

A. INTRODUCTION

Consistent with State Environmental Quality Review Act (SEQRA), this chapter of the Supplemental Environmental Impact Statement (SEIS) examines alternatives to the Project.

This chapter evaluates Project alternatives that are currently under consideration by Empire State Development (ESD):

- **Reduced Parking Alternative**—This alternative would consider modified parking requirements that would reduce the amount of accessory parking provided for the Project’s residential uses. As noted in Chapter 1, “Project Description,” Empire State Development (ESD) is evaluating a proposed reduction in the parking requirements for the Project from the 3,670 spaces analyzed in the 2006 Final Environmental Impact Statement (FEIS) to 2,896 parking spaces, and this proposal is included in the program for Phase II analyzed in the Extended Build-Out Scenario. The “Reduced Parking Alternative” would be an alternative that would further reduce on-site parking to reflect the recent zoning changes for Downtown Brooklyn, which eliminated accessory parking requirements for affordable housing units and reduced accessory parking requirements for market-rate housing.
- **A No Unmitigated Significant Adverse Impact Alternative**—This alternative considers development that would not result in any identified unmitigated significant adverse impacts.

In addition, in response to public comments, this chapter assesses the feasibility of requiring Phase II of the Project to be constructed by multiple developers. This assessment also evaluates whether such an approach to the Project, if determined to be feasible, would be effective in speeding the construction of Phase II.

PRINCIPAL CONCLUSIONS***REDUCED PARKING ALTERNATIVE***

Under the Reduced Parking Alternative, with respect to operational traffic, there would be one additional impacted intersection in the AM peak hour as compared with Phase II under the Extended Build-Out Scenario. Overall, the numbers and locations of impacted intersections and the types of impacts that would occur under the Reduced Parking Alternative would generally be similar to those under Phase II of the Project under the Extended Build-Out Scenario. The Reduced Parking Alternative would impact the same sidewalks and crosswalks as the Phase II of the Project under the Extended Build-Out Scenario; however two of the impacted crosswalks would also be impacted in additional peak hours.

With respect to construction transportation, the Reduced Parking Alternative would result in significant impacts at the same locations identified with Phase II of the Project under the Extended Build-Out Scenario; however at one location additional mitigation would be required to fully mitigate the impacts.

Impacts of the Reduced Parking Alternative in all other analyzed technical areas would be comparable to those identified for Phase II of the Project under the Extended Build-Out Scenario.

Operational Transportation

Traffic

There would be no change in the amount of travel demand or the numbers of vehicle trips generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the Future With Phase II conditions under the Project. Rather, the amount of on-site parking capacity would be reduced to a total of approximately 1,200 permanent spaces compared with 2,896 spaces with the Project. As a consequence, under the Reduced Parking Alternative there would be some localized redistribution of auto trips at intersections in the immediate vicinity of the project site compared with the Project.

With development of Phase II under the Project, 41 of the 71 analyzed intersections would have significant adverse impacts in the weekday AM peak hour, 21 in the midday, 38 in the PM, 28 in the weekday pregame peak hour, and 47 in the Saturday pregame peak hour. By comparison, under the Reduced Parking Alternative there would be one additional impacted intersection in the AM peak hour (42 total). The numbers of intersections operating at level of service (LOS) E or F would total 36, 17, 31, 19 and 38 in the weekday AM, midday, PM and pregame and Saturday pregame peak hours under the Reduced Parking Alternative, a decrease of one in the PM peak hour compared with future conditions with the Project. Overall, the numbers and locations of impacted intersections and the types of impacts that would occur under the Reduced Parking Alternative would generally be similar to those under the Project.

Like conditions for the Future With Phase II under the Project, many of the significant adverse traffic impacts that would occur with development of Phase II under the Reduced Parking Alternative could be fully mitigated. Recommended operational improvements would fully mitigate all significant adverse traffic impacts from the Reduced Parking Alternative at a total of 46 out of 56 impacted intersections, the same as for the Project. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Fort Greene Place, additional lane restriping at the intersection of Atlantic and Clermont Avenues, and modifications to the recommended signal timing changes at these and seven other intersections.

Transit

There would be no change in the amount of travel demand generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the conditions analyzed for the Future With Phase II under the Project. While there may be some potential for a shift from the auto mode to the transit modes as a result of the reduction of on-site parking under this alternative, any such shift, should it occur, is expected to be relatively minor and unlikely to result in material changes in the numbers of trips to individual subway stations and station elements, and subway and bus routes. Therefore, subway station, subway line haul and local bus conditions under the Reduced Parking Alternative would be similar to those disclosed for the Future With Phase II under the Project.

Pedestrians

The elimination of the proposed parking garages on Blocks 1120 and 1128 and the reduction in parking capacity at other on-site facilities under the Reduced Parking Alternative would likely

result in an increase in pedestrian trips on analyzed sidewalks and crosswalks since persons traveling by auto who would otherwise have parked on-site would need to walk between the project site and off-site parking facilities.

In the Future With Phase II under the Project, Phase II demand would significantly adversely impact four crosswalks in one or more peak hours under current *CEQR Technical Manual* impact criteria for a central business district (CBD) area, and two sidewalks and one additional crosswalk would be considered impacted if non-CBD criteria were used. Impacted pedestrian facilities would include:

- The south sidewalk on Atlantic Avenue west of 6th Avenue in all but the weekday AM peak hour (non-CBD criteria only);
- The north sidewalk on Dean Street between 6th and Carlton Avenues in the weekday PM and Saturday pregame peak hours (non-CBD criteria only);
- The west crosswalk on Atlantic Avenue at 6th Avenue in the weekday PM and Saturday pregame peak hours (CBD and non-CBD criteria);
- The south crosswalk on 6th Avenue at Atlantic Avenue in the weekday AM and PM and Saturday pregame peak hours (CBD and non-CBD criteria), and the weekday pregame peak hour (non-CBD criteria only);
- The east crosswalk on Atlantic Avenue at 6th Avenue in the weekday PM peak hour (non-CBD criteria only);
- The north crosswalk on Carlton Avenue at Dean Street in the weekday PM peak hour (non-CBD criteria) and Saturday pregame peak hour (CBD and non-CBD criteria); and
- The north crosswalk on 6th Avenue at Dean Street in all periods (CBD and non-CBD criteria).

These same impacts would occur under the Reduced Parking Alternative, and two of the impacted crosswalks would also be impacted in additional peak hours—the west crosswalk on Atlantic Avenue at 6th Avenue in the weekday pregame peak hour (under CBD and non-CBD criteria) and the east crosswalk on Atlantic Avenue and 6th Avenue in the Saturday pregame peak hour (non-CBD criteria-only).

Given that Atlantic Avenue is a major retail and commercial corridor, and a pedestrian access route for both the Barclays Center Arena and a major intermodal transit hub, the *CEQR Technical Manual* CBD impact criteria should be considered applicable for the analyzed sidewalks and crosswalks along this corridor. Under the CBD impact criteria, neither the south sidewalk on Atlantic Avenue west of 6th Avenue nor the east crosswalk on Atlantic Avenue at 6th Avenue would be considered significantly adversely impacted. Therefore, Phase II of the Project would not result in significant adverse impacts to the south sidewalk on Atlantic Avenue west of 6th Avenue and the east crosswalk on Atlantic Avenue at 6th Avenue under both the Project and the Reduced Parking Alternative. Consequently, the Reduced Parking Alternative would not result in any significant adverse impacts at additional pedestrian facilities compared with the Project.

As was the case for Future With Phase II conditions under the Project, mitigating the significant crosswalk impacts under the Reduced Parking Alternative would typically involve widening the impacted crosswalk, combined in some cases with minor signal timing changes. Recommended mitigation measures under this alternative would include:

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- Widening the west crosswalk on Atlantic Avenue at 6th Avenue from 12 feet to 14 feet in width (the same as for the Project);
- Widening the south crosswalk on 6th Avenue at Atlantic Avenue from 18 feet to 28 feet in width (versus 27 feet with the Project);
- Widening the north crosswalk on Carlton Avenue at Dean Street from 17 feet to 19 feet in width (versus 18 feet with the Project) along with signal timing changes of four seconds in the PM and three seconds in the Saturday pregame period; and
- Widening the north crosswalk on 6th Avenue at Dean Street from 17 feet to 28 feet in width (versus 27 feet with the Project) along with one second of signal timing change in the AM and four seconds in the PM and Saturday pregame periods.

These recommended measures would fully mitigate all of the significant crosswalk impacts under the Reduced Parking Alternative.

Signal timing changes associated with traffic mitigation under the Reduced Parking Alternative would result in a new significant impact to the west crosswalk on Atlantic Avenue at Vanderbilt Avenue in the Saturday pregame peak hour under the non-CBD criteria. As discussed previously, the CBD criteria should be considered applicable for pedestrian facilities along the Atlantic Avenue corridor. Based on the CBD criteria, this crosswalk would not be considered significantly adversely impacted in any peak hour under both the Project and the Reduced Parking Alternative.

Lastly, no mitigation is proposed for the non-CBD criteria impacts to the north sidewalk on Dean Street between 6th and Carlton Avenues as it is expected that mitigating these impacts would require relocating existing tree pits along the block which would likely not be practicable. The impacts to this sidewalk under the non-CBD criteria would therefore remain unmitigated in the Future With Phase II under both the Project and the Reduced Parking Alternative.

Pedestrian and Vehicular Safety

The Reduced Parking Alternative is not expected to result in substantial changes to vehicular or pedestrian flow at two of the three intersections in proximity to the project site identified as high crash locations—Flatbush Avenue/Atlantic Avenue and Atlantic Avenue/4th Avenue—and would likely result in an overall reduction in the numbers of turning vehicles at the third high crash intersection—Atlantic Avenue and Vanderbilt Avenue—compared with the Future With Phase II condition under the Project. Therefore, compared with the Project, there would likely be a reduced potential for conflicts between turning vehicles and pedestrians and cyclists at this latter intersection under the Reduced Parking Alternative.

The numbers of turning vehicles at the Dean Street/6th Avenue intersection adjacent to the potential location of a proposed public school in Building 15 would likely be slightly higher under the Reduced Parking Alternative than under the Project. The measures to enhance safety at this intersection recommended for the Project (i.e., the installation of designated school crossings including high visibility crosswalks and additional school crossing pavement markings and signage) are expected to be similarly effective at enhancing safety at this location under the Reduced Parking Alternative.

Parking

Under the Reduced Parking Alternative, a total of 1,200 parking spaces would be provided on-site in 2035 compared with the 2,896 parking spaces analyzed for the Project. This would include approximately 876 spaces of accessory parking for demand from the residential, commercial, retail, hotel and public school uses (i.e., non-Arena uses) on the project site, 300

spaces to accommodate a portion of the demand from the Barclays Center Arena, and 24 spaces allocated to the NYPD's 78th Precinct station house. The lower number of on-site parking spaces provided for non-Arena uses compared with the Project would be consistent with the parking required under zoning for the Special Downtown Brooklyn District.

In the Future With Phase II under the Project, on-site parking capacity would be more than sufficient to accommodate all of the Project's parking demand from non-Arena uses under both the residential mixed-use and commercial mixed-use variations. Under the Reduced Parking Alternative, parking demand from non-Arena uses that would need to be accommodated off-site during the weekday evening and overnight periods would total approximately 307 and 446 spaces, respectively, under the residential mixed-use variation and approximately 283 and 410 spaces, respectively, under the commercial mixed-use variation. (On-site capacity is expected to be sufficient to accommodate all non-Arena Project parking demand in the weekday midday and Saturday midday periods under both variations.) Available capacity at off-street public parking facilities within ¼-mile of the project site during the weekday evening and overnight periods would be sufficient to accommodate all non-Arena Project demand expected to park off-site during these periods under both variations. Therefore, under the Reduced Parking Alternative, no shortfalls in off-street public parking capacity are expected to occur as a result of demand from the residential, commercial, retail, hotel and public school uses developed under either Project variation.

Under both the Project and the Reduced Parking Alternative, a total of 300 on-site parking spaces would be provided on the project site to accommodate a portion of the demand from a Nets game or other major event at the Barclays Center Arena. Remaining Arena demand would park at off-site public parking facilities or on-street, as occurs at present. Therefore, off-street parking conditions during a weekday evening and a Saturday afternoon Nets game at the Arena are also assessed to determine the potential combined effects of demand from both Arena and non-Arena Project uses on the off-street public parking supply within a ½-mile study area (considered the maximum distance that persons en route to and from an event at the Arena would likely walk to access parking.)

Under both Project variations, off-site parking demand from a Nets game at the Barclays Center Arena is expected to total approximately 1,231 spaces and 1,289 spaces during the weekday evening and Saturday midday periods, respectively. Accounting for non-Arena parking demand that would also need to be accommodated off-site under the Reduced Parking Alternative, off-street public parking facilities are expected to operate with available capacity during both the weekday evening and Saturday midday periods when there is a Nets game scheduled at the Arena during these periods, irrespective of the Project variation. Therefore, under the Reduced Parking Alternative, no shortfalls in off-street public parking capacity are expected to occur as a result of demand from a Nets game at the Arena and other non-Arena uses at the project site.

As was the case for the Future With Phase II condition under the Project, the traffic mitigation plan for the Reduced Parking Alternative incorporates modifications to curbside regulations that would potentially affect existing curbside parking at a total of 28 locations throughout the traffic study area. Depending on the peak hour, it is estimated that the net number of on-street parking spaces within ½-mile of the Arena that would be displaced by the traffic mitigation measures recommended for the Reduced Parking Alternative would represent from 0.4 percent to 1.1 percent of the existing 9,395 on-street parking spaces in this area, the same as for the Project's traffic mitigation plan. It is estimated that a total of approximately 107, 53, 69, 36 and 58 on-street parking spaces would be displaced during the weekday AM, midday, PM and pregame and

Saturday pregame peak periods, respectively. Compared with the Project's traffic mitigation plan, this would represent a total of two additional on-street parking spaces displaced during each peak period with the exception of the weekday PM which would remain unchanged. Approximately seven on-street parking spaces would potentially be created as a result of a lane re-striping recommended for Dean Street at Vanderbilt Avenue under both the Project and the Reduced Parking Alternative.

It is expected that drivers currently parking in the on-street spaces that would be displaced under both the Project and the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity. However, on-street parking capacity is expected to remain available in the overall study area with implementation of the traffic mitigation plan under the Project and the Reduced Parking Alternative.

Operational Air Quality

With the Reduced Parking Alternative, the Project's parking facilities would be smaller in overall capacity. Since there would be fewer on-site parking spaces available, there would be some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. However, as shown above in the "Transportation" section, this would result in similar traffic operations at the analyzed intersections presented in Chapter 4D, "Operational Transportation." Therefore, like the Project, no significant adverse operational-related air quality impacts would result from the Reduced Parking Alternative.

Operational Noise

Traffic levels during operation of the Reduced Parking Alternative would be comparable to those during operation of the Project on roadways adjacent to each of the noise receptor locations analyzed in Chapter 4G, "Noise" during each of the analyzed time periods. Based on the traffic levels associated with the Reduced Parking Alternative, the differences in noise levels at affected locations as compared with those with the Project would be minimal and would be less than the levels that would have the potential to result in a significant adverse impact. Consequently, as with the Project, the Reduced Parking Alternative would not be expected to result in any significant adverse operational noise impacts.

Operational Neighborhood Character

The Reduced Parking Alternative, like the Project, would not result in significant adverse neighborhood character impacts. The Reduced Parking Alternative and the Project would both result in significant adverse traffic impacts at 56 intersections in one or more peak hours, and the locations of the impacted intersections would be the same. Compared with the Project, the Reduced Parking Alternative would result in one additional impacted intersection in the AM peak hour (42 in the AM peak hour under the Reduced Parking Alternative compared with 41 under the Project). As with the Project, mitigation measures for the Reduced Parking Alternative would fully mitigate significant adverse traffic impacts at 46 of the 56 impacted intersections. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Fort Greene Place, additional lane restriping at the intersection of Atlantic and Clermont Avenues, and modifications to the recommended signal timing changes at these and seven other intersections. Under the Reduced Parking Alternative, compared with the Project,

there would be one additional intersection with unmitigated traffic impacts in the AM peak hour and in the Saturday pregame peak hour, and one fewer in the PM peak hour.

In terms of pedestrians, two of the crosswalks identified as being impacted by the Project would, under the Reduced Parking Alternative, be impacted in additional peak hours. Under either the Project or the Reduced Parking Alternative, all pedestrian impacts to crosswalks could be fully mitigated through a combination of signal timing changes and crosswalk widening. Under both the Project and the Reduced Parking Alternative, there would be unmitigated sidewalk impacts on Dean Street between 6th and Carlton Avenues. It is expected that mitigating these impacts would require relocating existing tree pits along the block which would likely not be practicable.

No shortfalls in off-street public parking capacity are expected to occur as a result of either the Project or the Reduced Parking Alternative. The traffic mitigation plan for either the Project or the Reduced Parking Alternative would incorporate modifications to curbside regulations that would potentially affect existing curbside parking at a total of 28 locations throughout the traffic study area. Compared with the Project's traffic mitigation plan, the Reduced Parking Alternative would displace two additional on-street parking spaces during each peak period with the exception of the weekday PM which would remain unchanged. It is expected that drivers currently parking in the on-street spaces that would be displaced under both the Project and the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity. However, on-street parking capacity is expected to remain available in the overall study area with the implementation of the traffic mitigation plan under either the Project or the Reduced Parking Alternative.

The minor differences in traffic and pedestrian impacts and on-street parking availability associated with the Reduced Parking Alternative compared with the Project would not affect conclusions regarding neighborhood character; neither the Project nor the Reduced Parking Alternative would result in significant adverse neighborhood character impacts.

Construction Transportation

Traffic

Under this alternative, the 300 on-site Arena parking spaces would also be available to accommodate construction worker parking demand. Therefore, there would be no change in the construction vehicle trip assignments. With respect to construction transportation, the Reduced Parking Alternative would result in significant impacts at the same locations identified with Phase II of the Project under the Extended Build-Out Scenario; however at one location additional mitigation would be required to fully mitigate the impacts. Accounting for the localized redistribution of operational auto trips during the construction peak hours in the 1st quarter of 2032 under Construction Phasing Plan 3, an additional shift of one second of green time would be needed to fully mitigate the construction-related significant adverse impacts at one intersection during the 3 to 4 PM construction analysis peak hour, as compared with the recommended mitigation measures presented in Chapter 3H, "Construction Transportation." At other analysis intersections, the measures presented in Chapter 3H, "Construction Transportation," would also mitigate the construction impacts that could occur during the same construction quarters under this alternative.

Parking

Accounting for the parking supply and demand generated by the completed Project buildings, construction worker parking demand from Site 5 and Building 1 construction, and the Phase II peak construction worker parking demand during the 1st quarter of 2032 under Construction

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Phasing Plan 3, there would be sufficient off-street public parking spaces to accommodate the anticipated future parking demand such that there would be no shortfall during Phase II construction of the Project under this alternative.

Construction Air Quality

There would be no change to the number of construction vehicle trips generated by the Project or to the construction vehicle trip assignments under the Reduced Parking Alternative. Since there would be fewer on-site parking spaces available, there would be some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. However, as shown above in the “Transportation” portion of the “Construction” section, this would result in the same or comparable traffic operations at the analyzed intersections presented in Chapter 3H, “Construction Transportation.” Therefore, like the Project, no significant adverse construction-related air quality impacts would result from the Reduced Parking Alternative.

Construction Noise and Vibration

As described in Chapter 3J, “Construction Noise,” the primary source of noise and vibration associated with construction of Phase II of the Project would be the operation of on-site equipment, rather than construction-related vehicle trips, including construction trucks and construction worker autos, traveling to and from the project site. The types and amount of on-site construction equipment under the Reduced Parking Alternative would be comparable to that analyzed for construction of Phase II of the Project because the structures to be constructed under the Reduced Parking Alternative would be the same as those to be constructed as part of Phase II of the Project, with the exception of some of the parking structures, which would not be constructed. Consequently, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Additionally, as with construction of Phase II of the Project, construction of the Reduced Parking Alternative would not result in any significant adverse vibration impacts.

Construction Public Health

As described above under Construction Noise and Vibration, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Therefore, the Reduced Parking Alternative would not affect the conclusions of the public health analysis presented in Chapter 3K, “Construction Public Health.”

Construction Neighborhood Character

As described in Chapter 3L, “Construction Land Use and Neighborhood Character,” Construction of Phase II of the Project under the Extended Build-Out Scenario is not expected to result in significant adverse neighborhood character impacts in neighborhoods surrounding the Phase II project site; however, increased traffic, noise, and views of construction activity would result in significant adverse localized neighborhood character impacts in the immediate vicinity of the Phase II project site.

The Reduced Parking Alternative would result in some localized redistribution of operational auto trips during peak construction compared with the Project; however this would not alter the analysis conclusions presented in Chapter 3H, “Construction Transportation.” There would be

no material change in the number of construction workers using transit or how they would be distributed among the available transit options under the Reduced Parking Alternative, and there would be no material change in construction worker pedestrian trips. Similar to the peak construction parking analysis presented in Chapter 3H, “Construction Transportation,” there would be no shortfall of off-street parking anticipated during Phase II construction of the Project under the Reduced Parking Alternative. Likewise, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Views of construction activities during the Phase II construction period would be materially the same under both the Reduced Parking Alternative and the Project.

As the construction period effects with respect to transportation, noise, views of construction activity and the other technical areas considered in a neighborhood character analysis would be materially the same under both Phase II of the Project and the Reduced Parking Alternative, the neighborhood character impacts would be the same. Like Phase II of the Project during the construction period, construction under the Reduced Parking Alternative would result in a significant adverse localized neighborhood character impact in the immediate vicinity of the Phase II project site, but would not alter the character of the larger neighborhoods surrounding the project site.

NO UNMITIGATED SIGNIFICANT ADVERSE IMPACT ALTERNATIVE

The No Unmitigated Significant Adverse Impact Alternative would avoid some of the adverse environmental impacts of Phase II of the Project under the Extended Build-Out Scenario. However, the analysis of this alternative concludes that the alternative would fail to realize the Project’s goals.

MULTIPLE DEVELOPER ALTERNATIVE

The analysis of the multi-developer alternative concludes that the alternative would not be practicable, and would not be effective in accelerating construction of Phase II of the Project.

B. REDUCED PARKING ALTERNATIVE

BACKGROUND

The zoning text amendment to the Special Downtown Brooklyn District approved in 2012 reduced parking requirements in the District, which includes the portion of Phase I of the project site west of 5th Avenue. The text amendment reduced the amount of parking that new residential developments are required to provide (from 0.4 spaces per market-rate dwelling unit to 0.2 spaces, and no parking requirement for affordable housing units); and provided more flexibility to locate required accessory parking off-site, to build small underground public garages in Downtown Brooklyn and to allow accessory parking garages to be available to all residents, workers and visitors in Downtown Brooklyn. The text amendment is expected to result in the provision of a parking supply that better reflects actual parking demand in Downtown Brooklyn, which—like the project site—features some of the best transit access in the city, including numerous subway and bus lines. The Reduced Parking Alternative analyzes a condition on the entire project site that would be consistent with the parking requirements of the Special Downtown Brooklyn District zoning, with an additional 300 spaces for Arena parking and 24 spaces for the New York City Police Department (NYPD) parking. ESD is considering the

Reduced Parking Alternative in light of the policy considerations associated with the Special Downtown Brooklyn District parking controls combined with the Project's surplus of residential parking spaces which is discussed in the parking analysis in Chapter 4D, "Operational Transportation."

DESCRIPTION

Under the Reduced Parking Alternative, a total of 1,200 parking spaces would be provided on-site with full build-out of the Project in 2035 compared with the 2,896 parking spaces analyzed in Chapter 4D, "Operational Traffic." This would include approximately 876 spaces of accessory parking for demand from the residential, commercial, retail, hotel and public school uses on the project site, 300 spaces to accommodate a portion of the demand from the Barclays Center Arena, and 24 spaces allocated to the NYPD's 78th Precinct station house. For the purposes of the analysis it is assumed that under the Reduced Parking Alternative the 450-space parking garage on Block 1120 and the 150-space parking garage on Block 1128 would not be developed, that the number of spaces provided in the below-grade garage on Site 5 would be reduced to approximately 240 from 400 with the Project, and that up to 910 spaces would be provided in the permanent below-grade garage on Block 1129 compared with 1,846 with the Project. Approximately 50 to 100 spaces would also be provided beneath Building 3 on the Arena Block, unchanged from the Future With Phase II condition analyzed in Chapter 4D, "Operational Transportation." The locations of the on-site parking facilities proposed under the Reduced Parking Alternative are shown in **Figure 6-1**. (The locations of on-site parking under the Project are shown in Figure 1-5 in Chapter 1, "Project Description.")

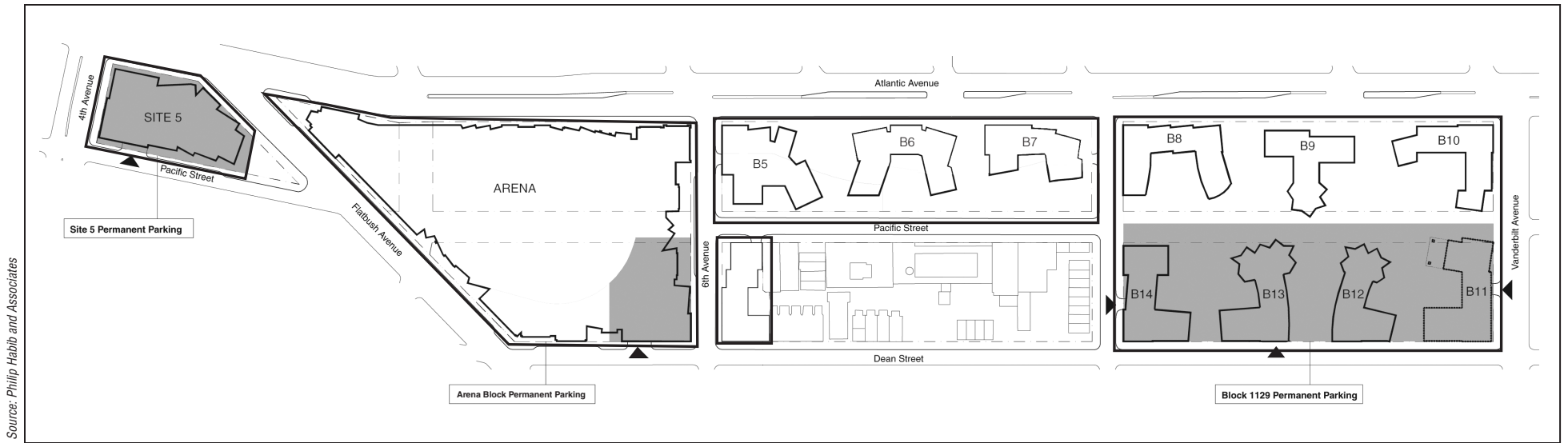
The Reduced Parking Alternative would not result in any significant adverse impacts to zoning or public policy since the alternative itself would be implemented for consistency with the Special Downtown Brooklyn District zoning. As noted previously, Phase II of the Project is not within the area covered by the Downtown Brooklyn Parking Text Amendment, and therefore this text amendment is not relevant to the analysis of a delay in the construction of Phase II. However, as a large mixed-use development over one of the largest transit hubs in the city, the Project is representative of the types of residential development covered by the Special Downtown Brooklyn District and is in line with the goal of the special district to ensure that new residential developments better reflect actual parking demand in an area of the city with excellent transit access.

The alternative would facilitate the development of the Project's affordable housing units. It would not extend the duration of project construction nor result in potential impacts on socioeconomic conditions. However, the reduction in construction costs resulting from the Reduced Parking Alternative would result in an associated reduction in the economic benefits discussed in Chapter 3C, "Construction Socioeconomic Conditions" and Chapter 3M, "Modular Construction." This alternative would not affect the conclusions of the analysis of community facilities. The Reduced Parking Alternative would not affect the sequencing of any of the construction phasing plans analyzed in the SEIS under the Extended Build-Out Scenario, result in any adverse impacts on pedestrian experience, or delay the implementation of neighborhood physical or visual connections and would therefore have no impacts on urban design or visual resources. Since the alternative would be implemented as part of the overall Project construction, it would have no impacts with respect to hazardous materials.

The following sections examine the potential effects of the Reduced Parking Alternative on transportation, air quality, noise and vibration, public health and neighborhood character.

Phase I

Phase II



Source: Philip Habib and Associates

- Project Site Boundary
- Below-grade Parking Location
- ▲ Vehicular Access

OPERATIONAL TRANSPORTATION

TRAFFIC

There would be no change in the amount of travel demand or the numbers of vehicle trips generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the conditions analyzed in Chapter 4D, “Operational Transportation.” Rather, the amount of on-site parking capacity would be reduced to a total of approximately 1,200 permanent spaces compared with 2,896 spaces with the Project. (While there may be some potential for a shift from the auto mode to the transit modes as a result of the reduction of on-site parking under this alternative, any such shift, should it occur, is expected to be relatively minor and unlikely to result in material changes in the overall numbers vehicle trips.) As described above, the 1,200 permanent spaces would include approximately 876 parking spaces for non-Arena demand along with approximately 300 parking spaces for demand from a Nets game or other event at the Arena and 24 spaces for NYPD parking. The planned parking garages on blocks 1120 and 1128 would not be developed under this alternative, and the number of spaces in garages on Site 5 and Block 1129 would be reduced. As the remaining on-site parking capacity is not expected to be sufficient to accommodate all non-Arena parking demand from the Project, some Project demand is instead expected to utilize off-site public parking facilities in the vicinity of the project site (see “Parking,” below). As a consequence, under the Reduced Parking Alternative there would be some localized redistribution of auto trips at intersections in the immediate vicinity of the project site compared with the Future With Phase II condition analyzed in Chapter 4D, “Operational Transportation.” As an example, some of the autos expected to utilize the Block 1120 parking garage under the Project would instead be expected to utilize the off-site Atlantic Center parking garage (625 Atlantic Avenue). This would result in fewer autos turning from Atlantic Avenue onto southbound Carlton Avenue (where the Block 1120 garage entrance would be located), and an increase in the numbers turning onto northbound Ft. Greene Place to access the Atlantic Center garage. By contrast, the elimination of the proposed Block 1128 parking garage is not expected to result in a substantial redistribution of auto trips as much of the demand that would use this garage in the future under the Project would instead be expected to utilize the adjacent off-site garage at 700 Pacific Street. (Access to both parking facilities would be from Pacific Street east of 6th Avenue.)

Table 6-1 shows a summary comparison of intersection levels of service for the Future With Phase II in 2035 with both the Project and the Reduced Parking Alternative, and an overview of the number of significant adverse traffic impacts that would be generated under both scenarios based on the *CEQR Technical Manual* criteria discussed in Chapter 4D, “Operational Transportation.” As shown in **Table 6-1**, with development of Phase II under the Project, 41 of the 71 analyzed intersections would have significant adverse impacts in the weekday AM peak hour, 21 in the midday, 38 in the PM, 28 in the weekday pregame peak hour, and 47 in the Saturday pregame peak hour. By comparison, under the Reduced Parking Alternative there would be one additional impacted intersection in the AM peak hour (42 total). The numbers of intersections operating at LOS E or F would total 36, 17, 31, 19 and 38 in the weekday AM, midday, PM and pregame and Saturday pregame peak hours under the Reduced Parking Alternative, a decrease of one in the PM peak hour compared with future conditions with the Project. Overall, the numbers and locations of impacted intersections and the types of impacts that would occur under the Reduced Parking Alternative would generally be similar to those under the Project as analyzed in Chapter 4D, “Operational Transportation.”

Table 6-1
Intersection Level of Service Summary Comparison
Project vs. Reduced Parking Alternative

	Future Without Phase II					Project Future With Phase II					Reduced Parking Alternative Future With Phase II				
	AM	MD	PM	Pre-game	SAT	AM	MD	PM	Pre-game	SAT	AM	MD	PM	Pre-game	SAT
Overall LOS A/B/C	29	43	32	36	27	25	41	27	34	21	25	42	28	34	22
Overall LOS D	11	13	10	20	10	10	13	12	18	12	10	12	12	18	11
Overall LOS E	19	10	16	11	16	20	9	11	13	15	20	9	10	13	16
Overall LOS F	12	5	13	4	18	16	8	21	6	23	16	8	21	6	22
Total number of intersections with significant impacts	---	---	---	---	---	41	21	38	28	47	42	21	38	28	47
No. of lane groups at LOS E or F of the approximately 305 analyzed	86	55	99	61	95	92	61	105	65	106	93	61	106	66	105

Like the Project, many of the significant adverse traffic impacts that would occur under the Reduced Parking Alternative could be fully mitigated. As discussed in Chapter 5, “Mitigation,” operational improvements would fully address all significant adverse traffic impacts from Phase II under the Extended Build-Out Scenario at a total of 46 out of 56 impacted intersections. Similarly, all significant traffic impacts at a total of 46 out of 56 intersections could be fully mitigated under the Reduced Parking Alternative. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Ft. Greene Place, additional lane restriping at the intersection of Atlantic and Clermont Avenues, and modifications to the recommended signal timing changes at these and seven other intersections. (The full traffic mitigation plan for the Reduced Parking Alternative is provided in **Table C-8** in **Appendix C**).

Table 6-2 shows a summary comparison of intersection levels of service and numbers of intersections with unmitigated significant adverse traffic impacts from the development of Phase II in 2035 under the Project and under the Reduced Parking Alternative. (V/c ratios, delays and levels of service for all lane groups at all analyzed intersections in all periods under the Reduced Parking Alternative With Mitigation condition are provided in **Table C-7** in **Appendix C**.) As shown in **Table 6-2**, under the Project, significant adverse impacts would remain unmitigated at 4 of the 41 intersections impacted in the weekday AM peak hour, none of the 21 intersections impacted in the midday peak hour, 7 of the 38 intersections impacted in the PM peak hour, none of the 28 intersections impacted in the weekday pregame peak hour and 8 of the 47 intersections impacted in the Saturday pregame peak hour. Under the Reduced Parking Alternative there would be one additional intersection with unmitigated impacts in the AM peak hour (five total) and in the Saturday pregame peak hour (nine total), and one fewer in the PM peak hour (six total). The number of lane groups operating at LOS E or F of the approximately 305 analyzed would be lower in all analyzed peak hours under both the Project with Mitigation and the Reduced Parking Alternative With Mitigation than in the future with or without Phase II.

Table 6-2
Intersection Level of Service Summary Comparison
Project w/Mitigation vs. Reduced Parking
Alternative w/Mitigation

	Project Phase II With Mitigation					Reduced Parking Alternative Phase II With Mitigation				
	AM	MD	PM	Pre- game	SAT	AM	MD	PM	Pre- game	SAT
Overall LOS A/B/C	27	45	32	39	26	27	45	32	39	26
Overall LOS D	19	14	14	17	14	19	14	14	17	14
Overall LOS E	15	10	15	12	13	15	10	15	12	13
Overall LOS F	10	2	10	3	18	10	2	10	3	18
Total number of intersections with significant impacts	4	0	7	0	8	5	0	6	0	9
No. of lane groups at LOS E or F of the approximately 305 analyzed	83	45	96	53	91	81	54	96	54	94

TRANSIT

There would be no change in the amount of travel demand generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the conditions analyzed in Chapter 4D, “Operational Transportation.” While there may be some potential for a shift from the auto mode to the transit modes as a result of the reduction of on-site parking under this alternative, any such shift, should it occur, is expected to be relatively minor and unlikely to result in material changes in the numbers of trips to individual subway stations and station elements, and subway and bus routes. Therefore, subway station, subway line haul and local bus conditions under the Reduced Parking Alternative would be similar to those disclosed for the Future With Phase II under the Project as described in Chapter 4D, “Operational Transportation.”

PEDESTRIANS

As noted previously, there would be no change in the amount of overall travel demand generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the conditions analyzed in Chapter 4D, “Operational Transportation.” However, the elimination of the proposed parking garages on blocks 1120 and 1128 and the reduction in parking capacity at other on-site facilities under this alternative would likely result in an increase in pedestrian trips on analyzed sidewalks and crosswalks since persons traveling by auto who would otherwise have parked on-site would need to walk between the project site and off-site parking facilities.

Tables 6-3 through 6-5 compare the levels of service at analyzed sidewalks, crosswalks and corner areas under the Reduced Parking Alternative to conditions in the Future with Phase II as analyzed in Chapter 4D, “Operational Transportation.” As shown in **Table 6-3**, under both the Project and the Reduced Parking Alternative, conditions at two analyzed sidewalks are expected to deteriorate from LOS B to LOS D under platoon conditions in one or more peak hours—the south sidewalk on Atlantic Avenue between Ft. Greene Place and 6th Avenue (in all but the AM peak hour) and the north sidewalk on Dean Street between 6th and Carlton Avenues (in the PM and Saturday pregame peak hours). Both of these sidewalks would be considered significantly

impacted under non-CBD criteria with the Project and with this alternative. However, it is important to note that Atlantic Avenue is a major retail, commercial and transit corridor characteristic of a CBD, and therefore the CBD criteria should be considered applicable for this location. Based on the CBD criteria, the south sidewalk on Atlantic Avenue between Ft. Greene Place and 6th Avenue would not be considered significantly adversely impacted in any peak hour under both the Project and the Reduced Parking Alternative.

As discussed in Chapter 5, “Mitigation,” under the Project no mitigation is proposed for the non-CBD criteria impacts to the north sidewalk on Dean Street between 6th and Carlton Avenues as it is expected that mitigating these impacts would require relocating existing tree pits along the block which would likely not be practicable. The impacts to this sidewalk under the non-CBD criteria would therefore remain unmitigated under both the Project and the Reduced Parking Alternative. As shown in **Tables 6-3 through 6-6**, all other analyzed sidewalks as well as all analyzed corner areas are expected to operate at an acceptable LOS C or better in all periods under both the Project and the Reduced Parking Alternative.

As shown in **Table 6-4**, in the Future With Phase II under the Project, a total of four crosswalks would be significantly adversely impacted in one or more peak hours under impact guidelines for a CBD location, and five crosswalks under impact guidelines for a non-CBD location, including (see Figure 4D-4 in Chapter 4D, Operational Transportation):

- The west crosswalk on Atlantic Avenue at 6th Avenue (X1) in the weekday PM and Saturday pregame peak hours (CBD and non-CBD);
- The south crosswalk on 6th Avenue at Atlantic Avenue (X2) in the weekday AM and PM and Saturday pregame peak hours (CBD and non-CBD) and the weekday pregame peak hour (non-CBD only)
- The east crosswalk on Atlantic Avenue at 6th Avenue (X3) in the weekday PM peak hour (non-CBD only);
- The north crosswalk on Carlton Avenue at Dean Street (X12) in the weekday PM peak hour (non-CBD) and Saturday pregame peak hour (CBD and non-CBD); and
- The north crosswalk on 6th Avenue at Dean Street (X15) in all periods (CBD and non-CBD).

**Table 6-3
Reduced Parking Alternative Sidewalk Conditions**

No.	Location	Future Without Phase II				Project Future With Phase II								Reduced Parking Alternative Future With Phase II											
		Flow Rate (PMF)				Platoon Adjusted LOS				Flow Rate (PMF)				Platoon Adjusted LOS				Flow Rate (PMF)				Platoon Adjusted LOS			
		AM	PM	PRE	SAT	AM	PM	PRE	SAT	AM	PM	PRE	SAT	AM	PM	PRE	SAT	AM	PM	PRE	SAT	AM	PM	PRE	SAT
S1	Flatbush Ave between Atlantic Ave and Dean Street - East	1.5	1.9	1.9	3.9	B	B	B	C	4.2	4.6	3.9	5.6	C	C	C	C	4.2	4.6	3.9	5.6	C	C	C	C
S2	Atlantic Ave between Fort Greene Pl and 6th Ave - South	1.6	2.5	2.9	2.6	B	B	B	B	5.8	8.0 *	6.5 *	6.8 *	C	D	D	D	5.9	8.1 *	6.5 *	6.9 *	C	D	D	D
S3	6th Ave between Atlantic Ave and Pacific Street - East	0.5	0.6	0.7	0.7	B	B	B	B	0.7	0.8	0.5	0.8	B	B	B	B	0.7	0.8	0.5	0.8	B	B	B	B
S4	Atlantic Ave between 6th and Carlton Aves - South	1.1	2.7	1.9	4.6	B	B	B	C	3.4	5.1	3.3	4.5	C	C	C	C	3.5	5.3	3.4	4.7	C	C	C	C
S5	Carlton Ave between Atlantic Ave and Pacific Street - West	0.0	0.0	0.1	0.1	A	A	A	A	0.3	0.6	0.3	0.6	A	B	A	B	0.3	0.6	0.3	0.6	A	B	A	B
S6	Carlton Ave between Atlantic Ave and Pacific Street - East	0.1	0.1	0.1	0.1	A	A	A	A	0.5	0.8	0.5	1.1	B	B	B	B	0.6	0.8	0.5	1.1	B	B	B	B
S7	Atlantic Ave between Carlton and Vanderbilt Aves - South	3.2	7.6	6.0	13.3	C	D	C	E	1.9	3.0	1.9	2.7	B	B	B	B	2.0	3.1	2.0	2.8	B	C	B	B
S8	Vanderbilt Ave between Atlantic Ave and Pacific Street - West	0.1	0.2	0.2	0.3	A	A	A	A	1.1	1.8	1.1	2.5	B	B	B	B	1.3	2.0	1.2	2.7	B	B	B	B
S9	Dean Street between Carlton and Vanderbilt Aves - North	0.1	0.3	0.3	0.9	A	A	A	B	2.1	2.9	1.7	3.2	B	B	B	C	2.3	3.0	1.9	3.5	B	B	B	C
S10	Pacific Street between 6th and Carlton Aves - North	0.2	0.2	0.4	0.4	A	A	A	A	0.2	0.2	0.3	0.3	A	A	A	A	0.2	0.2	0.3	0.4	A	A	A	A
S11	Pacific Street between 6th and Carlton Aves - South	0.1	0.1	0.3	0.9	A	A	A	B	0.1	0.1	0.3	0.9	A	A	A	B	0.2	0.2	0.4	1.1	A	A	A	B
S12	Dean Street between 6th and Carlton Aves - North	0.6	0.6	1.1	2.5	B	B	B	B	5.2	6.5 *	4.8	6.9 *	C	D	C	D	5.3	6.6 *	4.8	7.0 *	C	D	C	D
S13	Dean Street between Flatbush and 6th Aves - North	0.6	1.1	1.6	0.7	B	B	B	B	3.0	3.7	3.3	2.6	B	C	C	B	3.0	3.7	3.3	2.6	B	C	C	B
S14	6th Ave between Dean and Pacific Streets - East	0.2	0.2	0.3	0.4	A	A	A	A	1.6	1.2	0.9	1.1	B	B	B	B	1.7	1.2	0.9	1.3	B	B	B	B

Notes:
 AM - weekday 8-9 AM peak hour; PM - weekday 5-6 PM peak hour; PRE - weekday 7-8 PM (pregame) peak hour; SAT - Saturday 1-2 PM (pregame) peak hour.
 PMF - persons per foot of effective width per minute.
 LOS - level of service.
 * - denotes a significant adverse impact under CEQR Technical Manual Non-CBD criteria.
 ** - denotes a significant adverse impact under CEQR Technical Manual CBD and Non-CBD criteria.

Table 6-4
Reduced Parking Alternative Crosswalk Conditions

No.	Location	Future Without Phase II								Project Future With Phase II								Reduced Parking Alternative Future With Phase II															
		AM		PM		PRE		SAT		AM		PM		PRE		SAT		AM		PM		PRE		SAT									
		SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS								
X1	Atlantic Av @ 6th Av - west	44.9	B	23.3	D	14.9	E	16.1	D	31.3	C	18.6	**	D	13.8	E	13.2	**	E	29.4	C	18.0	**	D	13.5	**	E	12.5	**	E			
X2	Atlantic Av @ 6th Av - south	143.9	A	104.7	A	95.8	A	54.0	B	17.2	**	D	12.4	**	E	20.1	*	D	15.0	**	E	16.9	**	D	12.2	**	E	19.8	*	D	14.6	**	E
X3	Atlantic Av @ 6th Av - east	94.5	A	48.6	B	53.9	B	59.9	B	35.1	C	20.9	*	D	32.2	C	25.9	C	32.8	C	19.9	*	D	30.8	C	23.5	*	D					
X4	Atlantic Av @ Carlton Av - west	377.0	A	465.4	A	538.7	A	477.9	A	132.3	A	95.2	A	175.4	A	172.6	A	137.0	A	96.6	A	176.8	A	176.9	A								
X5	Atlantic Av @ Carlton Av - south	452.9	A	209.8	A	288.6	A	105.7	A	64.6	A	41.1	B	69.8	A	39.7	C	62.2	A	40.3	B	68.0	A	38.2	C								
X6	Atlantic Av @ Carlton Av - east	293.3	A	198.7	A	341.9	A	368.1	A	102.8	A	57.7	B	120.8	A	62.9	A	103.6	A	58.0	B	121.1	A	63.3	A								
X7	Atlantic Av @ Vanderbilt Av - west	111.3	A	113.0	A	124.9	A	62.1	A	51.5	B	38.2	C	60.4	A	30.6	C	41.7	B	32.0	C	48.8	B	25.3	C								
X8	Atlantic Av @ Vanderbilt Av - south	268.0	A	149.1	A	221.2	A	108.3	A	118.5	A	61.3	A	122.4	A	42.5	B	118.7	A	61.9	A	123.3	A	43.1	B								
X9	Dean St @ Vanderbilt Av - north	513.4	A	427.7	A	248.0	A	84.7	A	179.7	A	194.6	A	195.8	A	66.9	A	179.7	A	194.6	A	195.8	A	66.9	A								
X10	Dean St @ Vanderbilt Av - west	619.2	A	513.8	A	525.8	A	320.5	A	328.3	A	193.2	A	321.7	A	128.0	A	328.3	A	193.2	A	321.7	A	128.0	A								
X11	Dean St @ Carlton Av - east	528.9	A	589.8	A	558.3	A	506.9	A	147.4	A	95.8	A	166.7	A	78.7	A	147.4	A	95.8	A	166.7	A	78.7	A								
X12	Dean St @ Carlton Av - north	340.9	A	260.5	A	157.5	A	55.6	B	28.1	C	21.7	*	D	30.0	C	18.5	**	D	27.6	C	21.2	*	D	29.2	C	18.0	**	D				
X13	Dean St @ Carlton Av - west	633.3	A	633.6	A	448.2	A	331.0	A	164.6	A	100.7	A	152.2	A	83.0	A	164.6	A	100.7	A	152.2	A	83.0	A								
X14	Dean St @ 6th Av - east	520.9	A	194.0	A	229.9	A	195.3	A	169.4	A	121.0	A	175.3	A	113.2	A	169.4	A	121.0	A	175.3	A	113.2	A								
X15	Dean St @ 6th Av - north	243.2	A	116.0	A	65.6	A	30.7	C	13.8	**	E	10.5	**	E	15.4	**	D	11.1	**	E	13.7	**	E	10.2	**	E	15.1	**	D	10.7	**	E
X16	Dean St @ 6th Av - west	255.5	A	173.7	A	111.0	A	73.9	A	127.4	A	106.4	A	94.2	A	56.6	B	127.4	A	106.4	A	94.2	A	56.6	B								
X17	Flatbush Av @ Dean St - east	105.2	A	50.5	B	45.4	B	50.9	B	103.9	A	50.5	B	45.4	B	50.9	B	103.9	A	50.5	B	45.4	B	50.9	B								
X18	Flatbush Av @ Dean St - north	397.4	A	191.9	A	117.5	A	158.6	A	137.5	A	95.7	A	93.2	A	77.3	A	137.5	A	95.7	A	93.2	A	77.3	A								

Notes:
 AM - weekday 8-9 AM peak hour; PM - weekday 5-6 PM peak hour; PRE - weekday 7-8 PM (pregame) peak hour; SAT - Saturday 1-2 PM (pregame) peak hour.
 SF/Ped - average square feet per pedestrian.
 LOS - level of service.
 * - denotes a significant adverse impact under CEQR Technical Manual Non-CBD criteria.
 ** - denotes a significant adverse impact under CEQR Technical Manual CBD and Non-CBD criteria.

**Table 6-5
Reduced Parking Alternative Corner Conditions**

No.	Intersection	Corner	Future Without Phase II								Project Future With Phase II								Reduced Parking Alternative Future With Phase II							
			AM		PM		PRE		SAT		AM		PM		PRE		SAT		AM		PM		PRE		SAT	
			SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS	SF/Ped	LOS
C1	Atlantic Av @ 6th Av	south west	172.4	A	121.4	A	112.7	A	104.2	A	50.9	B	30.3	C	44.3	B	36.5	C	49.5	B	29.7	C	43.6	B	35.1	C
C2	Atlantic Av @ 6th Av	southeast	579.6	A	429.8	A	397.3	A	260.3	A	56.0	B	46.0	B	73.1	A	48.0	B	54.3	B	45.2	B	71.8	A	46.0	B
C3	Atlantic Av @ Carlton Av	south west	493.2	A	271.7	A	337.2	A	161.8	A	152.1	A	93.5	A	156.7	A	100.2	A	146.3	A	90.5	A	150.9	A	94.8	A
C4	Atlantic Av @ Carlton Av	southeast	566.9	A	300.7	A	431.4	A	192.0	A	153.8	A	99.6	A	169.2	A	95.0	A	148.5	A	96.5	A	163.2	A	90.3	A
C5	Atlantic Av @ Vanderbilt Av	south west	234.6	A	166.0	A	204.2	A	97.6	A	406.2	A	250.3	A	429.3	A	171.5	A	370.5	A	233.7	A	394.0	A	158.0	A
C6	Dean St @ Vanderbilt Av	north west	1,014.5	A	749.0	A	639.4	A	365.1	A	505.6	A	313.6	A	447.7	A	193.2	A	475.0	A	300.8	A	426.2	A	184.5	A
C7	Dean St @ Carlton Av	northeast	1,123.8	A	994.3	A	672.9	A	301.0	A	129.2	A	96.8	A	146.7	A	83.7	A	123.4	A	93.7	A	141.5	A	79.9	A
C8	Dean St @ Carlton Av	north west	826.6	A	716.2	A	461.0	A	193.7	A	95.4	A	66.4	A	97.7	A	61.3	A	93.9	A	65.2	A	95.5	A	59.7	B
C9	Dean St @ 6th Av	northeast	1,065.7	A	490.8	A	378.6	A	202.3	A	99.6	A	88.6	A	123.6	A	80.8	A	99.3	A	88.4	A	123.4	A	80.4	A
C10	Dean St @ 6th Av	north west	375.7	A	237.4	A	174.3	A	119.8	A	89.6	A	71.2	A	86.0	A	63.8	A	89.4	A	71.1	A	85.9	A	63.7	A
C11	Flatbush Av @ Dean St	northeast	374.9	A	209.4	A	160.1	A	251.9	A	154.2	A	109.8	A	111.0	A	132.9	A	154.2	A	109.8	A	111.0	A	132.9	A

Notes:
 AM - weekday 8-9 AM peak hour; PM - weekday 5-6 PM peak hour; PRE - weekday 7-8 PM (pregame) peak hour; SAT - Saturday 1-2 PM (pregame) peak hour
 SF/Ped - average square feet per pedestrian.
 LOS - level of service.

**Table 6-6
Reduced Parking Alternative With Mitigation Crosswalk Conditions**

Crosswalk Location	Future w/o Phase II		Future w/Phase II		Reduced Parking Alternative		Project Future With Phase II With Mitigation				Reduced Parking Alternative Future With Phase II With Mitigation				
	Width (feet)	SFP	Width (feet)	SFP	Width (feet)	SFP	Width (feet)	SFP	Mitigation Measures and Effectiveness		Width (feet)	SFP	Mitigation Measures and Effectiveness		
AM Peak Hour															
X2	Atlantic Av @ 6th Av - south	11.5	143.9	18.0	17.2	18.0	16.9	27.0	26.5	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.		28.0	26.5	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.	
X15	Dean St @ 6th Av - north	17.0	243.2	17.0	13.8	17.0	13.7	27.0	24.8	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.		28.0	25.6	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.	
PM Peak Hour															
X1	Atlantic Av @ 6th Av - west	12.0	23.3	12.0	18.6	12.0	18.0	14.0	21.9	CBD and non-CBD impacts mitigated through crosswalk widening.		14.0	21.2	CBD and non-CBD impacts mitigated through crosswalk widening.	
X2	Atlantic Av @ 6th Av - south	11.5	104.7	18.0	12.4	18.0	12.2	27.0	21.4	CBD impact mitigated through crosswalk widening and signal timing changes. Non-CBD impact to remain unmitigated.		28.0	22.1	CBD impact mitigated through crosswalk widening and signal timing changes. Non-CBD impact to remain unmitigated.	
X12	Dean St @ Carlton Av - north	17.0	260.5	17.0	21.7	17.0	21.2	18.0	28.8	Non-CBD impact mitigated through crosswalk widening and signal timing changes. No CBD impact.		19.0	29.9	Non-CBD impact mitigated through crosswalk widening and signal timing changes. No CBD impact.	
X15	Dean St @ 6th Av - north	17.0	116.0	17.0	10.5	17.0	10.2	27.0	24.3	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.		28.0	24.7	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.	
Pregame Peak Hour															
X1	Atlantic Av @ 6th Av - west	12.0	14.9	12.0	31.3	12.0	13.5	No CBD or non-CBD impact under the Project Future With Phase II.		14.0	16.0	CBD and non-CBD impacts mitigated through crosswalk widening.			
X2	Atlantic Av @ 6th Av - south	11.5	95.8	18.0	20.1	18.0	19.8	27.0	32.2	Non-CBD impact mitigated through crosswalk widening. No CBD impact.		28.0	33.2	Non-CBD impact mitigated through crosswalk widening. No CBD impact.	
X15	Dean St @ 6th Av - north	17.0	65.6	17.0	15.4	17.0	15.1	27.0	25.4	CBD and non-CBD impacts mitigated through crosswalk widening.		28.0	25.8	CBD and non-CBD impacts mitigated through crosswalk widening.	
Saturday Pregame Peak Hour															
X1	Atlantic Av @ 6th Av - west	12.0	16.1	12.0	13.2	12.0	12.5	14.0	15.6	CBD and non-CBD impacts mitigated through crosswalk widening.		14.0	14.8	CBD and non-CBD impacts mitigated through crosswalk widening.	
X2	Atlantic Av @ 6th Av - south	11.5	54.0	18.0	15.0	18.0	14.6	27.0	24.3	CBD and non-CBD impacts mitigated through crosswalk widening.		28.0	24.7	CBD and non-CBD impacts mitigated through crosswalk widening.	
X12	Dean St @ Carlton Av - north	17.0	55.6	17.0	18.5	17.0	18.0	18.0	25.0	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.		19.0	24.4	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.	
X15	Dean St @ 6th Av - north	17.0	30.7	17.0	11.1	17.0	10.7	27.0	24.9	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.		28.0	25.2	CBD and non-CBD impacts mitigated through crosswalk widening and signal timing changes.	

Notes:

SFP - square feet per pedestrian.

As also shown in **Table 6-4**, these same impacts would also occur under the Reduced Parking Alternative, and two of the impacted crosswalks would also be impacted in additional peak hours—crosswalk X1 in the weekday pregame peak hour (under CBD and non-CBD criteria) and crosswalk X3 in the Saturday pregame peak hour (non-CBD criteria-only). Overall, however, the Reduced Parking Alternative would not result in any significant adverse impacts at additional pedestrian facilities compared with the Project.

Although the east crosswalk on Atlantic Avenue at 6th Avenue would be impacted in the PM under non-CBD criteria, it is important to note that Atlantic Avenue is a major retail, commercial and transit corridor characteristic of a CBD, and therefore the CBD criteria should be considered applicable for this location. As shown in **Table 6-4**, based on the CBD criteria, this crosswalk would not be considered significantly adversely impacted in any peak hour under both the Project and the Reduced Parking Alternative.

As was the case for Future With Phase II conditions under the Project, mitigating the significant crosswalk impacts under the Reduced Parking Alternative would typically involve widening the impacted crosswalk, combined in some cases with minor signal timing changes. (Signal timing changes associated with traffic mitigation are also reflected in the analysis presented in **Table 6-6**.) The recommended mitigation measures and their effectiveness under both the Project and the Reduced Parking Alternative are shown in **Table 6-6**. Recommended mitigation measures under this alternative would include:

- Widening the west crosswalk on Atlantic Avenue at 6th Avenue (X1) from 12 feet to 14 feet in width (the same as for the Project);
- Widening the south crosswalk on 6th Avenue at Atlantic Avenue (X2) from 18 feet to 28 feet in width (versus 27 feet with the Project);
- Widening the north crosswalk on Carlton Avenue at Dean Street (X12) from 17 feet to 19 feet in width (versus 18 feet with the Project) along with signal timing changes of four seconds in the PM and three seconds in the Saturday pregame period; and
- Widening the north crosswalk on 6th Avenue at Dean Street (X15) from 17 feet to 28 feet in width (versus 27 feet with the Project) along with one second of signal timing change in the AM and four seconds in the PM and Saturday pregame periods.

As shown in **Table 6-6**, these recommended measures would fully mitigate all of the significant crosswalk impacts under the Reduced Parking Alternative.

It should also be noted that signal timing changes associated with traffic mitigation under the Reduced Parking Alternative would result in a new significant impact to the west crosswalk on Atlantic Avenue at Vanderbilt Avenue (X7) in the Saturday pregame peak hour under the non-CBD criteria. As discussed previously, Atlantic Avenue is a major retail, commercial and transit corridor characteristic of a CBD, and therefore the CBD criteria should be considered applicable for this location. Based on the CBD criteria, this crosswalk would not be considered significantly adversely impacted in any peak hour under both the Project and the Reduced Parking Alternative.

PEDESTRIAN AND VEHICULAR SAFETY

The Reduced Parking Alternative is not expected to result in substantial changes to vehicular or pedestrian flow at two of the three intersections in proximity to the project site identified as high crash locations in Chapter 4D, “Operational Transportation”—Flatbush Avenue/Atlantic Avenue

and Atlantic Avenue/4th Avenue. This alternative would, however, likely result in an overall reduction in the numbers of turning vehicles at the third high crash intersection—Atlantic Avenue and Vanderbilt Avenue—compared with the Future With Phase II condition under the Project. Therefore, compared with the Project, there would likely be a reduced potential for conflicts between turning vehicles and pedestrians and cyclists at this intersection under the Reduced Parking Alternative.

Compared with the Future With Phase II under the Project, the Reduced Parking Alternative is expected to result in relatively small increases in the numbers of turning vehicles at the Dean Street/6th Avenue intersection adjacent to the potential location of a proposed public school in Building 15. The numbers of additional turning vehicles at this intersection would range from 3 in the weekday AM peak hour (a peak period for school travel) to 20 in the Saturday pregame peak hour, and would primarily be due to an expected increase in the numbers of vehicles using the off-site public parking garage at 700 Pacific Street. The measures to enhance safety at this intersection recommended in Chapter 4D, “Operational Transportation,” (i.e., the installation of designated school crossings including high visibility crosswalks and additional school crossing pavement markings and signage) are expected to be similarly effective at enhancing safety at this location under the Reduced Parking Alternative.

PARKING

As described in Chapter 4D, “Operational –Transportation,” upon full build-out of the Project in 2035, a total of approximately 2,896 parking spaces would be provided on the project site to accommodate the parking demand from the residential, commercial, retail and hotel uses developed under Phase I, the needs of the nearby NYPD 78th Precinct station house (24 spaces), the parking demand from the residential, retail and public school uses that would be developed under Phase II, and a portion of the demand generated by the Arena (approximately 300 spaces). This would include a 400-space parking garage beneath Site 5 and a parking garage with 50 to 100 spaces on the Arena block beneath Building 3 (both to be provided in Phase I), along with a 450-space below-grade garage on Block 1120, a 150-space below-grade garage beneath Building 15 on Block 1128, and a 1,846-space below-grade garage on Block 1129 (all to be provided in Phase II).

As shown in Tables 4D-60 through 4D-63 in Chapter 4D, “Operational Transportation,” under the residential mixed-use variation, total parking demand from the Project’s residential, commercial, retail, hotel and public school uses (Phase I and Phase II combined) is expected to peak at approximately 1,322 spaces during the overnight period on both a weekday and a Saturday. The proposed 2,896 on-site parking spaces provided with full build-out of the Project would therefore be sufficient to accommodate all of the peak overnight demand generated by these non-Arena uses under the residential mixed-use variation. After accounting for the 300 spaces of Arena parking and 24 spaces dedicated for NYPD use, there would be a surplus of approximately 1,250 parking spaces during the peak overnight period under this variation.

Under the commercial mixed-use variation, total parking demand from the Project’s residential, commercial, retail and public school uses (Phase I and Phase II combined) is expected to peak at approximately 1,286 spaces during the overnight period on both a weekday and a Saturday. The proposed 2,896 on-site parking spaces provided with full build-out of the Project would therefore be sufficient to accommodate all of the demand generated by these non-Arena uses under the commercial mixed-use variation. After accounting for the 300 spaces of Arena parking

and 24 spaces dedicated for NYPD use, there would be a surplus of approximately 1,286 parking spaces during the peak overnight period under this variation.

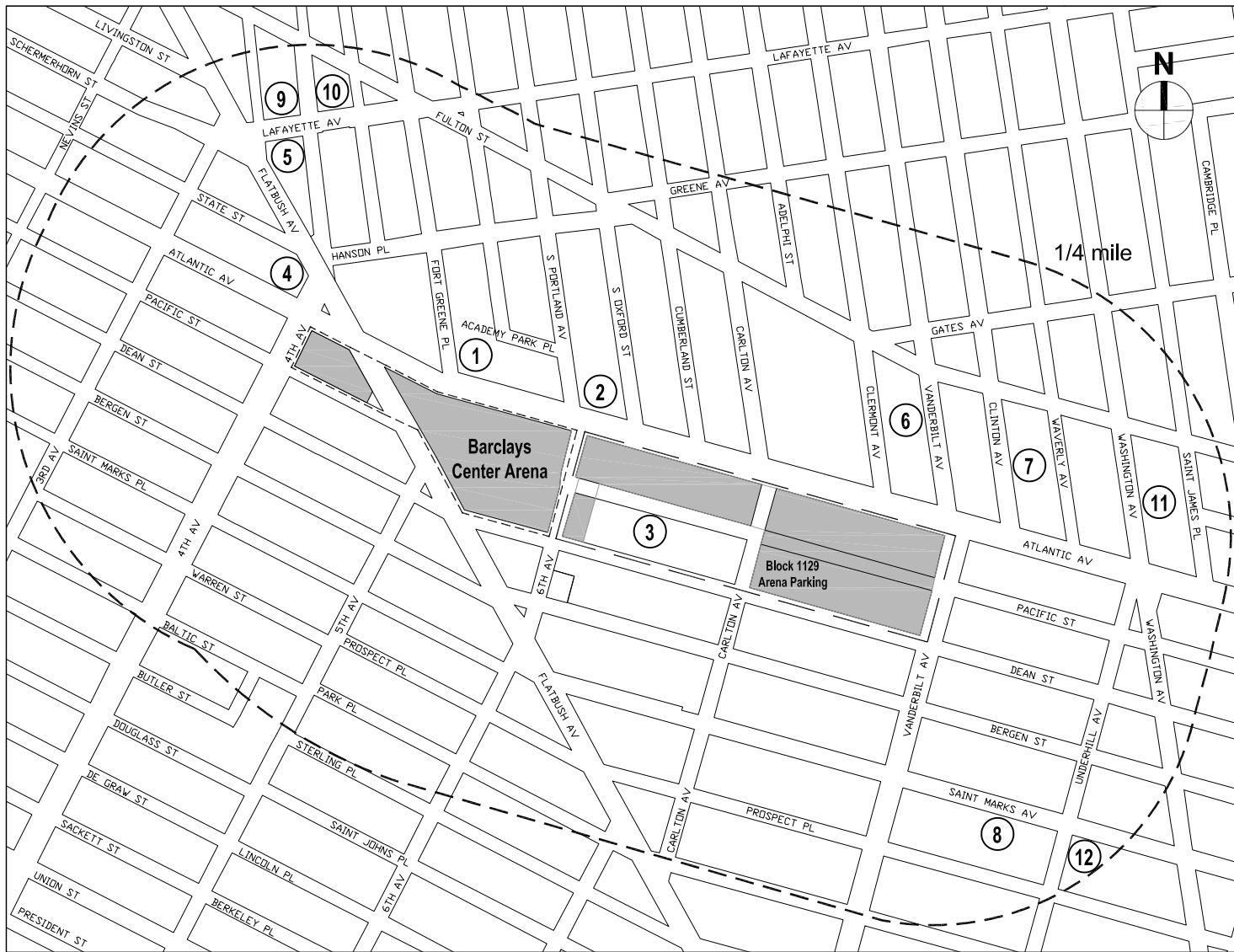
Under the Reduced Parking Alternative, a total of approximately 1,200 parking spaces would be provided on-site with full build-out of the Project in 2035 compared with the 2,896 parking spaces analyzed in Chapter 4D, "Operational Traffic." This would include approximately 876 spaces of accessory parking for non-Arena (residential, commercial, retail, hotel and public school) uses on the project site, 300 spaces to accommodate a portion of the demand from the Barclays Center Arena, and 24 spaces for use by the NYPD's 78th Precinct station house. The lower number of on-site parking spaces provided for non-Arena uses compared with the Project would be consistent with the parking required under zoning for the Special Downtown Brooklyn District zoning.

For the purposes of the analysis it is assumed that under the Reduced Parking Alternative the 450-space parking garage on Block 1120 and the 150-space parking garage on Block 1128 would not be developed, that the number of spaces provided in the below-grade garage on Site 5 would be reduced to 240 from 400 with the Project, and that up to 910 spaces would be provided in the permanent below-grade garage on Block 1129 compared with 1,846 with the Project. Approximately 50 to 100 parking spaces would also be provided beneath Building 3 on the Arena Block, the same as for the Project. The locations of the on-site parking facilities proposed under the Reduced Parking Alternative are shown in **Figure 6-1**. (The locations of on-site parking under the Project are shown in Figure 1-5 in Chapter 1, "Project Description.")

Off-Street Parking

The 876 on-site parking spaces that would be provided for residential, commercial, retail, hotel and public school uses on the project site under the Reduced Parking Alternative would be less than the peak parking demand that would be generated by these uses under both the residential mixed-use variation (1,322 spaces during the overnight period) and the commercial mixed-use variation (1,286 spaces during the overnight period). Therefore, under the Reduced Parking Alternative some of the parking demand from these non-Arena uses would likely need to be accommodated at off-site public parking facilities in proximity to the project site. Conditions at off-street public parking facilities within ¼-mile of the project site are therefore assessed for the 2035 Future condition under the Reduced Parking Alternative. A ¼-mile study area was selected for analysis as this is typically considered the maximum distance that persons en route to and from residential, commercial and retail uses would likely walk to access parking. The periods selected for analysis include the weekday midday (a peak period for retail and commercial parking demand), the weekday overnight period (a peak for residential and hotel demand), and the weekday evening and Saturday midday periods when non-Arena Project demand would coincide with demand from a weekday evening or Saturday afternoon Nets game at the Arena. These periods are all consistent with those analyzed in the 2006 FEIS.

Table 6-7 shows Existing conditions at off-street public parking facilities within ¼-mile of the project site, and their locations are shown in **Figure 6-2**. As shown in **Table 6-7**, there are currently 12 off-street public parking facilities with a total licensed capacity of 1,725 spaces located within ¼-mile of the project site. Three of these facilities with a total of capacity of 244 spaces are currently closed during the overnight period. (For the purposes of the analysis it is conservatively assumed that these facilities would remain closed during the overnight period in the future.) Based on existing utilization levels, on days when there are no major events scheduled at the Barclays Center Arena there are approximately 510 parking spaces currently available at these facilities during the weekday midday period, 1,032 spaces during the weekday



- ① Off-Street Parking Facility
- Project Site
- - - 1/4-Mile Radius From Project Site
- - - Phase I Development Boundary
- Phase II Development Boundary

Off-Street Public Parking Facilities
 Within 1/4-Mile of Project Site
Figure 6-2

evening period, 991 spaces during the weekday overnight period and 878 spaces during the Saturday midday period.

Table 6-8 shows anticipated conditions at off-street public parking facilities within ¼-mile of the project site in the 2035 Future Without the Project. As shown, new development by 2035 is expected to result in the displacement of approximately 346 existing parking spaces (in three facilities) and the development of approximately 527 new spaces for a total net increase of approximately 181 parking spaces compared with Existing conditions. As also shown in **Table 6-8**, demand at public parking facilities within ¼-mile of the project site is expected to increase as a result of new development and background growth. Overall, available capacity at off-street public parking facilities in the 2035 Future Without the Project condition is expected to total approximately 856 spaces during the weekday midday period, 1,026 spaces during the weekday evening period, 985 spaces during the weekday overnight period and 1,391 spaces during the Saturday midday period.

Table 6-9 shows anticipated future conditions at off-street public parking facilities within ¼-mile of the project site in 2035 for both the residential mixed-use and commercial mixed-use variations under the Reduced Parking Alternative. As previously described, under this alternative a total of approximately 876 parking spaces would be provided on-site to accommodate demand from the Project's residential, commercial, retail, hotel and public school uses. The data in **Table 6-9** reflect Project demand from these non-Arena uses but do not include demand from an event at the Barclays Center Arena. (Off-street public parking conditions during a Nets game at the Arena are discussed later in this section.)

**Table 6-7
Existing Off-Street Public Parking Facilities Within ¼-Mile of the Project Site**

No.	Facility Operator	Address	License Number	Licensed Capacity	Weekday MIDDAY		Weekday Evening		Weekday Overnight		Saturday MIDDAY	
					Estimated Utilization	Available Capacity	Estimated Utilization	Available Capacity	Estimated Utilization	Available Capacity	Estimated Utilization	Available Capacity
1	Ochre Car Park	625 Atlantic Ave	1242325	650	55%	288	22%	498	1%	628	51%	311
2	Imperial Parking U.S., Inc.	669 S. Portland Avenue	1383522	45	82%	8	25%	33	73%	12	32%	30
3	Pacific Parking LLC	700 Pacific Street	1244293	170	61%	65	31%	116	61%	65	41%	99
4	Flashpark	556 State Street	1328826	25	92%	2	72%	7	Closed		80%	5
5	Amber Car Park, BAM East	10 Lafayette Ave	1019610	124	86%	17	83%	21	Closed		61%	48
6	Exel Parking	470 Vanderbilt Ave	1449148	162	87%	21	23%	123	46%	86	31%	110
7	Brooklyn Clinton Corp	525 Clinton Ave	1472099	55	81%	10	69%	17	61%	21	30%	38
8	Country Wide Car Park Inc.	288 St. Mark's Ave	1004164	112	82%	20	66%	37	41%	65	51%	54
9	Amber Car Park LLC	258 Ashland Place / 9 Lafayette Ave	1021922/1021919	60	86%	8	51%	29	92%	5	81%	11
10	GGMC Parking Inc, Fulton Car Park	622 Fulton Street	1026759	95	72%	26	31%	64	Closed		82%	17
11	Enterprise Washington Parking	545 Washington Ave	1460723	67	52%	32	61%	26	52%	32	30%	46
12	Bobby Car Park	105 Underhill Ave	1126972	160	92%	13	61%	61	51%	77	31%	109
Total				1,725	70%	510	39%	1,032	32%	991	48%	878

Notes:
 Assumes parking facility is full at 98% of licensed capacity as per CEQR Technical Manual guidelines.
 Saturday midday utilization data not available for sites 6, 7, 14, 15 and 16. Saturday midday utilization estimated based on demand at nearby facilities.
 Data reflect conditions with no event at the Arena.
 Does not include Arena event parking at 752 Pacific Street (Block 1129).
 N/A - not available.

Sources:
 September 2013 and October 2013 data from the operator of the Atlantic Center garage.
 PHA field surveys conducted in November 2011, May 2012, November 2012 and April 2013.
 AKRF field surveys conducted in October 2013.
 SEE field surveys conducted in October 2011.

Table 6-8
2035 Future Parking Supply and Demand Without the Project
at Public Parking Facilities Within ¼-Mile of the Project Site

Period	2013 Existing Conditions			2035 Future Off-Site Parking Capacity			2035 Future Off-Site Parking Demand ⁷				
	Total Licensed Capacity ^{1,7}	Total Demand ¹	Net Spaces Available ³	Existing Public Spaces Displaced	New Public Spaces Provided ⁸	Total Public Parking Spaces ²	Existing Demand Plus Background Growth ⁴	Demand from Discrete Development Sites ⁵	Accessory Spaces Provided at Discrete Development Sites ⁶	Total Public Parking Demand ⁹	Net Parking Surplus or (Deficit) ³
Weekday Midday	1,725	1,181	510	346	527	1,906	1,222	395	605	1,012	856
Weekday Evening	1,725	659	1,032	346	527	1,906	682	765	605	842	1,026
Weekday Overnight	1,481	460	991	346	527	1,662	476	773	605	644	985
Saturday Midday	1,725	813	878	346	527	1,906	841	241	605	477	1,391

Notes:

¹ Based on PHA survey data from Nov. 2011, May 2012, Nov. 2012 and April 2013; SSE Oct. 2011 survey data; AKRF Oct. 2013 survey data, and Sept. 2013 and Oct. 2013 data from the operator of the Atlantic Center parking garage. Does not reflect Arena demand.

² Does not include public parking spaces provided on the Project site.

³ Assumes parking facility is full at 98% of licensed capacity as per *CEQR Technical Manual* guidelines.

⁴ Reflects annual background growth rates of 0.25% per year for 2013-2018 and 0.125% per year for 2018-2035 as per *CEQR Technical Manual* guidelines.

⁵ Assumes an overnight demand of 0.2 parking spaces/D.U. for residential development.

⁶ Assumes an 80%/20% market rate/affordable split for residential development where the number of affordable units is not known, and that 0.2 spaces/D.U. of accessory parking would be provided for market rate units as per zoning.

⁷ Three parking facilities with a total of 244 spaces are currently closed during the overnight period and are conservatively assumed to remain closed during this period in the future.

⁸ Assumes parking garage planned for 470 Vanderbilt Avenue would be available for use by Project demand, as is the existing surface parking lot at this location.

⁹ Does not include demand from Phase I or Phase II of the Project.

**Table 6-9
2035 Future Conditions at Public Parking Facilities Within 1/4-Mile of the
Project Site With Non-Arena Project Demand**

Period	2035 Future Off-Site Parking Demand w/o Project			2035 Future Off-Site Project Parking Demand (Residential Mixed-Use Variation)				2035 Future Off-Site Project Parking Demand (Commercial Mixed-Use Variation)			
	Total Public Parking Spaces ¹	Demand w/o Project	Net Parking Surplus or (Deficit)	Parking Spaces Provided On-Site ²	Non-Arena Project Parking Demand ³	Non-Arena Project Off-Site Parking Demand	Net Parking Surplus or (Deficit) at Public Off-Site Facilities	Parking Spaces Provided On-Site ²	Non-Arena Project Parking Demand ³	Non-Arena Project Off-Site Parking Demand	Net Parking Surplus or (Deficit) at Public Off-Site Facilities
Weekday Midday	1,906	1,012	856	876	674	0	856	876	872	0	856
Weekday Evening	1,906	842	1,026	876	1,183	307	719	876	1,159	283	743
Weekday Overnight	1,662	644	985	876	1,322	446	539	876	1,286	410	575
Saturday Midday	1,906	477	1,391	876	366	0	1,391	876	408	0	1,391

Notes:
¹ Does not include parking spaces provided on the Project site.
² Does not include 324 spaces designated for Arena and NYPD use.
³ Includes demand from residential, commercial, retail and hotel uses.

As shown in **Table 6-9**, under the residential mixed-use variation, non-Arena Project parking demand would total approximately 674, 1,183, 1,322 and 366 spaces during the weekday midday, evening and overnight periods and the Saturday midday period, respectively. As a total of 876 parking spaces would be provided on-site for non-Arena uses, parking demand that would need to be accommodated off-site would total approximately 307 and 446 spaces during the weekday evening and overnight periods, respectively. In the weekday midday and Saturday midday periods, the 876 on-site parking spaces are expected to be sufficient to accommodate all non-Arena Project parking demand. As shown in **Tables 6-8 and 6-9**, available capacity at off-street public parking facilities within 1/4-mile of the project site during the weekday evening and overnight periods in 2035 (1,026 and 985 spaces, respectively) would be sufficient to accommodate all of the non-Arena Project demand that would park off-site during these periods. There would continue to be surpluses of approximately 719 parking spaces in the weekday evening and 539 spaces during the weekday overnight period at public parking facilities within 1/4-mile of the project site. Therefore, under the Reduced Parking Alternative no shortfalls in off-street public parking capacity are expected to occur as a result of demand from the residential, commercial, retail and public school uses developed with the Project’s residential mixed-use variation.

As shown in **Table 6-9**, under the commercial mixed-use variation, non-Arena Project parking demand would total approximately 872, 1,159, 1,286 and 408 spaces during the weekday midday, evening and overnight periods and the Saturday midday period, respectively. With a total of 876 parking spaces provided on-site for non-Arena uses, parking demand that would need to be accommodated off-site would total approximately 283, and 410 spaces during the weekday evening and overnight periods, respectively. In the weekday midday and Saturday midday periods, the 876 on-site parking spaces are expected to be sufficient to accommodate all non-Arena Project parking demand. As shown in **Tables 6-8 and 6-9**, available capacity at off-street public parking facilities within 1/4-mile of the project site during the weekday evening and overnight periods would be sufficient to accommodate all non-Arena Project demand that would park off-site during these periods. There would continue to be surpluses of approximately 743

parking spaces in the weekday evening and 575 spaces in the weekday overnight period at public parking facilities within ¼-mile of the project site. Therefore, under the Reduced Parking Alternative, no shortfalls in off-street public parking capacity are expected to occur as a result of demand from the residential, commercial, retail, hotel and public school uses developed with the Project's commercial mixed-use variation.

As discussed above, under both the Project and the Reduced Parking Alternative, a total of 300 parking spaces would be provided on the project site to accommodate a portion of the demand from a Nets game or other major event at the Barclays Center Arena. (Current peak parking accumulation during a Nets game at the Arena parking lot on Block 1129 typically totals fewer than 300 autos, and averages approximately 150 vehicles). Remaining Arena demand would park at off-site public parking facilities or on-street, as occurs at present. Therefore, off-street parking conditions during a weekday evening and a Saturday afternoon Nets game at the Arena are also assessed to determine the potential combined effects of demand from both the Project's Arena and non-Arena uses on the off-street public parking supply. A ½-mile study area was selected for this analysis as this is typically considered the maximum distance that persons en route to and from an event at the Arena would likely walk to access parking, consistent with the parking analyses in Chapter 4D, "Operational Transportation" and the 2006 FEIS.

As shown in Table 4D-59 and Figure 4D-7 in Chapter 4D, "Operational Transportation," there are a total of approximately 21 off-street public parking facilities currently located within ½-mile of Barclays Center (not including the Arena parking lot on Block 1129). These facilities currently operate at approximately 45 percent of capacity (1,825 spaces available) in the weekday evening and 55 percent of capacity (1,501 spaces available) in the Saturday midday when there are no events scheduled at the Arena.

Table 6-10 shows anticipated conditions at off-street public parking facilities within ½-mile of the Barclays Center Arena in the 2035 Future Without the Project. The data in **Table 6-10** reflect conditions when there are no events scheduled at the Arena. As shown, new development by 2035 is expected to result in the displacement of approximately 346 existing parking spaces (in three facilities) and the development of approximately 527 new spaces for a total net increase of approximately 181 parking spaces compared with Existing conditions. As also shown in **Table 6-10**, demand at public parking facilities within ½-mile of the Arena is expected to increase as a result of new development and background growth. Overall, available capacity at off-street public parking facilities in the 2035 Future Without the Project condition is expected to total approximately 1,767 spaces during the weekday evening period and 2,048 spaces during the Saturday midday period.

Table 6-11 shows anticipated future conditions in 2035 at off-street public parking facilities within ½-mile of the Barclays Center Arena for both the residential mixed-use and commercial mixed-use variations under the Reduced Parking Alternative. The analysis reflects parking demand from both Arena and non-Arena uses on the project site that is expected to be accommodated at off-site parking facilities under the Reduced Parking Alternative. The analysis conservatively assumes that all of this off-site parking demand would utilize off-street public parking facilities although, as discussed later in this section, more than 50 percent of persons driving to a Nets game at the Arena currently park on-street.

As shown in **Table 6-11**, under the residential mixed-use variation, approximately 307 spaces of parking demand from non-Arena Project uses would need to be accommodated off-site during the weekday evening period, while all non-Arena demand during the Saturday midday period is expected to be accommodated on-site. Off-site parking demand from a Nets game at the Arena is

expected to total approximately 1,231 spaces and 1,289 spaces during these periods, respectively. As discussed above, available capacity at off-street public parking facilities in the 2035 Future Without the Project is expected to total approximately 1,767 spaces during the weekday evening period and 2,048 spaces during the Saturday midday period. Consequently, as shown in **Table 6-11**, off-street public parking facilities within ½-mile of the Arena are expected to operate with available capacity during both the weekday evening period (229 spaces) and Saturday midday period (759 spaces) when there is a Nets game scheduled at the Arena during these periods. Therefore, under the Reduced Parking Alternative, no shortfalls in off-street public parking capacity are expected to occur as a result of demand from a Nets game at the Arena and other non-Arena uses at the project site with the residential mixed-use variation.

Table 6-10
2035 Future Parking Supply and Demand Without the Project
at Public Parking Facilities Within ½-Mile of the Barclays Center Arena

Period	2013 Existing Conditions w/o Arena Event			2035 Future Off-Site Parking Capacity			2035 Future Off-Site Parking Demand w/o Arena Event ⁷				
	Total Licensed Capacity ¹	Total Demand ¹	Net Spaces Available ³	Existing Public Spaces Displaced	New Public Spaces Provided ⁸	Total Public Parking Spaces ²	Existing Demand Plus Background Growth ⁴	Demand from Discrete Development Sites ⁵	Accessory Spaces Provided at Discrete Development Sites ⁶	Total Public Parking Demand ⁷	Net Parking Surplus or (Deficit) ³
Weekday Evening	3,411	1,521	1,825	346	527	3,592	1,573	906	726	1,753	1,767
Saturday Midday	3,411	1,845	1,501	346	527	3,592	1,908	290	726	1,472	2,048

Notes:

¹ Based on PHA survey data from Nov. 2011, May 2012, Nov. 2012 and April 2013; SSE Oct. 2011 survey data; and Sept. 2013 and Oct. 2013 data from the operator of the Atlantic Center parking garage.

² Does not include public parking spaces provided on the Project site.

³ Assumes parking facility is full at 98% of licensed capacity as per *CEQR Technical Manual* guidelines. Numbers may not sum due to rounding.

⁴ Reflects annual background growth rates of 0.25% per year for 2013-2018 and 0.125% per year for 2018-2035 as per *CEQR Technical Manual* guidelines.

⁵ Assumes an overnight demand of 0.2 parking spaces/D.U. for residential development.

⁶ Assumes an 80%/20% market rate/affordable split for residential development where the number of affordable units is not known, and that 0.2 spaces/D.U. of accessory parking would be provided for market rate units as per zoning.

⁷ Does not include demand from Phase I or Phase II of the the Project.

⁸ Assumes parking garage planned for 470 Vanderbilt Avenue would be available for use by Project demand, as is the existing surface parking lot at this location.

Table 6-11

2035 Future Conditions at Public Parking Facilities Within 1/2-Mile of Barclays Center With Project Demand During an Arena Event

Period	2035 Future Off-Site Project Parking Demand (Residential Mixed-Use Variation)							2035 Future Off-Site Project Parking Demand (Commercial Mixed-Use Variation)								
	Non-Arena Project Parking			Arena Project Parking				Net Parking Surplus or (Deficit) at Public Off-Site Facilities	Non-Arena Project Parking			Arena Project Parking				Net Parking Surplus or (Deficit) at Public Off-Site Facilities
	Parking Spaces Provided On-Site ¹	Total Demand	Off-Site Parking Demand	Parking Spaces Provided On-Site	Total Demand	Off-Site Parking Demand	Parking Spaces Provided On-Site ¹		Total Demand	Off-Site Parking Demand	Parking Spaces Provided On-Site	Total Demand	Off-Site Parking Demand			
Weekday Evening	876	1,183	307	300	1,531	1,231	229	876	1,159	283	300	1,531	1,231	253		
Saturday Midday	876	366	0	300	1,589	1,289	759	876	408	0	300	1,589	1,289	759		

Notes:
¹ Does not include 324 spaces designated for Arena and NYPD use.

As shown in **Table 6-11**, with the commercial mixed-use variation, approximately 283 spaces of parking demand from non-Arena uses would need to be accommodated off-site during the weekday evening period, while sufficient parking capacity is expected to be available on-site to accommodate all non-Arena demand during the Saturday midday period. Demand from a Nets game at the Arena would be the same as with the residential mixed-use variation during both periods, as would the amount of available capacity at off-street public parking facilities in the 2035 Future Without the Project. Consequently, as shown in **Table 6-11**, off-street public parking facilities within 1/2-mile of the Arena are expected to operate with available capacity during both the weekday evening period (253 spaces) and Saturday midday period (759 spaces) when there is a Nets game scheduled at the Arena during these periods. Therefore, under the Reduced Parking Alternative, no shortfalls in off-street public parking capacity are expected to occur as a result of demand from a Nets game at the Arena and other non-Arena uses at the project site with the commercial mixed-use variation.

On-Street Parking

The New York City Department of Transportation (NYCDOT) survey data from 2011 (prior to the opening of the Arena) indicate that there are a total of approximately 9,395 on-street parking spaces (metered and un-metered) in the neighborhoods within 1/2-mile of the Arena.¹ Overall peak utilization was found to total approximately 84 percent on a weekday afternoon, 81 percent on a weekday evening, and 66 percent on a Saturday afternoon, although there was considerable variation by neighborhood. April 2013 data from a subsequent NYCDOT study found increased utilization of the on-street parking supply in this area during a weekday evening Nets game at Barclays Center, with a peak utilization level of approximately 87 percent on blocks closest to the Arena.²

Although the previous analysis of off-street public parking conditions conservatively assumes that all Project demand not accommodated on-site would utilize off-street public parking

¹ *Analysis of Parking Conditions Around Yankee Stadium and Atlantic Yards*, NYCDOT Division of Traffic and Planning, July 6, 2012.

² *Barclays Center On-Street Parking Impact Study*, NYCDOT, September 26, 2013.

facilities in the vicinity, data from surveys of Arena patrons indicate that on weekdays approximately 25.7 percent of Nets spectators arrive by auto, and of these, approximately 46 percent use off-street parking facilities and 54 percent are parking on-street. A higher percentage of Nets spectators arrive by auto on weekends (32.1 percent) but a smaller percentage use off-street facilities on weekends (approximately 43 percent) with more parking on-street (57 percent). As discussed previously, peak parking accumulation during a Nets game at the Arena parking lot on Block 1129 typically totals fewer than 300 autos, and a total of 300 on-site parking spaces would be provided to accommodate Arena demand under both the Project and the Reduced Parking Alternative. As there would continue to be available capacity at off-street public parking facilities within ½-mile of the Arena in the future (see **Table 6-11**), the numbers of Arena patrons parking on-street under this alternative are expected to be similar to current conditions as well as future conditions with the Project.

As discussed above, under the Reduced Parking Alternative, sufficient off-street public parking capacity is expected to be available in the 2035 Future With the Project to accommodate all Project demand from both Arena and non-Arena uses not otherwise accommodated in on-site accessory parking. However, as was the case for the Project, the traffic mitigation plan for the Reduced Parking Alternative incorporates modifications to curbside regulations that would potentially affect existing curbside parking at a total of 28 locations throughout the traffic study area. Depending on the peak hour, it is estimated that the net number of on-street parking spaces within ½-mile of the Barclays Center Arena that would be displaced by the traffic mitigation measures recommended for the Reduced Parking Alternative would represent from 0.4 percent to 1.1 percent of the existing 9,395 on-street parking spaces in this area, the same as for the Project's traffic mitigation plan. It is estimated that a total of approximately 129, 68, 107, 63 and 81 on-street parking spaces would be displaced during the weekday AM, midday, PM and pregame and Saturday pregame peak periods, respectively, of which 107, 53, 69, 36 and 58, respectively, would be located within ½-mile of the Arena. Compared with the Project's traffic mitigation plan, a total of two additional on-street parking spaces would be displaced during each peak period with the exception of the weekday PM which would remain unchanged. (The remaining displaced parking spaces would be distributed among more distant intersections within the traffic study area, some located as far as one mile from the project site.) Also, approximately seven on-street parking spaces would potentially be created as a result of a lane re-striping recommended for Dean Street at Vanderbilt Avenue under both the Project and the Reduced Parking Alternative. As noted in Chapter 5, "Mitigation," recommended traffic mitigation measures (and therefore the related changes in curbside parking regulations) would be implemented over time as Phase II is developed through 2035, and as directed by NYCDOT.

It is expected that drivers currently parking in the on-street spaces that would be displaced under the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity. (As noted above, overall, on-street parking within ½-mile of the Arena currently operates at approximately 84 percent of capacity on a weekday afternoon, 81 percent on a weekday evening and 66 percent of capacity on a Saturday afternoon, although it varies by neighborhood.) Based on this analysis, with the implementation of the proposed traffic mitigation measures that would eliminate on-street parking, on-street parking capacity would remain available in the overall study area under the Reduced Parking Alternative.

OPERATIONAL AIR QUALITY

With the Reduced Parking Alternative, the Project's parking facilities would be smaller in overall capacity. Since there would be fewer on-site parking spaces available, there would be

some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. However, as shown above in the “Transportation” section, this would result in similar traffic operations at the analyzed intersections presented in Chapter 4D, “Operational Transportation.” Therefore, like the Project, no significant adverse operational-related air quality impacts would result from the Reduced Parking Alternative.

OPERATIONAL NOISE

Traffic levels during operation of the Reduced Parking Alternative would be comparable to those during operation of the Project on roadways adjacent to each of the noise receptor locations analyzed in Chapter 4G, “Operational Noise” during each of the analyzed time periods. Based on the traffic levels associated with the Reduced Parking Alternative, the differences in noise levels at affected locations as compared with those with the Project would be minimal and would be less than the levels that would have the potential to result in a significant adverse impact. Consequently, as with the Project, the Reduced Parking Alternative would not be expected to result in any significant adverse operational noise impacts.

OPERATIONAL NEIGHBORHOOD CHARACTER

The Reduced Parking Alternative, like the Project, would not result in significant adverse neighborhood character impacts. The Reduced Parking Alternative and the Project would both result in significant adverse traffic impacts at 56 intersections in one or more peak hours, and the locations of the impacted intersections would be the same. Compared with the Project, the Reduced Parking Alternative would result in one additional impacted intersection in the AM peak hour (42 in the AM peak hour under the Reduced Parking Alternative compared with 41 under the Project). As with the Project, mitigation measures for the Reduced Parking Alternative would fully mitigate significant adverse traffic impacts at 46 of the 56 impacted intersections. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Fort Greene Place, additional lane restriping at the intersection of Atlantic and Clermont Avenues, and modifications to the recommended signal timing changes at these and seven other intersections. Under the Reduced Parking Alternative, compared with the Project, there would be one additional intersection with unmitigated traffic impacts in the AM peak hour and in the Saturday pregame peak hour, and one fewer in the PM peak hour.

In terms of pedestrians, two of the crosswalks identified as being impacted by the Project would, under the Reduced Parking Alternative, be impacted in additional peak hours. Under either the Project or the Reduced Parking Alternative, all pedestrian impacts to crosswalks could be fully mitigated through a combination of signal timing changes and crosswalk widening. Under both the Project and the Reduced Parking Alternative, there would be unmitigated sidewalk impacts on Dean Street between 6th and Carlton Avenues. It is expected that mitigating these impacts would require relocating existing tree pits along the block which would likely not be practicable.

No shortfalls in off-street public parking capacity are expected to occur as a result of either the Project or the Reduced Parking Alternative. The traffic mitigation plan for either the Project or the Reduced Parking Alternative would incorporate modifications to curbside regulations that would potentially affect existing curbside parking at a total of 28 locations throughout the traffic study area. Compared with the Project’s traffic mitigation plan, the Reduced Parking Alternative would displace two additional on-street parking spaces during each peak period with the

exception of the weekday PM which would remain unchanged. It is expected that drivers currently parking in the on-street spaces that would be displaced under both the Project and the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity. However, on-street parking capacity is expected to remain available in the overall study area with the implementation of the traffic mitigation plan under either the Project or the Reduced Parking Alternative.

The minor differences in traffic and pedestrian impacts and on-street parking availability associated with the Reduced Parking Alternative compared with the Project would not affect conclusions regarding neighborhood character; neither the Project nor the Reduced Parking Alternative would result in significant adverse neighborhood character impacts.

CONSTRUCTION TRANSPORTATION

As described above under “Transportation,” the Reduced Parking Alternative would reduce the number of on-site parking from 2,896 spaces to approximately 1,200 spaces. Out of these 1,200 parking spaces, approximately 876 spaces would be for non-Arena demand along with approximately 300 parking spaces for demand from a Nets game or other events at the Arena and 24 spaces for NYPD parking. As described in Chapter 3H, “Construction Transportation,” the 300 parking spaces available to accommodate Arena demand would generally be available to construction workers, because Arena events typically do not coincide with the hours during which construction activities would occur at the project site. These 300 on-site parking spaces would also be available to accommodate construction worker parking demand under this alternative. Therefore, there would be no change in the construction vehicle trip assignments under this alternative. However, the on-site parking spaces would not be sufficient to accommodate all non-Arena parking demand from the Project and some of the Project demand is expected to utilize off-site public parking facilities in the vicinity of the Project site. As a consequence, under this alternative, there would be some localized redistribution of operational auto trips during the period of Phase II construction at intersections in the immediate vicinity of the Project site compared with the Future With Phase II condition. As a number of Phase II buildings (Buildings 8, 11, 12, 13, 14, and 15) are assumed to be operational by the 1st quarter of 2032 under Construction Phasing Plan 3, an assessment was conducted to determine if the localized redistribution of operational auto trips during peak construction would alter the analysis conclusions presented in Chapter 3H, “Construction Transportation.”

TRAFFIC

Accounting for the localized redistribution of operational auto trips during the construction analysis peak hours in the 1st quarter of 2032 under Construction Phasing Plan 3, traffic operations at the analyzed intersections during the two construction analysis peak hours would be the same or comparable to those presented in Chapter 3H, “Construction Transportation.” However, the significant adverse traffic impacts at the intersection of Atlantic Avenue and Clermont Avenue during the 3 to 4 PM construction analysis peak hour under this alternative would require shifting one additional second of green time from the southbound phase to the eastbound/westbound phase to be fully mitigated, as compared with the recommended mitigation measures presented in Chapter 3H, “Construction Transportation.” At the other analysis intersections, the measures presented in Chapter 3H, “Construction Transportation” for the 1st quarter of 2032 under Construction Phasing Plan 3 would also mitigate the construction impacts that could occur during the same peak construction quarter under this alternative. For the 4th quarter of 2027 under Construction Phasing Plan 3 (when only Building 14 is assumed to be

operational), the resultant localized redistribution of operational auto trips would have minimal effects during the two construction analysis peak hours such that the traffic operations would be the same or comparable to those presented in Chapter 3H, “Construction Transportation.” The same mitigation measures presented in Chapter 3H, “Construction Transportation” for the 4th quarter of 2027 under Construction Phasing Plan 3 would also mitigate the construction impacts that could occur during the same peak construction quarter under this alternative. Therefore, the number of potential construction-related impacted traffic intersections that could occur during peak construction under Construction Phasing Plans 1 and 2 is also expected to be comparable to the 4th quarter of 2027 under Construction Phasing Plan 3 under this alternative.

TRANSIT

As described in Chapter 3H, “Construction Transportation,” construction workers would be distributed among the various subway and bus routes, station entrances, and bus stops near the Project site and would generally travel outside of typical commuter peak periods such that the projected construction worker trips by transit would not result in any significant adverse transit impacts. There would be no material change in the number of construction workers using transit or how they would be distributed among the available transit options under this alternative. Therefore, the projected construction worker trips by transit under this alternative would also not result in any significant adverse transit impacts.

Pedestrians

Similar to transit, there would be no material change in the number of construction workers or how they would travel to the Project site outside of typical commuter peak periods. Therefore, these trips are also expected to have minimal effects on pedestrian operations during the construction peak hours and similarly would not result in any significant adverse pedestrian impacts under this alternative.

PARKING

As described above, the on-site parking spaces being built out over the course of Project construction would not be sufficient to accommodate all non-Arena parking demand from the Project and some of the Project demand is expected to utilize off-site public parking facilities in the vicinity of the Project site. As a number of Phase II buildings (Buildings 8, 11, 12, 13, 14, and 15) are assumed to be operational by the 1st quarter of 2032 under Construction Phasing Plan 3, conditions at off-street public parking facilities within ¼-mile of the Project site were also assessed for the parking supply and demand generated by these completed Project buildings, construction worker parking demand from Site 5 and Building 1 construction, and the Phase II peak construction worker parking demand during the 1st quarter of 2032 under Construction Phasing Plan 3.

Table 6-12 shows the anticipated future conditions at off-street public parking facilities within ¼-mile of the Project site during peak construction in the 1st quarter of 2032 under Construction Phasing Plan 3 without the Project. As shown, parking demand at public parking facilities within ¼-mile of the Project site is expected to increase as a result of new development and background growth. Overall, available capacity at off-street public parking facilities in the 1st quarter of 2032 is expected to total approximately 1,255 spaces during the weekday AM period, 865 spaces during the weekday midday period, and 1,035 spaces during the weekday PM period.

Table 6-12

2032 Future Conditions at Public Parking Facilities Within ¼-Mile of the Project Site Without the Project

Period ¹	2013 Existing Conditions			2032 Future Off-Site Parking Capacity			2032 Future Off-Site Parking Demand				
							Existing		Accessory Spaces		
				Existing	New	Total	Demand	Demand from	Provided at	Total	Net
	Total		Net	Public	Public	Public	Plus	Discrete	Discrete	Public	Parking
	Licensed	Total	Spaces	Spaces	Spaces	Parking	Background	Development	Development	Parking	Surplus or
	Capacity ²	Demand ²	Available ⁴	Displaced	Provided	Spaces ³	Growth ⁵	Sites ⁶	Sites ⁷	Demand ⁸	(Deficit) ⁴
Weekday AM	1,725	710	983	346	225	1,604	732	492	907	317	1,255
Weekday Midday	1,725	1,183	510	346	225	1,604	1,219	395	907	707	865
Weekday PM	1,725	927	766	346	225	1,604	955	489	907	537	1,035

Notes:

- (1) Typical weekday peak hours include 8 AM to 9 AM, 12 PM to 1 PM, and 5 PM to 6 PM.
- (2) Based on survey conducted by AKRF, Inc. in October 2013, and September 2013 and October 2013 data from the operator of the Atlantic Center Garage. Does not reflect Arena Demand.
- (3) Does not include parking spaces provided on the Project site.
- (4) Assumes parking facility is full at 98% of licensed capacity as per *CEQR Technical Manual* guidelines.
- (5) Reflects annual background growth rates of 0.25% per year for 2013-2018 and 0.125% per year for 2018 to 2032 as per *CEQR Technical Manual* guidelines.
- (6) Assumes an overnight demand of 0.2 parking spaces/D.U. for residential development.
- (7) Assumes an 80%/20% market rate/affordable split for residential development where the number of affordable units is not known, and that 0.2 spaces/D.U. of accessory parking would be provided for market rate units as per zoning.
- (8) Does not include demand from Phase I or Phase II of the Project.

Table 6-13 shows the anticipated future conditions at off-street public parking facilities within ¼-mile of the Project site during peak construction in the 1st quarter of 2032 under Construction Phasing Plan 3 with the Project. By the 1st quarter of 2032 under Construction Phasing Plan 3, Buildings 2, 3, and 4 from Phase I and Buildings 8, 11, 12, 13, 14, and 15 from Phase II are assumed to be operational. The parking analysis also conservatively assumes the overlapping construction parking demand from Building 1 and Site 5, which may be constructed anytime during the overall construction period. Accounting for the parking supply and demand generated by the completed Project buildings, construction worker parking demand from Site 5 and Building 1 construction, and the Phase II peak construction worker parking demand, overall available capacity at off-street public facilities is expected to decrease to approximately 927 spaces during the weekday AM period, 531 spaces during the weekday midday period, and 1,035 spaces during the weekday PM period. This analysis conservatively assumes that on-site non-Arena parking spaces would not be utilized by construction workers. Therefore, similar to the peak construction parking analysis presented in Chapter 3H, “Construction Transportation,” there would be no shortfall anticipated during Phase II construction of the Project under this alternative.

CONSTRUCTION AIR QUALITY

There would be no change to the number of construction vehicle trips generated by the Project or to the construction vehicle trip assignments under the Reduced Parking Alternative. Since there would be fewer on-site parking spaces available, there would be some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. However, as shown above in the “Transportation” portion of the “Construction” section, this would result in the same or comparable traffic operations at the analyzed intersections presented in Chapter 3H, “Construction Transportation.” Therefore, like the Project, no significant adverse construction-related air quality impacts would result from the Reduced Parking Alternative.

Table 6-13

2032 Future Conditions at Public Parking Facilities Within 1/4-Mile of the Project Site With Project Demand and Phase II Peak Construction Parking Demand

Period ¹	2032 Future Off-Site Parking Capacity w/o Project			2032 Future Off-Site Parking Demand (Commercial Mixed-Use Variation)									
	Total Public Parking Spaces ²	Demand w/o Project	Net Parking Surplus or (Deficit)	Non-Arena	Non-Arena	Non-Arena	Arena		Phase II	Building 1	Site 5	Total	Net
				Parking	Project	Off-Site	Spaces	Arena	Construction	Construction	Construction	Public	Parking
				Spaces	Provided	Parking	Provided	Parking	Parking	Parking	Parking	Parking	Parking
On-Site ³	Demand ^{4,5}	Demand	On-Site	Demand ⁶	Demand ⁷	Demand ⁷	Demand ⁷	Demand ⁷	Demand ⁷	Demand ⁷	(Deficit)		
Weekday AM	1,604	317	1,255	636	449	0	300	39	392	134	63	328	927
Weekday Midday	1,604	707	865	636	301	0	300	45	392	134	63	334	531
Weekday PM	1,604	537	1,035	636	412	0	300	160	0	0	0	0	1,035

Notes:
 (1) Typical weekday peak hours include 8 AM to 9 AM, 12 PM to 1 PM, and 5 PM to 6 PM.
 (2) Does not include parking spaces provided on the Project site.
 (3) Does not include 324 spaces designated for Arena and NYPD use and the 240 spaces provided on Site 5.
 (4) Includes demand from residential, commercial, and retail uses.
 (5) Buildings 2, 3, 4, 8, 11, 12, 13, 14 and 15 are assumed to be operational by the 1st quarter of 2032 under Construction Phasing Plan 3.
 (6) Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the Project site.
 (7) Building 1 and Site 5 are assumed to undergo concurrent construction with Phase II buildings.

CONSTRUCTION NOISE AND VIBRATION

As described in Chapter 3J, “Construction Noise,” the primary source of noise and vibration associated with construction of Phase II of the Project would be the operation of on-site equipment, rather than construction-related vehicle trips, including construction trucks and construction worker autos, traveling to and from the project site. The types and amount of on-site construction equipment under the Reduced Parking Alternative would be comparable to that analyzed for construction of Phase II of the Project because the structures to be constructed under the Reduced Parking Alternative would be the same as those to be constructed as part of Phase II of the Project, with the exception of some of the parking structures, which would not be constructed. Consequently, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Additionally, as with construction of Phase II of the Project, construction of the Reduced Parking Alternative would not result in any significant adverse vibration impacts.

CONSTRUCTION PUBLIC HEALTH

As described above under Construction Noise and Vibration, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Therefore, the Reduced Parking Alternative would not affect the conclusions of the public health analysis presented in Chapter 3K, “Construction Public Health.”

CONSTRUCTION NEIGHBORHOOD CHARACTER

As described in Chapter 3L, “Construction Land Use and Neighborhood Character,” Construction of Phase II of the Project under the Extended Build-Out Scenario is not expected to result in significant adverse neighborhood character impacts in neighborhoods surrounding the Phase II project site; however, increased traffic, noise, and views of construction activity would result in significant adverse localized neighborhood character impacts in the immediate vicinity of the Phase II project site.

As described above under “Transportation,” the Reduced Parking Alternative would result in some localized redistribution of operational auto trips during peak construction compared with the Project, however this would not alter the analysis conclusions presented in Chapter 3H, “Construction Transportation.” There would be no material change in the number of construction workers using transit or how they would be distributed among the available transit options under the Reduced Parking Alternative, and there would be no material change in construction worker pedestrian trips. Similar to the peak construction parking analysis presented in Chapter 3H, “Construction Transportation,” there would be no shortfall of off-street parking anticipated during Phase II construction of the Project under the Reduced Parking Alternative. Likewise, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as described for Phase II of the Project in Chapter 3J, “Construction Noise.” Views of construction activities during the Phase II construction period would be materially the same under both the Reduced Parking Alternative and the Project.

As the construction period effects with respect to transportation, noise, views of construction activity and the other technical areas considered in a neighborhood character analysis would be materially the same under both Phase II of the Project and the Reduced Parking Alternative, the neighborhood character impacts would be the same. Like Phase II of the Project during the construction period, construction under the Reduced Parking Alternative would result in a significant adverse localized neighborhood character impact in the immediate vicinity of the Phase II project site, but would not alter the character of the larger neighborhoods surrounding the project site.

C. NO UNMITIGATED SIGNIFICANT ADVERSE IMPACT ALTERNATIVE

The 2006 FEIS (in Chapter 20, “Alternatives,”) determined that the Project would result in unmitigated impacts with respect to cultural resources, urban design and visual resources, shadows, traffic, and noise. The 2006 FEIS then discussed alternatives to the proposed project that would allow for the elimination of these impacts.

As described in Chapter 5, “Mitigation,” unmitigated significant adverse impacts have been identified in the areas of community facilities, transportation and construction. Therefore, this section explores alternatives to the Project that would allow for the elimination of these impacts.

OPERATIONAL IMPACTS

COMMUNITY FACILITIES

The project site for Phase II is located in Sub-District 1 of Community School Districts (CSD) 13. As discussed in Chapter 4B, “Operational Community Facilities,” based on current CEQR methodology Phase II of the Project under the Extended Build-Out scenario would introduce 1,430 elementary school students by 2035, increasing the elementary school utilization rate in CSD 13/Sub-District 1 by 88 percentage points, and bringing total utilization to 220 percent (under the conservative assumption that no new school capacity would be created between 2019 and 2035). Phase II would also introduce 592 intermediate school students by 2035, increasing the intermediate school utilization rate in CSD 13/Sub-District 1 by 69 percentage points, and bringing total utilization to 160 percent (also assuming no new school capacity would be created

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between 2019 and 2035). Therefore, Phase II would exceed the *CEQR Technical Manual* threshold for a significant adverse impact on elementary and intermediate schools.

The 2006 FEIS had also found that there would be a shortfall of seats at elementary and intermediate schools in the future with the Project, and that these shortfalls would constitute a significant adverse impact on elementary and intermediate schools within the ½-mile study area.

As discussed in Chapter 5, “Mitigation,” to mitigate the projected shortfall in school seats for elementary and intermediate schools in CSD 13/Sub-District 1, either one or a combination of the following measures would need to be undertaken:

- Building a new school on the project site;
- Shifting the boundaries of school catchment areas within the CSDs to move students to schools with available capacity;
- Creating new satellite facilities in less crowded schools; and
- Building new school facilities off-site.

To partially mitigate the significant adverse impact on public schools, the project sponsors have committed to provide adequate space for the construction and operation of a 100,000-gsf elementary and intermediate school on the Phase II project site. The project sponsors’ obligation to provide space for an elementary and intermediate public school on the Phase II project site was included in 2006 and 2009 MGPP and the Amended Memorandum of Environmental Commitments (MEC).

If built at the election of the New York City Department of Education (DOE), the new P.S./I.S on the Phase II project site would partially mitigate the projected shortfall in school seats for elementary and intermediate schools located within CSD 13/Sub-District 1. While the school program and capacity would be developed at a later date, based on DOE’s 2015-2019 Proposed Capital Plan, it is anticipated that this school would accommodate 757 students for elementary and/or intermediate students. Thus, the proposed school would be expected to accommodate a number of students equivalent to over one third of Phase II-generated demand for elementary and intermediate school seats, based on current projections and assumptions, leaving this significant adverse impact partially mitigated.

To avoid these significant impacts on elementary and intermediate school utilization, the No Unmitigated Significant Adverse Impact Alternative would have to decrease the number of residential units planned for the project (therefore decreasing the number of intermediate and elementary school students introduced by the Project) in order to avoid triggering *CEQR Technical Manual* thresholds for significant adverse impacts. According to the *CEQR Technical Manual* methodology, a significant adverse impact may occur if a proposed action would result in 1) a utilization rate of the elementary and/or intermediate schools in the sub-district study area, that is equal to or greater than 100 percent; and 2) an increase of five percentage points or more in the collective utilization rate between the Future Without Phase II and the Future With Phase II.

As described in Chapter 4B, “Operational Community Facilities,” because the program and capacity for the proposed school that could be provided on-site as partial mitigation at the election of DOE, these new school seats have not been included in the quantitative assessment of future school utilization that is summarized above. Assuming that this proposed school is not provided, in order to avoid triggering the threshold for a significant adverse impact, Phase II would have to introduce approximately 278 or fewer residential units, which is 4,654 fewer units

than proposed. With this number of residential units, the elementary school utilization rate with Phase II under the Extended Build-Out Scenario would increase only by 4.9 percentage points (136.9 percent utilization), and the intermediate school utilization rate would increase by 3.9 percentage points (94.4 percent utilization). If DOE elects to develop the proposed on-site school, it is expected that two-thirds of the total seats would be for elementary school use and one-third of the total seats would be for intermediate school use. In this scenario, in order to avoid triggering the threshold for significant adverse impacts, Phase II would have to introduce approximately 2,671 or fewer residential units, which is 2,261 fewer units than proposed. With these residential units, the elementary school utilization rate with Phase II under the Extended Build-Out Scenario would increase by 4.9 percentage points (136.9 percent utilization) and the intermediate school utilization rate would increase by 8.5 percentage points (99.0 percent utilization).

This large reduction in the residential component of the Project would not be feasible and would be substantially less effective than the Project in responding to Brooklyn’s need for market-rate and affordable housing. In the scenario without the proposed on-site school, this alternative would provide only 102 new affordable housing units, which is less than six percent of the affordable housing planned for Phase II under the Extended Build-Out Scenario. In the scenario with the proposed on-site school, this alternative would provide only 975 new affordable housing units, which is a little more than half of the affordable housing planned for Phase II under the Extended Build-Out Scenario. Therefore, the No Unmitigated Significant Adverse Impact Alternative would not meet public policy goals for redevelopment as effectively as the Project. Furthermore, under this alternative, the project sponsors would not fulfill their obligations to provide some of the Project benefits, including the substantial affordable housing that is stipulated in the Project commitments.

TRANSPORTATION

As described in Chapter 5, “Mitigation,” Phase II of the Project under the Extended Build-Out Scenario would result in unmitigated significant adverse traffic impacts at four intersections in the weekday AM peak hour, seven in the PM peak hour, and eight in the Saturday pregame peak hour, and at one sidewalk in the weekday PM and Saturday pregame peak hours. Because of existing congested conditions at a number of intersections, and anticipated increases in congestion in the Future Without Phase II, even a minimal increase in traffic would result in unmitigated significant traffic impacts at one or more locations. Based on a sensitivity analysis of intersections within the study area, it was determined that the addition of fewer than five cars during the PM peak hour would trigger a traffic impact that cannot be fully mitigated. Thus, almost any new development on the project site would result in unmitigated significant impacts in the area of transportation, and no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Project’s goals.

CONSTRUCTION IMPACTS

TRAFFIC

As discussed in Chapter 3H, “Construction Transportation” the detailed construction traffic analysis of the peak construction periods for Construction Phasing Plan 3—which represent the reasonable worst case period for construction traffic impacts when multiple buildings and certain railroad yard platform segments would be under concurrent construction at the project site and a number of the Phase II buildings would also be in operation—determined that significant adverse traffic impacts would occur at numerous locations throughout the construction period.

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As noted in Chapter 5, “Mitigation,” similar to the traffic impact analysis and findings from the 2006 FEIS, there would be locations where impacts could not be fully alleviated with practicable mitigation measures or could only be partially mitigated. Because of existing congestion at a number of intersections, even a minimal increase in traffic would result in unmitigated impacts at some locations. Thus, almost any new development on the project site would result in unmitigated traffic impacts, and no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Project’s goals.

NOISE

As discussed in Chapter 3J, “Construction Noise and Vibration,” the results of the detailed construction noise analysis indicates that of the approximately 489 buildings in the study area, elevated noise levels are predicted to occur at one or more floors of approximately 124 buildings under Construction Phasing Plan 1, at one or more floors of approximately 160 buildings under Construction Phasing Plan 2, and at one or more floors of approximately 134 buildings under Construction Phasing Plan 3. This is as compared with the approximately 176 buildings predicted to experience significant adverse noise impacts at one or more floors resulting from construction of Phase II of the Project in the 2006 FEIS. Most of the locations predicted to experience significant adverse construction noise impacts according to this SEIS analysis are the same as those predicted to experience impacts in the 2006 FEIS, but there are some buildings predicted to experience significant adverse construction noise impacts at one or more floors that were not predicted to experience significant adverse construction noise impacts in the 2006 FEIS.

The Extended Build-Out Scenario would result in construction occurring over a longer overall period of time, and result in noise level increases occurring over a longer duration. In addition to resulting in significant adverse construction noise impacts at some locations not predicted to experience significant adverse construction noise impacts in the 2006 FEIS, this also would result in longer durations of impact at some locations that were predicted to experience significant adverse construction noise impacts in the 2006 FEIS. At locations with line of sight to several Phase II buildings the increased duration of construction at those buildings would extend the overall duration of construction noise level increases. However, at these receptors predicted to experience significant adverse construction noise impacts in the 2006 FEIS and at which receptor control noise measures were provided by the project sponsors, those measures would continue to partially mitigate the impacts resulting from construction noise.

At one building—525 Clinton Avenue, a residential building with balconies—there would be no feasible and practicable mitigation for the predicted significant adverse construction noise impacts at balcony locations.

As discussed in the 2006 FEIS, because of the complexity of constructing a deck and the subsequent time required to erect a building, any proposal to redevelop the project site would likely require more than two years to construct and would likely result in significant adverse noise impacts on nearby sensitive receptors. Therefore, the construction noise impacts associated with Phase II of the Project can be avoided only through precluding construction, which would fail to meet the Project’s goals of generating economic and civic benefits for the City and the State and would be inconsistent with public policy goals.

D. MULTIPLE DEVELOPER ALTERNATIVE

A number of commenters on the Draft Scope of Work for the SEIS requested that ESD assess a “multiple developer alternative” as a strategy for speeding construction of the Project, so as to reduce the duration of its construction impacts and to achieve the benefits of the Project more rapidly. ESD owns a portion of the Phase II site and intends to acquire the parcels that remain in private ownership through the use of eminent domain; the MTA also owns a substantial portion of the Phase II site (the Vanderbilt Yard on Blocks 1120 and 1121). Therefore, it is assumed that in order to pursue an alternative involving additional developers in Phase II construction, ESD and MTA would either separately or together solicit proposals through one or more new requests for proposals (RFPs). ESD and MTA would then evaluate any proposals that they receive and seek to negotiate individual agreements with different developers for discrete areas of the Phase II site.

The discussion below evaluates the feasibility of this approach and its effectiveness in speeding construction. It also considers this “multiple developer approach” in light of the structure that is currently in place, which allows the current project sponsors to transfer one or more Phase II building sites to other developers or to enter into one or more joint venture agreements with other developers to co-develop one or more of the Phase II buildings.

THE PROJECT SPONSORS’ EXISTING CONTRACTUAL ARRANGEMENTS AND PROPERTY RIGHTS

FCRC affiliates have extensive contractual and property rights in the Phase II site that must be taken into account in considering an alternative involving the engagement by ESD and the Metropolitan Transportation Authority (MTA) of other developers for construction of the Phase II area.

Among these rights are those relating to the rail yard on Blocks 1120 and 1121 – two blocks that comprise more than half of the Phase II site, and that are expected to accommodate about 65 percent of the floor area to be constructed in Phase II. MTA and certain Forest City Ratner Company (FCRC) affiliates have entered into several agreements with respect to this MTA-owned property. Under those agreements, the FCRC affiliates are obligated to construct a new rail yard for the Long Island Rail Road (LIRR) as part of Phase I of the Project, and is granted the right, upon completion of that new facility, to purchase air space over the yard, construct a platform, and develop the six Phase II buildings on Blocks 1120 and 1121, subject to a number of terms and conditions.

The contractual arrangements between MTA and the FCRC affiliates are summarized in Chapter 1, “Project Description.” Those agreements were challenged in one lawsuit (*Montgomery v. MTA*, Index No. 114304/09), but that case was dismissed and no appeal was taken. Accordingly, under contracts that are in full force and effect with MTA, an affiliate of FCRC holds exclusive rights to purchase the air space parcels over the Vanderbilt Yard through 2031. Those rights would have to be modified or rescinded for ESD and MTA to engage other developers to construct any of the buildings over the rail yard.

Affiliates of FCRC have also entered into a number of agreements and leases with ESD. Among these are the Land Acquisition Funding, Property Management and Relocation Agreement, the Development Agreement and several interim leases and development leases. These contracts are also summarized in Chapter 1, “Project Description.” Under the agreements, an FCRC affiliate has paid for ESD’s acquisition of the land on Block 1129, for Lot 35 on Block 1120, and for

Lots 42 and 47 on Block 1121, and ESD has acquired this land. ESD has leased Block 1129 (the future site of four of the Phase II buildings) to FCRC entities under long-term leases that grant those entities the right to develop the property up to the outside date of 2035, subject to certain terms and conditions. The remaining privately owned land on the Phase II site (*i.e.*, Lots 19 and 28 on Block 1120 and Lots 1, 4, and 85 through 87 on the western portion of Block 1128) have not yet been acquired by ESD, but the Development Agreement and Land Acquisition Funding, Property Management and Relocation Agreement specify the rights that the project sponsors would have to develop these areas when they are acquired for Phase II.

The only lawsuit brought to challenge the Development Agreement (*Peter Williams Enterprises, Inc. v. N.Y.S. Urb. Dev. Corp.*, Index No. 105101/10) was dismissed in 2010.¹ None of the leases or other agreements between ESD and the FCRC affiliates were challenged in court. Accordingly, the FCRC affiliates' rights and obligations under their agreements with ESD are in full force and effect, and would have to be modified or rescinded for ESD to engage other developers to construct any of the Phase II buildings.

**EVALUATION OF THE PRACTICABILITY OF A MULTI-DEVELOPER
ALTERNATIVE INVOLVING CONTRACTUAL ARRANGEMENTS AMONG ESD,
MTA AND ADDITIONAL DEVELOPERS**

The feasibility of the multi-developer alternative as a means of accelerating the completion of Phase II has been considered in light of circumstances as they currently exist with respect to the Project, and in light of the obstacles that would be encountered if it were to be implemented.

The FCRC affiliates' existing rights under the numerous agreements they now have with the agencies would affect the feasibility of this alternative. As discussed above, under those agreements certain FCRC affiliates hold extensive contractual and property rights in the Project and the Phase II project site. As described in the 2006 FEIS (Chapter 1, "Project Description"), FCRC affiliates had acquired a substantial portion of the project site prior to affirmation of the 2006 MGPP. Subsequently, most of the properties were acquired by ESD from certain FCRC affiliates through the exercise of eminent domain for nominal consideration, because ESD's acquisition occurred under agreements that provided for the lease back of the properties to certain FCRC affiliates obligated to develop the Project. The FCRC affiliates also have spent hundreds of millions of dollars in performing their obligations under these contracts, and have used many of those agreements as security for financing the Project. Since the FCRC affiliates have given no indication that either they or their secured lenders would be willing to give up their existing rights, issues arising in connection with a switch by ESD and MTA to a multi-developer alternative would take years to resolve, prolonging the construction period.

In addition, in the event that issues arising from cancellation of the existing contracts were resolved in a way that would allow a multiple developer alternative to proceed, the agencies (ESD and MTA) would then, either individually or together, begin a formal procurement process to engage other developers. It is speculative to estimate how long that process would take, but it is clear that even with the consent and cooperation of the FCRC affiliates, it would be complex

¹ In *Develop Don't Destroy (Brooklyn), Inc. v. Empire State Development Corporation*, Index No. 114631/09 and *Prospect Heights Neighborhood Development Council v. Empire State Development Corporation*, Index No. 116323/09, petitioners cited the Development Agreement as a basis to challenge the 2009 Technical Memorandum and 2009 Modified General Project Plan (MGPP), but did not challenge the Development Agreement.

and time consuming. One or more RFPs would have to be prepared and issued, and (in the event responsive proposals are submitted by responsible entities) either simultaneous or sequential consideration and negotiation of proposals would ensue. Amendments could be required to the MGPP, following UDC Act procedures, if negotiations with other developers result in material changes to the Project or ESD's financial obligations; further environmental review under SEQRA would be required to address any material changes to the Project; new Public Authorities Control Board approval might have to be obtained depending on the nature of the new development agreements and their financial risks to ESD; appraisals would be needed with respect to any property dispositions; and applicable requirements of the Public Authorities Accountability Act would have to be satisfied. A new round of litigation, arising from the approval process, may then have to be resolved.

Given the complexity of addressing Project obligations among multiple developers, it is not clear that multiple developers would have an interest in the opportunity presented by an RFP. It is also uncertain whether the necessary transactional arrangements could be put into place, because negotiations would be exceedingly complicated. Numerous parties would participate in such negotiations, including additional developers, ESD, MTA, the City, FCRC, existing and prospective lenders, and other parties in interest. The complexity of the negotiations would be compounded by the inter-related nature of several of the key Project elements, since a number of capital improvements are being constructed for the benefit of several or all of the Phase II buildings.¹ For example, affiliates of FCRC have already invested substantially more than \$100 million to build public infrastructure improvements in the area, including the new transit entrance, sewers, and new rail yard improvements. The new rail yard is a public improvement that is required to allow the platform and six Phase II buildings to be constructed. A substantial new phase of this work is scheduled to begin in or around July 2014, to be secured by a completion guarantee to be posted on or before June 30, 2014. These large capital investments are for an LIRR facility that will not generate any revenue for the project sponsors. Therefore, they have been and will be made by the project sponsors only to allow them to proceed with the development of the buildings over the rail yard. The financial ramifications of diluting their existing conditional rights to build such Phase II buildings would have to be sorted out in the negotiations, and it is likely that all work on the rail yard would cease pending completion of such negotiations. Thus, pursuing the multi-developer alternative through direct contractual arrangements with other developers would result in a delay in the completion of the permanent rail yard, a significant public benefit of the Project. Similar consequences would result for other common Project benefits, such as the platform and the open space.

Other inter-related elements of the Phase II portion of the Project are the parking facilities. Most or all of the parking in the Phase II area is to be located on Blocks 1128 and 1129, and it is anticipated that parking facilities on those blocks will also serve the buildings on Blocks 1120 and 1121, as well as certain Phase I buildings. Similarly, the new platform and open space to be developed on Block 1121 will not just benefit the three buildings on that block. They would also be of material benefit to the four residential buildings on Block 1129, because they would replace the depressed open rail yard contiguous to that parcel with at-grade open space.

¹ Because of the overlapping jurisdictions of the MTA and ESD and the need to provide for the allocation of infrastructure and Project-wide amenities such as open space, the timing of development and the cooperation of multiple developers in implementing the Project, the responsibilities of all of the developers would need to be put into place at the same time, adding considerable time and complexity to the negotiations.

Although it is possible that the costs commensurate with the relative benefits of the common improvements could be allocated among multiple developers, the cross-site interdependency of critical Project elements would add considerable complexity to the negotiations. Moreover, it is unknown what the effect on financing would be if an individual developer's project were to be dependent on the actions (and solvency) of other developers in a multiple developer arrangement, adding an additional complication to an effort to have multiple developers share common costs such as the rail yard, platform, open space and parking facilities.

Thus, the process required to implement the multiple developer alternative would be extremely time consuming, and its outcome would be uncertain. It is only after that process is completed that additional developers could begin final design, arrange for financing and commence construction. Therefore, assuming that the effort to modify the existing agreements and bring on additional developers could succeed at all, it would take many years to bring the Project back to where it is today, and the accelerated completion of Phase II, which would be the objective of the multiple developer alternative, would not be achieved. Moreover, ESD and MTA would have to incur substantial costs in resolving issues with the FCRC affiliates, preparing the RFP(s), considering proposals, preparing appraisals, complying with procedural requirements, conducting any necessary reviews and negotiating agreements with multiple new parties. The agencies would have to look to currently unidentified sources to fund this effort.

CONSTRUCTION AND PROJECT COORDINATION

The engagement by ESD and MTA of additional developers on the Project would not be effective in accelerating the schedule, given the logistical problems and inefficiencies that would result from concurrent independent operations at the Project site. The resources available to support construction of the Project are constrained due to the limited means of access, and limited space for staging, truck marshalling, and major equipment operation. Multiple unrelated contractors would compete for these resources, with conflicts arising over the use of Pacific Street and other critical access points and staging areas. Such conflicts would be compounded by the need for adjoining and overlapping MPTs for multiple unrelated construction sites. Efficiencies that now exist with respect to contractor coordination of deliveries and joint use of equipment and materials would be lost, and contractors would be faced with conflicts arising with respect to on-site operations, the timing of deliveries, and overall traffic control.

Contractor coordination issues would be particularly acute with respect to platform construction and the placement of building foundations within the rail yard. Any plan to break up that work into packages with unrelated contractors would require that MTA deal with multiple entities in the review and approval of design documents and project schedules, and in arranging for track outages. Since any change to one design or schedule for construction of the common platform could affect the work of other contractors, adjustments would have to be made in consultation with all affected developers. Conflicts with respect to the timely completion of common open space and infrastructure could also be expected to arise, particularly where the completion of development on one site requires infrastructure work on another site to be completed.

Given the spatial and engineering constraints associated with the Project site, it is critically important to the efficient concurrent construction of multiple Project components that a single entity—a “program manager”—have the authority to allocate logistical capacity among the competing parties. The project sponsors have been performing that role thus far, but would no longer be responsible to do so if multiple unrelated developers were to be brought into the Project.

In sum, multiple site developers would reduce the level of construction coordination at the Project site, and lead to conflicts that themselves would likely impede Project construction. The benefits of the project sponsors acting as a single overall development authority—in terms of efficiency and contractor coordination—would be lost.

For all these reasons, a multi-developer alternative under new agreements among ESD, MTA and additional developers would not be practicable, and would not be effective in accelerating construction of Phase II of the Project. On the contrary, because of the complexities and delay that would result from unwinding the existing transactions, putting multiple new arrangements in place, and possibly defending ensuing litigation, the alternative may cause construction to cease for many years, would prolong construction, and might well imperil the Project altogether. In addition, as discussed below, one major objective of the multiple developer alternative—providing additional capital to facilitate an accelerated construction schedule for Phase II development—can be attained through the existing arrangements with the project sponsors.

ENGAGEMENT OF OTHER DEVELOPERS BY THE PROJECT SPONSORS

Under the existing agreements and leases, the project sponsors have the flexibility under certain conditions to enter into joint ventures or other arrangements with additional entities for purposes of constructing the Phase II buildings. In particular, the Development Agreement, Interim Leases and Development Leases allow FCRC to assign its development interests to other entities if certain conditions are met. FCRC is also permitted, subject to certain terms and conditions, to enter into joint ventures with other developers or investors to bring additional capital resources to bear in funding one or more of the Project buildings. Thus, if additional capital is needed for Phase II of the Project, the existing agreements provide mechanisms for the project sponsors to bring on other developers or investors without fundamental changes to the Project structure, and without additional administrative and judicial proceedings.

FCRC has announced its intention of pursuing such a joint venture arrangement. As discussed in Chapter 1, “Project Description,” FCRC has advised ESD that pursuant to the existing contractual agreements, an affiliate of the Greenland Group may acquire 70 percent of Phase II of the Project (as well as certain elements of Phase I), provide an immediate infusion of capital into the Project, and share in the Project costs going forward. In the event that the joint venture transaction with the Greenland Group affiliate were to close, it is likely that it would inject substantial additional capital into Phase II, and thereby be more effective in accomplishing an accelerated development schedule than pursuit of a multiple developer alternative. *