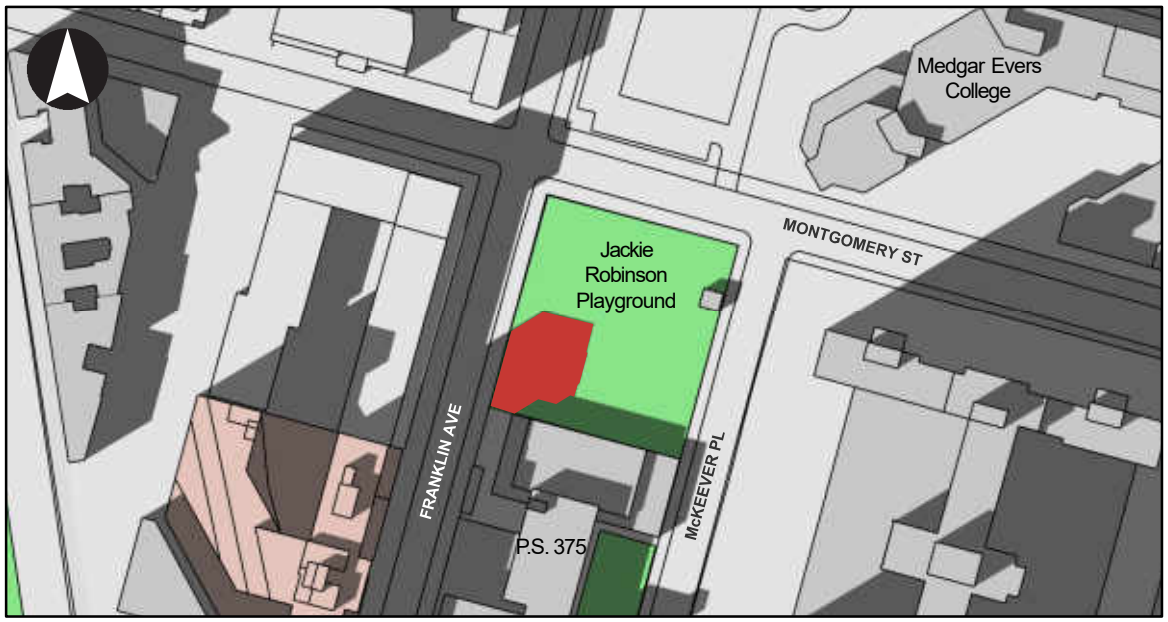
Air Quality

Under the Modified Project, as with the Proposed Project, there would be a new approximately 471,495-gsf mixed use development with 71 accessory parking spaces. While the roof height of the Modified Project, 145 feet, would be the same as the Proposed Project, the total height of the Modified Project as compared to the Proposed Project, inclusive of bulkheads, would be approximately 170 feet, due to the imaginary sloping plane restriction, as compared to the Proposed Project, which with a maximum permitted bulkhead of 55 feet would be up to approximately 200 feet. As such, the Modified Project would

Jackie Robinson Playground
Incremental Shadows on March 21/September 21



2:30 PM



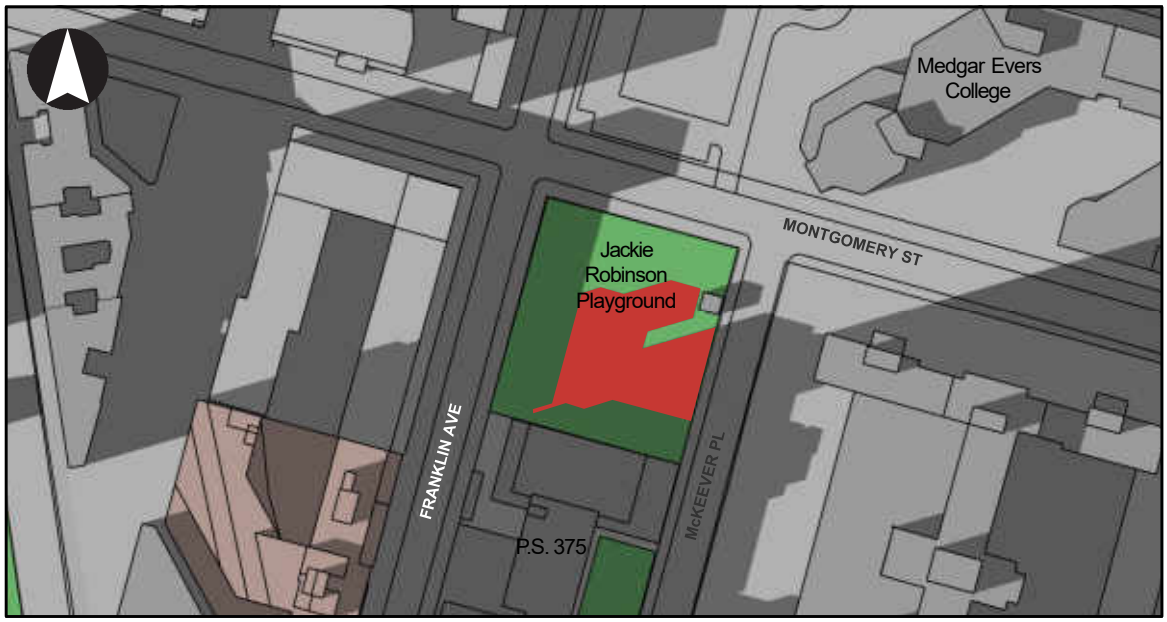
3:15 PM

Modified Project Open Space Incremental Shadow

Figure 4-6b
Jackie Robinson Playground
Incremental Shadows on March 21/September 21



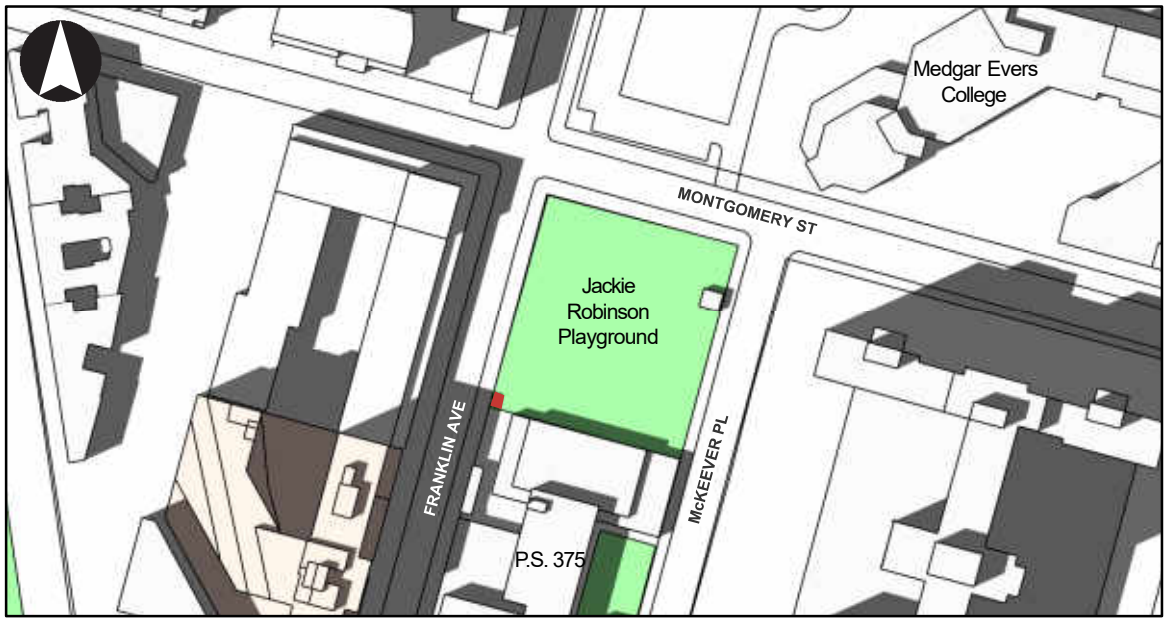
3:45 PM



4:29 PM

Modified Project Open Space Incremental Shadow

Jackie Robinson Playground
Incremental Shadows on May 6/August 6



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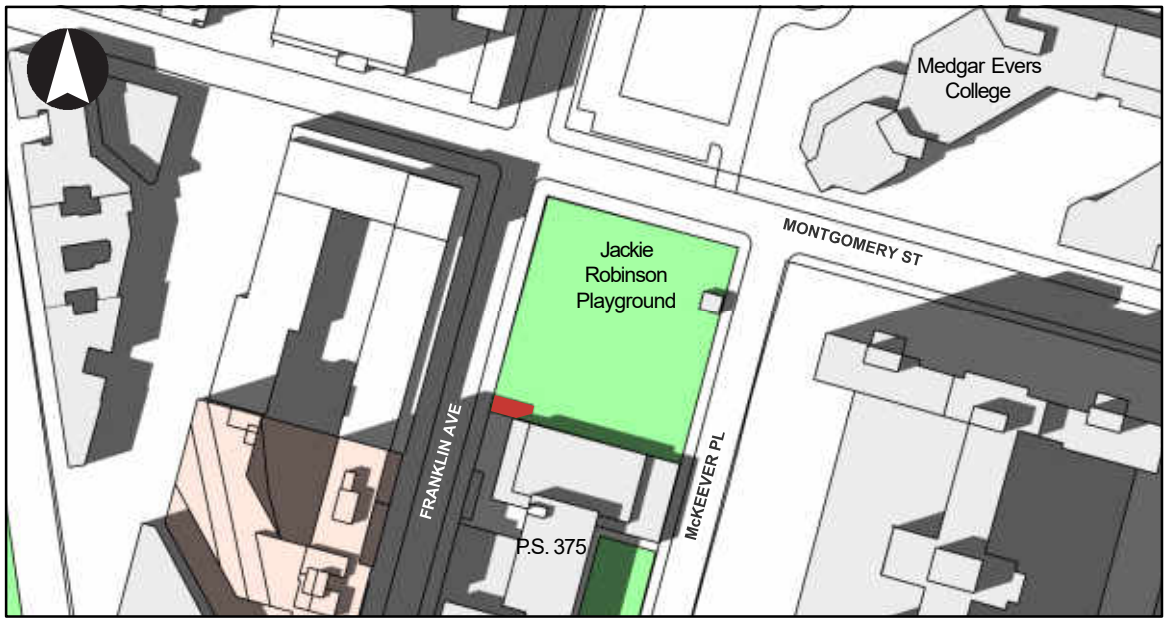
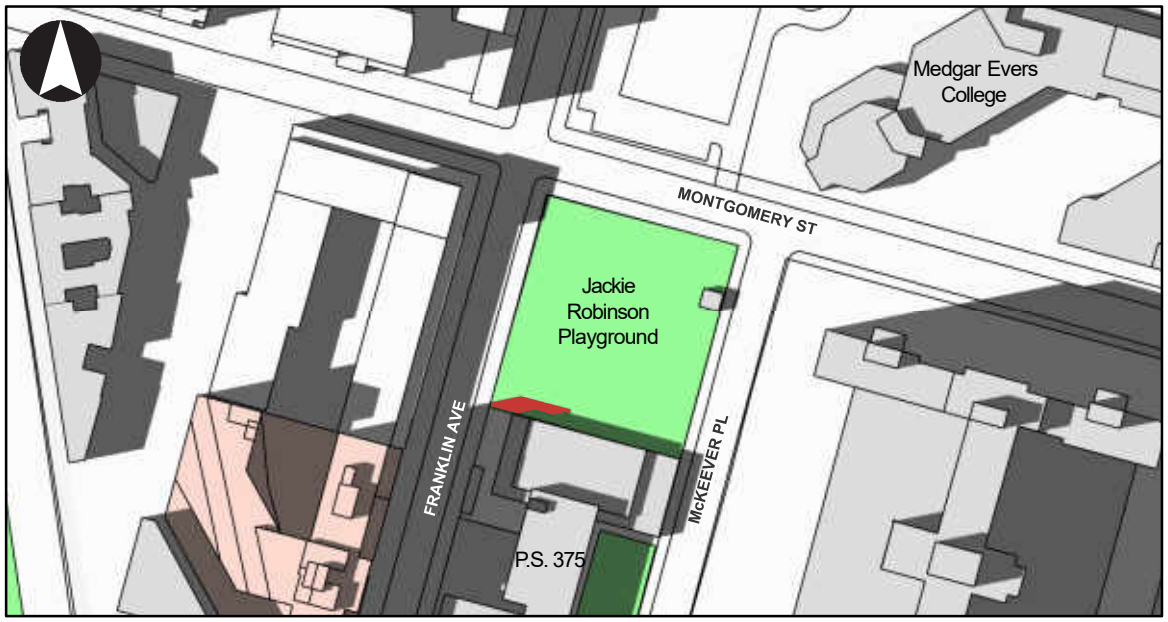


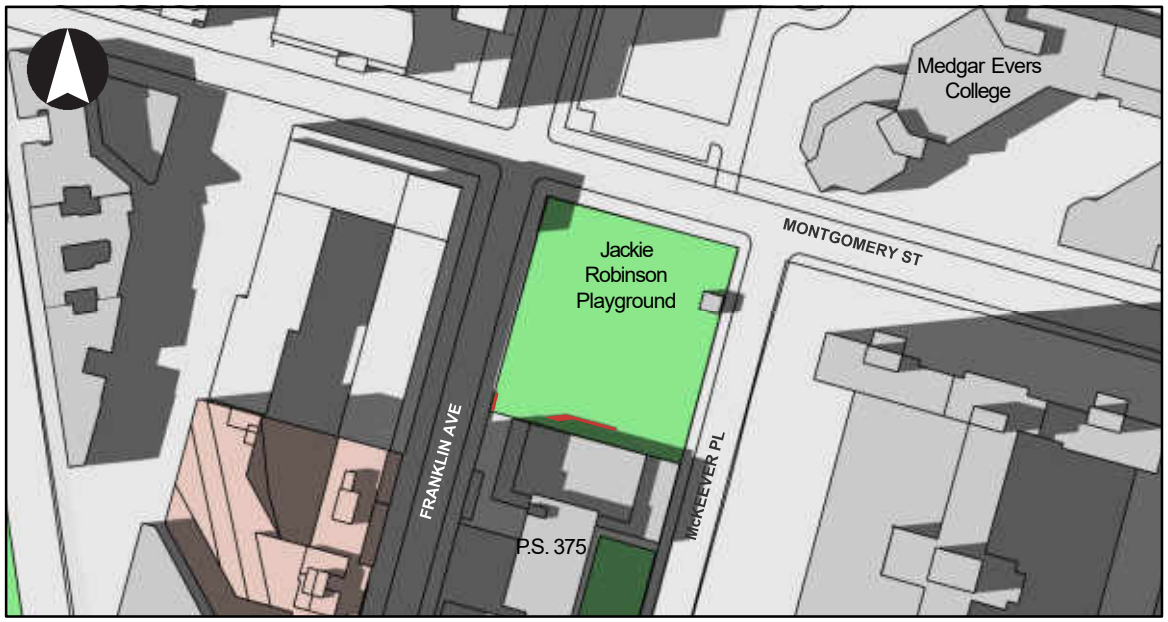
3:00 PM

Modified Project Open Space Incremental Shadow

Figure 4-6d
Jackie Robinson Playground
Incremental Shadows on May 6/August 6



3:30 PM



4:00 PM

Modified Project Open Space Incremental Shadow

Figure 4-6e
Jackie Robinson Playground
Incremental Shadows on December 21



2:00 PM



2:53 PM

Modified Project Open Space Incremental Shadow

introduce stationary source air quality emissions of the same magnitude and similar source locations as compared to the Proposed Project and as is the case for the Proposed Project, the Modified Project would not be expected to result in significant adverse stationary source air quality impacts.

The same (E) designation requirement for stack location identified for the Proposed Project in the **Environmental Assessment Statement (EAS)** for this application, issued June 26, 2023, would also apply to the Modified Project. That requirement is as follows:

> **Block: 1192, Lots: 63 and 66**
>
> **Any new residential and/or commercial development on the above-referenced property must ensure the heating, ventilating, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 148 feet above grade to avoid any potential significant adverse air quality impact.**

Additionally, mobile source emissions from traffic on surrounding roadways would be identical for the Modified Project as compared to the Proposed Project. Accordingly, as is the case for the Proposed Project, the Modified Project would not result in significant adverse mobile source air quality impacts.

Public Health

Similar to the Proposed Project, the Modified Project would not result in any unmitigated significant adverse impacts in any of the technical areas related to public health. According to the *CEQR Technical Manual*, actions that do not result in unmitigated significant adverse impacts related to air quality, water quality, hazardous materials, or noise typically do not warrant a public health analysis. As the Modified Project does not have the potential to cause any significant adverse impacts in those areas, it would not have any significant adverse impacts on public health.

Neighborhood Character

According to the *CEQR Technical Manual*, a proposed project could have a significant adverse neighborhood character impact if it would have the potential to affect the defining features of the neighborhood, either through the potential for a significant adverse impact in any relevant technical area, or through a combination of moderate effects in those technical areas. Similar to the Proposed Project, the Modified Project would not cause significant adverse impacts in the areas of land use, zoning, and public policy; socioeconomic conditions; historic and cultural resources; urban design and visual resources; transportation; or noise. As such, the Modified Project would not affect any defining feature of neighborhood character, nor would a combination of moderately adverse effects affect such a defining feature. The new building that would occur under the Modified Project and the overall neighborhood character of the area would continue to trend toward increased residential and local retail uses on vacant and underutilized sites, as would also occur under the Proposed Project. The study area would continue to be characterized by its evolving mix of land uses and building types, and its location in an area with low pedestrian volumes. Neither the Proposed Project nor the Modified Project would result in significant adverse impacts to neighborhood character.

Appendix A

Proposed Modified Text Amendment

23-443 [COY HO Section Numbers]
Special provisions for certain community districts

…

(b) Borough of Brooklyn

~~For the purposes of applying the #street wall# location as well as the height and setback provisions of Sections 23-431 and 23-432, respectively, where the Administrative Code establishes restrictions on the location of #buildings# on lots fronting upon and within 30 feet of Eastern Parkway in Community Districts 8 and 9 in the Borough of Brooklyn, lines drawn 30 feet north of and 30 feet south of, and parallel to, Eastern Parkway shall be considered the northern and southern #street lines# of Eastern Parkway.~~

(1) Community District 8

For the purposes of applying the #street wall# location as well as the height and setback provisions of Sections 23-431 and 23-432, respectively, where the Administrative Code establishes restrictions on the location of #buildings# on lots fronting upon and within 30 feet of Eastern Parkway lines drawn 30 feet north of and 30 feet south of, and parallel to, Eastern Parkway shall be considered the northern and southern #street lines# of Eastern Parkway.

(2) Community District 9

(i) For the purposes of applying the #street wall# location as well as the height and setback provisions of Sections 23-431 and 23-432, respectively, where the Administrative Code establishes restrictions on the location of #buildings# on lots fronting upon and within 30 feet of Eastern Parkway lines drawn 30 feet north of and 30 feet south of, and parallel to, Eastern Parkway shall be considered the northern and southern #street lines# of Eastern Parkway.

(ii) Notwithstanding any other provisions of this Resolution, except as provided in this section, in #Mandatory Inclusionary Housing areas# within the portion of Community District 9 in the Borough of Brooklyn, on the #block# bounded by Montgomery Street, Washington Avenue, Sullivan Place, and Franklin Avenue, the highest projection of any #building or other structure# hereafter constructed or of any existing #building or other structure# hereafter relocated, #enlarged# or reconstructed shall not penetrate the imaginary inclined plane, rectangular in shape, with dimensions as follows:

(a) Along a line at an elevation of 85 feet above the level of the #base plane#, beginning at the point along the center line of Sullivan Place, distant 120 feet, 4 inches east of the center line of Washington Avenue and parallel to Sullivan Street, and extending to Montgomery Street at an angle

of 83˚17’38” , then rising eastward perpendicularly to such line at a slope of 26˚48’21” (5.06 to 10, expressed as a ratio of vertical distance to horizontal distance in feet).

(iii) Parapets, rails, or safety guards may penetrate such inclined plane only to the extent that would otherwise be permitted obstructions pursuant to Section 23-411 and provided that such parapets, rails, or safety guards are at least 50 percent open or 90 percent transparent for the portion above the inclined plane.

24-56 [COY HO Section Numbers]
Special Height and Setback Provisions for Certain Areas

…

(e) Notwithstanding any other provisions of this Resolution, in #Mandatory Inclusionary Housing areas# within the portion of Community District 9 in the Borough of Brooklyn, on the #block# bounded by Montgomery Street, Washington Avenue, Sullivan Place, and Franklin Avenue, any #building or other structure# hereafter constructed or any existing #building or other structure# hereafter relocated, #enlarged# or reconstructed shall comply with the provisions of Section 23-443(b)(2)(ii), inclusive.