SEQRA Findings Statement

Atlantic Yards Arena and Redevelopment Project
Empire Statement Development Corporation
December 8, 2006

FINDINGS UNDER THE STATE ENVIRONMENTAL QUALITY REVIEW ACT BY THE NEW YORK STATE URBAN DEVELOPMENT CORPORATION

D/B/A EMPIRE STATE DEVELOPMENT CORPORATION

IN CONNECTION WITH THE ATLANTIC YARDS ARENA AND REDEVELOPMENT PROJECT (ATLANTIC YARDS LAND USE IMPROVEMENT AND CIVIC PROJECT)

I. Summary and Introduction

A. Introduction

This Statement of Findings is issued pursuant to the State Environmental Quality Review Act ("SEQRA"), N.Y. Envtl. Conserv. Law Article 8, and its implementing regulations adopted by the New York State Department of Environmental Conservation ("NYSDEC") and codified at Title 6 of the New York Code of Rules and Regulations ("N.Y.C.R.R.") Part 617 (the "SEQRA Regulations"). This statement sets forth the findings of the New York State Urban Development Corporation, doing business as Empire State Development Corporation ("ESDC"), with respect to the environmental impacts of the Atlantic Yards Arena and Redevelopment Project (Atlantic Yards Land Use Improvement and Civic Project) (the "Project") as summarized in the modified General

Project Plan ("GPP"), dated December 8, 2006, and as analyzed in the Atlantic Yards Arena and Redevelopment Project Final Environmental Impact Statement ("FEIS") dated November 27, 2006.

The actions required by ESDC to carry out the Project include the adoption of the GPP; condemnation by ESDC of New York City's interest in City-owned properties within the site of the Project (the "project site"), including portions of City streets to be closed; acquisition by ESDC of MTA/LIRR property interests located within the project site; acquisition by ESDC of private property located within the project site through negotiation or condemnation; disposition by ESDC of project site properties to the Atlantic Yards Development Company, LLC, and Brooklyn Arena, LLC (the "project sponsors"), affiliates of the Forest City Ratner Companies; and funding of certain infrastructure improvements.

Other required actions to be taken by other agencies include: disposition by the Metropolitan Transportation Authority ("MTA") of a property interest in the Long Island Rail Road ("LIRR") Vanderbilt Yard (the "rail yard" or "LIRR rail yard") to ESDC or the project sponsors; approval by MTA, the LIRR and/or New York City Transit ("NYCT") of the relocated and upgraded rail yard and other transit improvements, and any related real property acquisitions by MTA, LIRR, and/or NYCT; approval by the Public Authorities Control Board of the proposed project; New York City ("City") funding of certain infrastructure improvements and land acquisition costs; and provision of State and City funding for affordable housing bond financing.

Part II of this Findings Statement summarizes the procedural history of the Project. Part III describes the analytical structure of the FEIS. Part IV provides an overview of the Project, including a description of the components of the Project, a more detailed description of ESDC actions subject to SEQRA, and an enumeration of the purposes and needs the Project is intended to serve. Part V discusses the Project's benefits. Part VI summarizes the environmental analysis set forth in the FEIS, with particular emphasis on identification of significant adverse environmental impacts. Parts VII and VIII discuss the mitigation measures and alternatives, respectively, identified in connection with the Project. Part IX summarizes the Project's unmitigated significant adverse impacts. Part X provides a summary of SEQRA findings specific to growth-inducing aspects of the Project, and Part XI addresses the commitment of resources in connection with the Project. Part XII presents a summary evaluation of the Project and the alternatives. Part XIII presents the certification and findings required by SEQRA and the SEQRA Regulations.

B. Location of Action and Brief Description

The Project will be located in the Atlantic Terminal area of Brooklyn, which is situated immediately to the south of Downtown Brooklyn in an area that lies at the junction of several Brooklyn neighborhoods. Portions of the project site are within the Special Downtown Brooklyn District created by the *New York City Zoning Resolution* (the "Zoning Resolution"). The Project will occupy an approximately 22-acre area, roughly bounded by Flatbush and 4th Avenues to the west, Vanderbilt Avenue to the east, Atlantic Avenue to the north, and Dean and Pacific Streets to the south. The Project will include the development of an arena, 16 buildings for residential, office, retail, community facilities, parking, and possibly hotel uses, and 8 acres of publicly accessible open space. The Project will also include a reconfigured and improved rail yard and a new direct entrance to the Atlantic Avenue/Pacific Street subway station complex.

C. Lead Agency

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D. SEQRA Status

The Project is a Type I action pursuant to 6 N.Y.C.R.R. § 617.4.

II. Procedural History

The review of the Project under SEQRA has been conducted in coordination with the review of the GPP under the Urban Development Corporation Act (Chapter 174, Section 1, Laws of 1968; codified at N.Y. Unconsol. Laws § 6251 *et seq.*), and with the review required under Article 2 of the Eminent Domain Procedure Law. The MTA, LIRR, NYCT and the City (through the Mayor's Office of Economic Development and Rebuilding) participated extensively in the coordinated SEQRA review of the Project, including the preparation of both the Draft Environmental Impact Statement ("DEIS") and the FEIS.

ESDC issued its Notice of Intent to serve as lead agency on September 16, 2005, and, in its role as lead agency, prepared an Environmental Assessment Form ("EAF"). Based on the information contained in the EAF, ESDC determined that the Project could have the potential to result in significant adverse environmental impacts and issued a Positive Declaration on September 16, 2005. In addition to the Positive Declaration, ESDC also issued a draft Scope of Work for the EIS on September 16, 2005. The draft Scope of Work was posted on ESDC's web site and widely distributed to public officials and agencies and other interested parties. A Combined Notice of Lead Agency, Public Scoping and Intent to Prepare Draft Environmental Impact Statement was published in the *Environmental Notice Bulletin* on September 21, 2005, and in the *City Record* from September 16 to September 19, 2005. The notice was also published in the *New York Daily News*, the *Brooklyn Daily Eagle* and the *Brooklyn Daily Challenge* on September 16, 2005.

A public scoping meeting was held for the Project on October 18, 2005, at the New York City College of Technology at 285 Jay Street, Brooklyn, New York. Written comments were accepted through October 28, 2005, and a final Scope of Work, reflecting consideration of comments made during scoping, was issued on March 31, 2006.

The DEIS was then prepared in accordance with the final Scope of Work. On July 18, 2006, the ESDC Directors (the "Directors") accepted the DEIS, and a Notice of Completion was issued. At the same meeting, the Directors adopted the GPP, which included Design Guidelines that were developed as a result of consultation with ESDC and New York City Department of City Planning ("DCP") staff and discussions with the project sponsors. The Design Guidelines set forth urban design goals and principles that establish an overall framework for the design and development of the project site. Copies of the DEIS (either on CD-ROM or in hard copy), along with the Notice of Completion, were sent to public agencies, the Mayor of the City of New York, the Brooklyn

Borough President's Office, and the community boards in the vicinity of the project site, as well as local members of the New York City Council, New York State Senate, New York State Assembly, and United States House of Representatives. Copies of the Executive Summary were sent to New York's Senators. The DEIS was made available to the public on the ESDC web site, and hard copies were provided to the Central Library, Bedford Branch, Clinton Hill Branch, Pacific Branch, and Walt Whitman Branch of the Brooklyn Public Library. Hard copies of the DEIS were also made available to the public at the Brooklyn Borough President's Office and the offices of Brooklyn Community Boards 2, 6, and 8. The DEIS was also on file at the office of ESDC and available for inspection by the general public between 9:30 AM and 5:00 PM, Monday through Friday, public holidays excluded. The executive summary of the DEIS and a CD-ROM including the entire DEIS were made available at no charge from ESDC upon request, and hard copies of the entire DEIS were available for purchase (at a price set to cover the costs of copying the document).

On August 23, 2006, ESDC held a public hearing on the DEIS and the GPP at the New York City College of Technology at 285 Jay Street, Brooklyn, New York. The notice for the August 23 hearing (the "Initial Notice") was published each day from July 24 to July 28, 2006 in the *New York Post* and *City Record*. In addition, the Initial Notice was published in the *Environmental Notice Bulletin* on July 26, 2006, and was duly distributed in accordance with the SEQRA Regulations. Ninety-nine people spoke at the August 23 public hearing.

The Initial Notice also invited written comments with respect to the DEIS, and established a comment period extending from July 18 to September 22, 2006. That comment period was subsequently extended to September 29, 2006. Notice of the comment period extension (the "Extension Notice") was published in the *New York Post* on September 1, 2006, in the *City Record* on September 1, 2006, and from September 5 to September 8, 2006. The Extension Notice was also published on the ESDC web site. The public was also afforded the opportunity to make oral comments at two community forums held on September 12, 2006, and September 18, 2006, at the New York City College of Technology at 285 Jay Street, Brooklyn, New York The September 12 community forum was announced in the Initial Notice, and the September 18 community forum was announced in the Extension Notice. Announcements regarding the extension of the comment period and the community forums were also published in the *Brooklyn Daily Eagle* on September 13, 2006, and in the *Brooklyn Papers* on September 9, 2006, and September 16, 2006. A total of 104 people spoke at the two community forums, 41 at the September 12 forum and 63 at the September 18 forum. Comments received at the community forums were treated as comments on the DEIS. ESDC received written comments from over 1,800 people and organizations.

On November 15, 2006, the Directors accepted a "Final Environmental Impact Statement" dated November 15, 2006. However, subsequent to the November 15 acceptance, it came to ESDC's attention that a number of comments on the DEIS had been inadvertently omitted from that document. Accordingly, a corrected and amended FEIS was prepared and accepted by ESDC's Directors on November 27, 2006. The FEIS, as corrected and amended, includes a summary of and responses to all substantive comments on the DEIS. It also incorporates revisions to the DEIS that were made subsequent to the issuance of the DEIS. The revisions reflect certain modifications to the Project's program, the refinement of mitigation measures, and responses to public and agency comments. Immediately after acceptance of the FEIS on November 27, 2006, a Notice of Completion was published, and the FEIS was duly circulated and made available at the same locations as the DEIS had been made available, including the ESDC web site. All persons who had

requested a copy of the November 15 FEIS were sent a copy of the corrected and amended November 27 FEIS.

In addition to those mentioned above, a number of other State and City agencies were consulted in the environmental review, including the New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), the New York City Landmarks Preservation Commission ("LPC"), DCP, the New York City Fire Department ("FDNY"), the New York City Department of Environmental Protection ("DEP"), the New York City Department of Transportation ("DOT"), the New York City Police Department ("NYPD"), the School Construction Authority ("SCA") and the Department of Education ("DOE"). Certain of these agencies provided particular assistance to ESDC in the review of those matters within the agency's area of expertise. DOT has endorsed the analysis methodologies and planning assumptions for the traffic analysis, carefully reviewed the traffic and parking analyses and proposed traffic mitigation measures appearing in the DEIS and FEIS, and advised ESDC that it concurs with the findings included in the FEIS with respect to these subject areas. DOT has also advised ESDC that it finds the traffic mitigation measures identified in the document to be feasible. OPRHP was consulted in the analysis of impacts on cultural resources, and has assisted ESDC in identifying properties on and in the vicinity of the Project site that are eligible for listing on the State and National Register of Historic Places. OPRHP has also concurred with the determination that reuse of the two eligible properties currently standing on the Project site is not prudent or feasible, and has entered into a Letter of Resolution with ESDC and the project sponsors regarding mitigation measures to be taken with respect to the Project. As noted above, DCP has worked with ESDC in the development of the Design Guidelines, while the City Planning Commission ("CPC") of New York City has adopted a letter of recommendation in which it expresses its support for the Project and recommends certain modifications that have been incorporated into the Project's design. The relevant correspondence between ESDC and the involved and interested agencies is included in Appendix I of the FEIS.

Having reviewed the DEIS, FEIS and supporting and related documents, each of which is incorporated by reference into this statement of findings, and the comments received on the FEIS, ESDC makes the following findings and conclusions based on those documents and the administrative record:

III. Framework for the Environmental Impact Analysis

A. Methodology

The DEIS and FEIS were prepared in accordance with the guidelines set forth in the *New York City Environmental Quality Review (CEQR) Technical Manual* (the "*CEQR Technical Manual*"), where appropriate. The *CEQR Technical Manual* is generally considered to provide the most appropriate methodologies and criteria for environmental impact assessment in New York City, and is consistent with SEQRA.

B. Analysis Years

Since the Project will involve the development of several elements over an extended period of time, two analysis years, 2010 and 2016, were considered in the FEIS. The 2010 analysis year ("Phase I") was selected because a key component of the Project, the arena, is expected to be completed by fall 2009, with the remaining development on Blocks 1118, 1119 and 1127 (the "arena

block") and on part of Block 927 ("Site 5") completed by the next year. (Block 927 is "Site 5" of the Atlantic Terminal Urban Renewal Area ("ATURA"). In addition to the arena, Phase I development will include office space, retail space, residential units, parking, possible hotel space, a publicly accessible Urban Room, the new subway entrance and related circulation improvements on the southeast corner of Atlantic and Flatbush Avenues, the reconstruction of the LIRR rail yard and interim parking on Blocks 1120 and 1129. Phase I development will also include upgrades to infrastructure, as well as the reconstruction of the 6th Avenue and Carlton Avenue bridges over the rail yard between Atlantic Avenue and Pacific Street. All Phase I development, other than the rail yard, infrastructure and roadway improvements, and any interim parking, will take place on the western end of the project site on Blocks 1118, 1119, and 1127 and part of Block 927. (An existing community garden located on Block 927, Lot 26 is excluded from the Project.) All existing structures on the project site will be demolished in Phase I.

The remainder of the development program ("Phase II") is anticipated to be complete by 2016 and will be built on the eastern portion of the project site (Blocks 1120, 1121, and 1129 and part of Block 1128). A platform will be built over the upgraded rail yard (Blocks 1120 and 1121) to support six of the 11 buildings constructed during Phase II. Phase II development will include residential units, retail space, community facilities, publicly accessible open space, and permanent parking.

ESDC has selected the 2010 and 2016 analysis years after careful consideration of a construction schedule tracking each of the major construction elements for the Project, broken down into quarter-year segments. That construction schedule, which was prepared in the first instance by Turner Construction Company at the request of the project sponsors, was reviewed in detail by ESDC's staff and consultants and found to be a reasonable projection of how Project construction would proceed.

ESDC has utilized the 2010 and 2016 analysis years it has selected as analytical tools for the prediction of the short and long term impacts of the Project in accordance with the methodology set forth in the *CEQR Technical Manual*. By following this methodology, the FEIS discloses the impacts that will occur approximately mid-way through the construction process and upon completion of the Project. Where relevant, the FEIS discusses not only the effects that will be apparent as of the analysis year, but trends (such as the indirect displacement of businesses in certain areas) that will be set into motion as of those dates. Unrelated changes occurring in Brooklyn in areas other than the Project site that may occur after 2016 are not considered to be Project impacts.

The FEIS provides a description of existing conditions, as well as an assessment of conditions in the "Future Without the Proposed Action" and the "Future With the Proposed Action." The Future Without the Proposed Action condition provided a baseline condition that was evaluated and compared with incremental changes due to the Project. The Future Without the Proposed Action condition assumed that none of the discretionary approvals proposed as part of the Project would be adopted and, using existing conditions as a baseline, added to the baseline changes that are known or expected to be in place at various times in the future. For many analysis areas, the Future Without the Proposed Action condition incorporated known development projects that are reasonably likely to be built in the absence of the Project by the analysis years. This includes development currently under construction or that can be reasonably anticipated due to the current level of planning and public approvals. The FEIS assumed that the conditions currently present on the Project site would remain the same in the Future Without the Proposed Action, except for

certain assessment areas such as land use and urban design, where a modest amount of change was assumed as a conservative measure. The analyses of the Future Without the Proposed Action for some technical areas, such as traffic and combined sewer overflows, also added a background growth factor, as a further conservative measure, to account for a general increase in activity unrelated to known projects in addition to anticipated future projects. (Section VI.J.1 below discusses in greater detail the methodology for determining the Future Without the Proposed Action condition for the transportation analyses.) In addition, the analyses of the Future Without the Proposed Action considered other future changes that will affect the environmental setting, including technology changes, such as advances in vehicle pollution control, roadway improvements, water conservation measures and changes to City policies, such as zoning regulations.

The FEIS also assessed potential impacts expected during the construction of Phase I and Phase II of the Project. In the course of this assessment, the FEIS discussed the measures to be implemented for the Project's construction activities to avoid or reduce the potential for significant adverse impacts and identified additional mitigation measures to further reduce potential significant adverse impacts. Where applicable, the FEIS addressed the potential impacts from construction of the Project's Phase II elements on the operational Phase I components.

C. Reasonable Worst-Case Scenario

To provide flexibility for the Project to meet the potential demand for residential and office space in the vicinity of Downtown Brooklyn, Project planning allows for a range of residential and commercial uses in Buildings 1 and 2 on the arena block and on Site 5. To account for this flexibility, the FEIS presented and assessed two variations of the Project: the commercial mixed-use variation and the residential mixed-use variation. The commercial mixed-use variation allows for additional commercial use to substitute for the hotel use and the residential space in Buildings 1 and 2 on the arena block and on Site 5. The other buildings and uses on the Project site (the arena, Buildings 3 and 4, and all buildings east of 6th Avenue) will remain the same under either program variation. The following table compares the uses and allocations of square footage anticipated as a result of the residential mixed-use and the commercial mixed-use program variations:

Comparison of Residential and Commercial Mixed-Use Variation Programs for 2010 and 2016

Proposed Uses	Residential Mixed-Use Variation	Commercial Mixed-Use Variation
Analysis Year: 2010 (Phase I: Development of Arena Block and Site 5)		
Residential[1]	2,085,000 gsf (2,110 units)	994,000 gsf (1,005 units)
Hotel (180 rooms)	165,000 gsf	0 gsf
Retail[1]	91,000 gsf	91,000 gsf
Commercial	336,000 gsf	1,606,000 gsf
Arena	850,000 gsf	850,000 gsf
Parking (spaces)	2,346 spaces	2,346 spaces
Private Open Space	±1 acres	±1 acres
Publicly Accessible Open Space	0 acres	0 acres
Analysis Year: 2016 (Phase I and Phase II: Full Build-Out)		
Residential[1]	6,363,000 gsf (6,430 units)	5,272,000 gsf (5,325 units)
Hotel (180 rooms)	165,000 gsf	0 gsf
Retail[1]	247,000 gsf	247,000 gsf
Commercial	336,000 gsf	1,606,000 gsf
Arena	850,000 gsf	850,000 gsf
Parking (spaces)	3,670 spaces	3,670 spaces
Private Open Space	±1 acres	±1 acres
Publicly Accessible Open Space	8 acres	8 acres

Note: [1] A portion of the retail and residential space is expected to house community facilities. An additional 100,000 gsf, not included in this table, may be built for a public school at the project site.

For some technical areas, the Project has different potential environmental impacts under the two program variations. Accordingly, each section of the FEIS presented a full analysis of the Reasonable Worst Case Scenario ("RWCS") – the program variation with the greater potential to cause significant adverse environmental impacts for that particular technical area – and, where relevant, a less-detailed analysis for the other development variation. Each FEIS section also described, either in the section analysis or in a separate "mitigation" section, any mitigation required for both variations, highlighted relevant differences between the development variations, and discussed ways in which the effects of the two differ from each other. This methodology fully discloses any impacts, and describes any required mitigation that could be associated with either the residential mixed-use variation or the commercial mixed-use variation.

IV. Project Overview

A. Project Description

The Project will be a major mixed-use, transit-oriented development near the LIRR Atlantic Terminal in Brooklyn. As noted above, a portion of the Project will be constructed on a platform to be built over the below-grade rail yard, which, together with a NYCT yard for retired buses, currently occupies approximately nine acres of the project site. Construction of the Project will require the demolition of all existing site structures, as well as the closure of 5th Avenue between Atlantic and Flatbush Avenues, Pacific Street from Flatbush to 6th Avenues, and Pacific Street from Carlton to Vanderbilt Avenues.

The Project will introduce a variety of uses, including a new arena for the New Jersey Nets National Basketball Association team, along with commercial office and retail, possible hotel, residential, and community facility uses. At full build-out, the Project will comprise, in addition to a 150-foot-tall arena, 16 buildings with maximum heights ranging from approximately 184 feet to approximately 620 feet. As discussed above in Section III.C, the two variations of the Project's program – a residential mixed-use variation and a commercial mixed-use variation – allow for flexibility in the program of three of the Project's 17 buildings. Both variations will provide 8 acres of publicly accessible open space, with 1 additional acre of private open space on the roof of the arena, and both variations will also provide community facility uses occupying portions of the retail and residential space. Both the residential mixed-use and commercial mixed-use variations will include approximately 3,670 parking spaces. In addition, under both variations a new subway entrance will be constructed at the southeast corner of Atlantic and Flatbush Avenues, which will provide access to the Atlantic Avenue/Pacific Street subway station complex through a publicly accessible covered pedestrian space at the western end of the project site.

The project sponsors have consulted with the FDNY concerning the provision of access for emergency vehicles and other safety considerations, such as evacuation plans for places of public gathering, fire protection and security measures. The project sponsors have also consulted with the NYPD to review the Project and to discuss issues of public safety and security. The Project will have a site security plan, which will, among other elements, address security staffing needs, as well as monitoring and screening procedures. Under this plan, additional security personnel will be provided at arena events, screening procedures will be established for office tenants and visitors, and private security will be provided for the residential and open space components of the Project.

1. Residential Uses

Residential use is planned for each building in the residential mixed-use variation, totaling an estimated 4,500 rental units and 1,930 condominium units. The commercial mixed-use variation would have the same number of rental and affordable units, but the total number of condominiums in this variation would be 825 units. Under the commercial mixed-use variation, there would be no residential uses in Buildings 1 or 2 or on Site 5.

Fifty percent of the rental units will be administered under an affordable housing program. It is estimated that there will be a total of approximately 4,500 rental units, of which 2,250 will be affordable units. Thirty percent of the units built on the arena block during Phase I will be affordable. It is currently anticipated that affordable units will be reserved for households earning

between 30 percent and 160 percent of the Area Median Income ("AMI") for the New York City metropolitan area, and 50 percent of these units (on a square foot basis) will be two- and three-bedroom units. Rent for the units administered under this affordable housing program will be targeted at 30 percent of household income. The affordable program will be subject to adjustment to accommodate the requirements of any City, state, or federal affordable housing program utilized for this housing. Notwithstanding such adjustments, income bands and distribution of units across income bands will be subject to approval by the City, the number of affordable units will not be less than 2,250, and the affordable units will be constructed in accordance with the phasing described above.

2. Hotel Use

The residential mixed-use variation will include a full-service 180-room hotel (approximately 165,000 gsf) in Building 1. The commercial mixed-use variation would not include a hotel.

3. Commercial (Office and Retail) Uses

The residential mixed-use variation would include approximately 336,000 gsf of Class A commercial office space in Building 1. The commercial mixed-use variation would include approximately 1.6 million gsf of commercial office space in Buildings 1 and 2 and on Site 5. Both variations will include an approximately 247,000-gsf retail component consisting of retail and eating establishments primarily serving the local population. A component of this retail space will also be for use as a community facility. These retail uses, which are expected to be the same for both variations, will be located on the ground floor, possibly extending to the second floor, in a number of the buildings. The retail spaces will not house "big box" retail.

4. Nets Arena

One of the primary civic components of the Project is the arena for the Nets. The arena is expected to host approximately 225 events per year, including approximately 41 regular-season Nets basketball games. The 850,000-square-foot arena will be 150 feet tall and seat 18,000 fans at a Nets basketball game. While there is the potential for additional seating capacity for non-game events (to 19,925 seats if wheelchair seating is replaced by regular seating), Americans with Disabilities Act ("ADA") accessibility, production equipment, and line of sight, operational and staging requirements will in almost all instances limit attendance at non-basketball events to well under 18,000. Non-game events are expected to attract fewer spectators than basketball events, with attendance generally ranging from 5,000 persons to 15,000 persons. The arena will include approximately one acre of private open space on its roof. The roof will also contain approximately three acres of landscaped green space, a sustainable design feature that reduces storm water runoff but that will not be accessible. The arena will be located on the block bounded by Dean Street and Atlantic, Flatbush, and 6th Avenues.

5. Urban Room

The Urban Room, a publicly accessible atrium with at least 10,000 square feet of space at the southeast corner of Flatbush Avenue and Atlantic Avenue, will be constructed within the base of Building 1. This glass-enclosed space will be a pedestrian pass-through, as well as a new access point

to the underground subway connection. It will have a sitting area with café kiosks and include arena ticket booths and will host concerts and other community events throughout the year.

6. Open Space

Eight acres of publicly accessible open space will be provided on the project site. On Block 1120, the open space between Pacific Street and the Project's buildings will have active uses, walking paths, seating areas, and extensive landscaping. The open space will continue along Pacific Street eastward on Blocks 1121 and 1129 with a walking path, preserving this corridor as a pedestrian thoroughfare The open space on Blocks 1121 and 1129 will also have active uses, walking paths, seating areas, and extensive landscaping, as well as a water feature and a sloped lawn area. In the north-south direction, the open space will link the site to neighborhood streets to the north by creating landscaped pedestrian corridors at least 60 feet wide aligned with the Fort Greene street grid to the north of Atlantic Avenue. A bicycle path will enter the project site along Atlantic Avenue on Block 1120 and continue between two Project buildings. The route will turn east running along Pacific Street where it will reenter the project site at Carlton Avenue and then exit onto Dean Street where it will connect with the larger City bicycle network. The open space will be designed to promote public access and use and will be, at a minimum, accessible to the public as specified in the Design Guidelines, which require that the open space be open and available to the public seven days a week, 365 days a year between the hours of 7:00 AM and the later of 8:00 PM and sunset from October 1 through April 30 and 7:00 AM to 10:30 PM from May 1 through September 30.

The Project's open space will be owned by a conservancy or other not-for-profit entity established by the project sponsors, which will be responsible for the maintenance, operation, and security of this public amenity. The conservancy or other not-for-profit entity will be funded in the first instance by the project sponsors, and when the surrounding parcels are developed, by the owners of the surrounding buildings pursuant to restrictive declarations recorded against the surrounding Project properties. The conservancy or other not-for-profit entity will be governed by a board, which will include representatives of the project sponsors, civic group(s) active in park matters, representatives of surrounding properties on the project site, and, on an *ex officio* basis, Brooklyn Community Boards 2, 6 and 8, and the New York City Department of Parks and Recreation (the "Parks Department"). The initial program and plans for the open space and any material modifications prior to construction of the open space will be subject to review by ESDC. Any subsequent changes will be subject to the reasonable approval of the Parks Department.

7. Community Facilities

An intergenerational community center will be created in the base of one of the buildings in Phase II. The facility will include a child care center offering space for at least 100 children, and youth and senior centers. The Project will also include an up to 20,000-square-foot health care facility that will provide a broad range of health care services to the community. The health care facility will occupy a portion of the residential space and will be built during Phase I.

The Project will include a bicycle station in a ground-floor retail space on the arena block. The 4,000 square foot station will include storage for approximately 400 bicycles, space for a repair shop, an accessory retail shop, and amenities such as lockers, restrooms, and a security desk to service the needs of its users.

8. Parking

By the end of Phase I, about 2,346 parking spaces will be provided, including 750 permanent and 1,596 interim spaces. By completion of Phase II, the interim spaces will no longer exist, and the Project will provide up to 3,670 permanent below-grade attended parking spaces on the project site.

9. LIRR Rail Yard Improvements

The LIRR rail yard will be relocated, covered and improved. The reconfigured and upgraded rail yard will be built below street grade on the eastern end of the existing rail yard footprint. In addition to modernizing switching and signal equipment, the Project's improvements will increase the rail yard's capacity. Because of ADA requirements, new rail cars accommodate fewer passengers than older cars, and longer trains are needed to provide service to the same number of passengers. The new rail yard will consist of longer 8- and 10-car tracks, facilitating the use of such longer trains. The new rail yard will streamline train movement between the rail yard and the Atlantic Terminal, as well as within the yard. Currently there is no direct rail connection between the rail yard and Atlantic Terminal. Trains leaving the terminal and heading for the rail yard must move eastward under Atlantic Avenue, then stop and reverse direction to move onto a track leading to the rail yard. The "West Portal" that will be constructed as part of the Project will provide direct access between the terminal and the rail yard. The West Portal will also provide an emergency detour route for passenger train egress from the Atlantic Terminal, adding flexibility in the event of an emergency on the main line. With respect to movement within the yard, a new drill track will allow the switching of 10-car trains to different tracks within the yard.

The Project's improvements will also make the servicing of trains at the rail yard more efficient. Once in the yard, trains are currently stored on parallel tracks that are too close to one another to allow toilet servicing of any but the trains on the outer tracks. To clean the cars and empty waste, the trains must be moved in and out of position until each train has had its turn on an outer track. The Project will provide wider spaces between tracks and new toilet manifolds for unrestricted servicing. Additionally, the Project will provide parking for 30 cars and five trucks and usable storage space in Blocks 1120 and 1121 consistent with the needs of LIRR.

10. Access and Circulation Reconfigurations

The Project will include several roadway and pedestrian circulation changes near the project site: (i) Pacific Street between Flatbush Avenue and 6th Avenue and 5th Avenue between Flatbush and Atlantic Avenues will be closed to vehicular traffic to accommodate the arena, the Urban Room, and a direct below-grade connection from the arena block to the Atlantic Avenue/Pacific Street subway station complex; (ii) Pacific Street between Vanderbilt and Carlton Avenues will be closed to vehicular traffic to create the Project's publicly accessible open space and water features that are major sustainable design elements; (iii) sidewalks along Flatbush Avenue between Atlantic Avenue and Dean Street will be reconfigured to provide a lay-by lane; (iv) the sidewalk along the south side of Atlantic Avenue between Flatbush Avenue and Fort Greene Place will be reconfigured to provide an additional eastbound travel lane and a lay-by lane; (v) Atlantic Avenue will be reconfigured from Flatbush Avenue to Vanderbilt Avenue to operate with a minimum of three travel lanes plus a parking lane in each direction; (vi) 6th Avenue between Atlantic Avenue and Flatbush Avenue will be converted to two-way operation, the segment between Pacific Street and Flatbush Avenue will be widened, and a lay-by lane between Atlantic Avenue and Dean Street will be provided; (vii) Pacific

Street between 6th Avenue and Carlton Avenue will be widened; and (viii) wide sidewalks will be provided along the south side of Atlantic Avenue from Flatbush Avenue to Vanderbilt Avenue and the east side of Flatbush Avenue between Atlantic Avenue and Dean Street by setting the buildings back from the street line. Additional physical reconfigurations of the street network and changes to traffic circulation will be implemented as mitigation measures and are discussed below in Section VII.

The Project will also improve subway station access and circulation. The project sponsors will construct a new entrance to the Atlantic Avenue/Pacific Street subway station complex on Block 1118 at the southeast corner of Atlantic and Flatbush Avenues consistent with the conceptual drawings included in the FEIS, and pursuant to a final design approved by NYCT. The project sponsors' construction contract schedules will require that the new subway entrance be substantially complete prior to or simultaneously with the opening of the arena. Additionally, the Project will include the renovation and re-opening of an existing, but currently closed, emergency transit egress stairs located on the sidewalk in front of Site 5.

B. Summary of Actions Subject to SEQRA

The Project requires several discretionary actions by ESDC that require review under SEQRA:

1. Affirmation of the GPP. As part of the GPP, ESDC will override certain aspects of the the Zoning Resolution, including, but not limited to, use and bulk (including height, setback and floor area), signage, and parking requirements and allowances; the land use regulations of the ATURA Plan, as they relate to Site 5 and Site 6A to the extent the ATURA Plan requires compliance with zoning; and the City Map as it relates to the closure of and building on portions of City streets, which will be effectuated with the consent of the City.

2. Condemnation by ESDC of the City's interest in City-owned properties within the project site, including portions of the City streets to be closed.

3. Acquisition by ESDC of MTA/LIRR property interest located within the project site.

4. Acquisition by ESDC of private property located within the project site through negotiation or condemnation.

5. Disposition by ESDC of the project site properties to the project sponsors.

6. State funding of certain infrastructure improvements.

In addition, the Project requires discretionary actions on the part of other State and City entities, including: disposition by the MTA or LIRR of a property interest in the rail yard to ESDC or the project sponsors; approval by MTA, LIRR and/or NYCT of the relocated and upgraded rail yard and other transit improvements, and any related real property acquisitions by MTA, LIRR and/or NYCT; approval by the Public Authorities Control Board of the Project; City funding of certain infrastructure improvements and land acquisition costs; and provision of State and City funding for affordable housing bond financing. The Project will also require approvals from DOT,

DEP, the New York City Department of Buildings ("DOB"), the Art Commission of the City of New York, and perhaps other agencies. Air permits from NYSDEC are also likely to be required.

C. Project Purpose and Need

The overarching goal of the Project is to transform a blighted area into a vibrant mixed-use community. The Project aims to provide a state-of-the-art arena, affordable and market-rate housing, first-class office space, publicly accessible open space, local retail and community services, a hotel (under one variation of the Project's program), a new entrance to the Atlantic Avenue/Pacific Street subway station, and an improved rail yard. The Project's buildings will contribute to the Brooklyn skyline, and its open space will connect the surrounding neighborhoods, which are currently separated by the open rail yard. More specifically, the Project is intended to:

1. Enhance the vitality of the Atlantic Terminal area by providing new residential, retail, office, and hotel space that will capitalize on the Project's proximity to one of the major transit hubs in New York City; removing the physical and visual barrier created by the existing below-grade rail yard that separates the neighborhoods of Boerum Hill, Downtown Brooklyn, Fort Greene, Clinton Hill, Prospect Heights, and Park Slope; eliminating blighted conditions on the project site, including dilapidated and structurally unsound buildings, debris-filled vacant lots, and underutilized properties; remediating environmental conditions; contributing to the Brooklyn skyline and streetscape with distinctive buildings and a cohesively designed open space; and fostering and supporting growth through job creation and economic activity during construction and operation of this mixed-use development.

2. Provide for new development to support the current and future residents of the Atlantic Terminal area and the borough as a whole by contributing to the City's effort to meet the demand for affordable and market-rate housing by providing up to 6,430 housing units, including 4,500 rental units, 50 percent of such rental units being affordable to low-, moderate- and middle-income families; creating a first-class arena for a professional sports team and an entertainment venue; creating publicly accessible active and passive open space with amenities encouraging year-round use; and providing community facility spaces, including a health care center and an intergenerational facility offering child care, youth, and senior center services.

3. Improve railroad and subway facilities by expanding rail yard capacity, providing direct rail access to the rail yard from Atlantic Terminal through a new West Portal, building a new drill track to allow for the switching of 10-car trains, installing new toilet manifolds for unrestricted servicing, and adding signal, interlocking, and switching systems; platforming over the new rail yard to increase pedestrian connections between neighborhoods; and improving subway access and pedestrian safety by opening a subway station entrance on the south side of Atlantic Avenue at Flatbush Avenue.

V. Benefits of the Project

Implementation of the Project will achieve the purposes and fulfill the needs set forth above. The Project will remove blight from the project site and replace it with an architecturally distinctive, world-class development.

Each of the Project's components will benefit the Borough of Brooklyn, the City, and the region as a whole. The arena will facilitate the return of a major league professional sports team to Brooklyn after a 50 year hiatus. The arena will not only serve as a new home for the Nets, but will also provide a venue for other entertainment and cultural events including community gatherings, collegiate competitions, and graduations. The project sponsors have made a commitment to make available a minimum of ten events at the arena for use by community groups at a reasonable cost (generally the cost of operation).

The residential component will provide a substantial supply of homes to meet the demand anticipated for new housing in the coming decades. The New York Metropolitan Transportation Council ("NYMTC") predicts that more than 40,000 new households will be added in Brooklyn between 2005 and 2015 and more than 120,000 new households will be added between 2002 and 2030. The Project will accommodate some of this demand by including up to 6,430 residential units and not less than 2,250 units of much-needed affordable housing for low-, moderate-, and middle-income families. The Project's commercial component, which will consist of Class A office space, will likewise meet the demand expected in Brooklyn over the coming years. According to NYMTC, the Borough will add approximately 60,000 jobs between 2005 and 2015, and 162,000 jobs from 2002 to 2030. New York City is expected to add 500,000 and 1.1 million jobs, respectively, during these periods. The net employment growth in Brooklyn, which NYMTC's forecasts represent, is likely to be predominantly in the office and retail sectors.

The Project's arena, residential units and commercial office space will be constructed in a location that is well suited to high-density development, situated in proximity to Brooklyn's existing commercial center, at the intersection of ten subway lines (with two additional lines nearby), eleven bus routes, and the LIRR Atlantic Terminal. Concentrating such an integrated mix of uses in this manner is "smart growth," which will facilitate the return of major league sports to Brooklyn and accommodate projected regional growth in a manner that will promote mass transit and provide a single location for people to live, work, shop and relax. As far back as 1983, the Regional Plan Association advocated dense development at this location, stating that the area immediately adjacent to the transit hub should be built to high density, appropriate to the excellent transportation in Downtown Brooklyn.

The transit-related components of the Project will improve subway and railroad facilities. The new entrance to the Atlantic Avenue/Pacific Street subway station complex will enhance subway access and pedestrian safety by making it unnecessary for pedestrians approaching the subway station from the south to cross Atlantic Avenue. Instead, they will be able to use the new subway entrance at the Urban Room, which will have new escalators, stairways and passageways leading to the subway, as well as an elevator affording access to disabled mass transit users. New stairways and ramps to the subway platforms will be constructed, and existing but unused passages and shafts will be rehabilitated. As described above in Section IV, the improvements to the rail yard will help to modernize LIRR operations.

The Project will create 8 acres of open space, which will serve as an active and passive recreational resource for the Project's residents and workers, as well as residents, workers, and visitors in the area. The open space will connect the neighborhoods surrounding the project site with landscaped corridors and pedestrian paths, and a bicycle path connecting two sections of the City's bicycle network will run through the open space. The Project will therefore not only rid the project site of the physical and visual barrier of the exposed rail yard but will also create connections among surrounding neighborhoods. The Project has been designed to achieve other urban design benefits. Retail components will create active streetfronts, and other Project components, in particular the Urban Room, will provide places for people to congregate.

The Project's community facility uses will also provide benefits to the area. The intergenerational facility and a health care center will help to meet the recreational and health needs of new and existing residents of the area. The Project will include, as a commercial amenity, a bicycle station for 400 bicycles in a ground-floor retail space on the arena block.

In addition to the benefits of locating dense development in an area well served by public transit, the Project will entail a number of other environmental benefits. The Project will remediate environmental contamination on the project site. In addition, each of the Project's buildings will achieve Leadership in Energy and Environmental Design (LEED) certification, with a goal of a higher LEED Silver certification where feasible and practicable. LEED certification provides third-party verification that a project meets advanced performance standards relating to environmental stewardship, including the conservation of energy and water, the reduction of waste sent to landfills, and protection of the health of building occupants and other sustainability practices in building design and operation. Among the features that will contribute to the Project's LEED certification are a green roof on the arena and a comprehensive stormwater management system that will result in a net reduction in the volume of discharges from the combined sewer system to the Gowanus Canal and East River, compared to the Future Without the Proposed Action. The Project will incorporate a number of features designed to reduce energy consumption and control peak electric demand loads, and the Project will also minimize its emissions of pollutants through the use of natural gas for its heating systems and the installation of low-nitrogen oxides (NO_x) burners.

The construction and operation of the Project will generate substantial employment and economic benefits for New York City and State. As set forth in the FEIS, Phase I construction will create between 13,300 and 13,800 direct and indirect person-years of employment in New York City and between 16,400 and 17,100 direct and indirect person-years of employment overall in New York State, with the residential mixed-use variation generating the higher number of jobs. Construction of Phase II will generate approximately 11,900 direct and indirect person-years of employment in New York City and a total of approximately 14,800 person-years of employment in New York State.

The FEIS projects that once constructed, the annual operation of the completed project will support approximately 6,200 to 16,300 direct and indirect full-time equivalent ("FTE") jobs in New York City, and approximately 7,500 to 19,800 direct and indirect FTE jobs overall in New York State – with the first number in each case being that of the residential mixed-use variation and the second the commercial mixed-use variation.

Construction of the Project will generate tax revenues for New York City, the MTA, and New York State. Including the estimated mortgage recording fees from the condominium owners, total public sector revenues for New York City, MTA, and New York State from construction of the

Project will equal $247 million for the commercial mixed-use variation and $261 million for the residential mixed-use variation in 2006 dollars. Operation of the Project will also have tax revenues associated with it. In addition to annual property taxes, public sector revenues for New York City, MTA, and New York State from the operations of the Project are projected at approximately $70 million annually from the residential mixed-use variation and $140 million annually from the commercial mixed-use variation. None of the foregoing revenue numbers include either real property taxes or personal income taxes paid to the City or the State by future Project residents.

The cumulative economic effect from constructing the entire development program of either the residential mixed-use or the commercial mixed-use variation will be substantial. The total effect on the local economy, measured as economy output or demand, is projected at approximately $4.9 billion in New York City and between $6.3 and $6.4 billion overall in New York State in 2006 dollars. The overall effect on the local economy from operating the completed development is projected at $0.9 to $2.6 billion annually in New York City and $1.1 to $3.0 billion annually in New York State – with the first number being that of the residential mixed-use variation and the second the commercial mixed-use variation.

The employment, tax revenue and induced economic activity estimates summarized above are those presented in the FEIS. A separate economic impact analyses was performed as part of the GPP analysis. The two analyses shared general input data and other assumptions about the Project but had different purposes, technical orientation, and units of output. There are methodological differences in the analyses, leading to different estimates, but the results of these analyses are not contradictory. Rather, each is a reasonable projection based on the methodology used. The purpose of the analysis conducted as part of the FEIS was to provide a "snapshot" view of the likely employment and economic activity that would result if the Project were implemented (*i.e.*, dollar values are presented in constant dollars rather than net present value). Separate "snapshots" of this activity were provided for Project construction and annual operation as of 2010 and for Project construction and annual operation as of 2016.

The purpose of the analysis conducted for the GPP was to evaluate the implications for ESDC and the other involved public agencies of implementing the Project. As such, it was essentially a financial analysis of investment considerations that required that the Project be viewed similarly to the way in which a financial analyst would view it. As a result, rather than a "snapshot" of effects, the monetary units of the analysis had to incorporate the effect of the time-value of money – that a benefit that occurs sooner (or a cost that occurs later) is valued more highly than the same benefit that occurs later (or cost that occurs sooner). As such, the GPP analysis expresses its evaluations in "present value" – discounting a time-stream of annual values back to its value in 2006.

The economic model for the FEIS analysis was the Regional Input-Output Modeling System (RIMS II), developed by the U.S. Department of Commerce, Bureau of Economic Analysis. The RIMS II model and similar prior input-output models have been used extensively in SEQRA and CEQR projects in New York City. The economic model that was used as part of the GPP analysis was the REMI model (Regional Economic Models, Inc.), a model that has been used extensively by government agencies, including most state governments, to evaluate proposed public sector actions. Unlike the RIMS II model, REMI is a dynamic model that provides year-by-year estimates and expresses its evaluations in terms of net present value. The results from the two separate analyses reinforce the conclusion that the Project will result in significant economic benefits for New York City and New York State.

VI. Consideration of Relevant Environmental Impacts, Facts, and Conclusions Disclosed in the FEIS

A. Land Use, Zoning, and Public Policy

1. Land Use

The Project will result in land uses currently not present on the project site at an overall density much greater than that of most of the study area but comparable to the Special Downtown Brooklyn District. Part of the project site is located within the Special Downtown Brooklyn District, although most of that district lies to the west and north of the project site. These land use changes occasioned by the Project will be significant, but they will not result in significant adverse land use impacts.

The project site sits at a major crossroads and transit center, close to Downtown Brooklyn and at the junction of several thriving neighborhoods. However, it currently contains virtually none of the land use patterns or vitality of its neighbors. By replacing the existing structures with a mix of new entertainment, residential, office, community facility and retail uses, plus substantial open space, the Project will upgrade the land uses on the site. Moreover, the rehabilitation of the rail yard will improve LIRR operations, and the new subway entrance will enhance access to and pedestrian flow within the station.

The location of the project site at a major transportation hub makes it suitable for high-density mixed-use development. Placing dense development on the project site will assist the City and the Borough in meeting the demands of economic and population growth expected over the next two decades, while achieving the objective of making Brooklyn the home of a major league sports team, in an efficient, transit-oriented manner.

Except for the arena, which is a singular use, the predominantly residential, commercial, and open space land uses associated with the Project will be similar to, and compatible with, the uses in the surrounding primary and secondary study areas. The arena will be a new use, but arenas are typically compatible with commercial, retail, entertainment, and cultural event-oriented uses, and, therefore, this use will be compatible with the presence of these uses in its surroundings, particularly with Downtown Brooklyn and the Brooklyn Academy of Music Cultural District to the north.

With respect to the arena's proximity to residential uses, the Zoning Resolution prohibits arenas within 200 feet of residential districts, since some arena operations could be incompatible with districts limited primarily to residential use. The Zoning Resolution permits arenas in most commercial districts that allow for both commercial and residential uses. The arena block is adjacent to (and within 200 feet of) a residential district to the south. Accordingly, the facility has been designed to minimize its presence and effect on the residential uses on these blocks. Primary entrances and signage will be oriented toward the crossroads of Atlantic and Flatbush Avenues and away from the residential areas. Two primarily residential buildings that will be compatible with the residential district will be constructed on the arena block (Buildings 2 and 3) along most of the Dean Street frontage, serving as a buffer between the arena use and the residential district. However, the preferred seating entry and entry to the arena loading area will be located on Dean Street, and while security screening and loading functions will take place entirely within the building, the residences along this street will experience some localized adverse impacts. In addition, three residential

buildings on Pacific Street west of Flatbush Avenue and three residential buildings on Dean Street west of Flatbush Avenue will have a view of arena signage along Flatbush Avenue. These localized impacts will not constitute a significant adverse impact on land use. It should be noted, in this regard, that the Dean Street corridor between Flatbush and Vanderbilt Avenues is lined with and zoned for both residential and industrial uses and has historically functioned as a transition area between the more commercial and industrial uses to the north and the residential uses to the south.

The below-grade rail yard and dilapidated, vacant, and underutilized properties form a visual and physical barrier between the redeveloped areas to the north of Atlantic Avenue and the neighborhoods to the south. The Project will remove that barrier. Components of the proposed development will be built on a platform above the rail yard, allowing the creation of grade-level open space across much of the project site, which will connect the surrounding neighborhoods. Comments submitted with respect to the DEIS expressed the view that the Project itself would create a barrier between neighborhoods by closing streets and constructing high-density buildings on a currently underdeveloped site. ESDC has considered those concerns, and has determined that the Project design – by connecting multiple pedestrian pathways to much of the existing street grid, creating 60 foot wide entrances to those pathways, establishing visual corridors into the open space and providing a bike path through the site – has been designed to facilitate and encourage pedestrian and bicycle traffic from one neighborhood to another. The Project buildings will not impair this connection simply by virtue of their height or bulk.

2. Zoning and Public Policy

The Project will not result in significant adverse impacts with respect to zoning and public policy. The development on the project site will be subject to the provisions of the GPP, which will serve in lieu of zoning. The GPP will be implemented in accordance with Design Guidelines developed in consultation with the City and the project sponsors. The Design Guidelines, which include requirements for bulk, density and use, will lead to the construction of a cohesive development with a variety of scales, programmatic uses and architectural elements.

Pursuant to the GPP, ESDC will override certain aspects of: (i) the Zoning Resolution, including, but not limited to, use and bulk (including height and setback and floor area), signage, and parking requirements and allowances; (ii) ATURA to the extent that ATURA requires development of Site 5 and Site 6A to comply with zoning; and (iii) use of streets located on the City Map as it relates to Pacific Street between Flatbush and 6th Avenues, 5th Avenue between Flatbush and Atlantic Avenues, and Pacific Street between Carlton and Vanderbilt Avenues. The Project will also entail condemnation by ESDC of such streets and all or parts of the remainder of the project site.

The non-conformance with zoning is not considered a significant adverse impact, because the new uses will relate rationally to uses and densities allowed under the existing zoning in the area. Much of the current zoning on the project site is linked to one use now existing in the area – the open rail yard. Once a platform is constructed over this facility, the project site will offer the opportunity to further some of the City's more general policies for housing and commercial development in Brooklyn by supplying substantial new commercial space and both affordable and market-rate housing. The Project will not conflict with the City's industrial retention policy.

The GPP will apply only to the project site, so there will be no precedents set by a rezoning. Land use patterns in the surrounding areas are expected to remain relatively stable due to existing

land use patterns (including the presence of established neighborhoods), existing zoning regulations (including recent rezoning actions), and historic district designations in many locations throughout the study area. For the same reasons, the presence of greater density on the project site is not expected to induce changes in density elsewhere in the study area.

In Prospect Heights, the existing R6B zoning imposes height and bulk limits that would constrain redevelopment. In areas along Pacific Street and Vanderbilt and Flatbush Avenues where existing zoning would allow development of slightly greater height and bulk, properties are generally occupied by existing buildings containing active uses, and there is only limited potential for additional development. In addition, the LPC is exploring the designation of portions of the Prospect Heights Historic District as a New York City Historic District. New York City Historic District designation of the rowhouse blocks of Prospect Heights would provide another level of stability since alterations or new development within historic districts must be reviewed and approved by LPC or its staff. The FEIS indicates that the Project could result in redevelopment pressures in existing manufacturing districts in the vicinity of the project site. However, zoning restrictions in M1 districts would preclude intensive development of properties within those districts, absent a discretionary amendment to zoning.

The density of the Project's commercial office and residential buildings will be substantially greater than that of the residential areas in the vicinity of the Project site. However, Project density will generally be compatible with the buildings to the north in Downtown Brooklyn, while the scale of the street-level retail throughout the project site will be consistent with that of the ground-floor retail throughout the study area. The Project's overall density will be more concentrated on the western end of the project site (the arena block and Site 5) near the intersection of Flatbush and Atlantic Avenues, and in proximity to the high-density commercial areas of Downtown Brooklyn.

Though it will require an override of ATURA as it relates to zoning conformance, the Project will promote a number of ATURA objectives, including, but not limited to, the removal of structurally substandard buildings and the elimination of negative environmental conditions. The Project will complement the goals of the Special Downtown Brooklyn District, first approved in 2001, to encourage medium- to high-density commercial development and strengthen the business core of Downtown Brooklyn, including portions of the project site. Portions of the project site – Site 5 on the southwest corner of the intersection of Atlantic and Flatbush Avenues and Block 1118 on the southeast corner of this intersection – are located within the Special Downtown Brooklyn District.

The Project will also support City policy to promote transit-oriented development by locating high-density commercial, residential, entertainment, and cultural uses adjacent to a major transportation hub. As noted in the FEIS, this policy is evidenced by the high-density zoning districts that have been created around transportation centers at several locations around the City. Finally, the rental component of the Project will advance the objectives of the City's well established affordable housing policies and programs.

B. Socioeconomic Conditions

The FEIS analyzes the Project's potential for direct residential displacement, direct business or institutional displacement, indirect residential displacement, indirect business or institutional

displacement, and effects on specific industries, and concludes that the Project will not result in any significant socioeconomic impacts.

1. Direct Residential Displacement

The FEIS analysis of direct residential displacement conservatively assumes that the Project will directly displace 171 residential units of housing (which includes all residential units on the project site, whether occupied or unoccupied) with an estimated 410 residents, all during Phase I. The direct displacement of these residents will not result in a significant adverse impact because they do not represent a significant proportion of the study area population and they are not likely to have socioeconomic characteristics that differ markedly from the study area population as a whole.

2. Direct Business or Institutional Displacement

During Phase I, the Project will directly displace 27 businesses involved in a variety of activities and two institutions, a privately operated facility that provides temporary housing for homeless families and an FDNY Special Operations Facility used for equipment cleaning and storage. Eleven of these businesses are not currently operating on the project site. The Project will not cause significant adverse direct business and institutional displacement impacts because the displaced businesses and institutions do not have substantial economic value to the City or region; are not subject to publicly adopted plans to preserve, enhance, or protect them; do not individually or collectively contribute substantially to neighborhood character; and can be relocated elsewhere in the City, since their operation is not tied to their current location.

3. Indirect Residential Displacement

The Project will not result in a significant adverse impact with respect to indirect residential displacement. The number of at-risk households in the study area has been decreasing and will probably continue to do so with or without the Project The FEIS concludes that in the Future Without the Proposed Action in 2010 and 2016 the at-risk population in the study area will likely be much smaller than in 2000. In addition, the Project will not substantially affect residential property values in areas with at-risk population for several reasons. First, similarities between the Project housing mix and the housing mix currently present in the ¾-mile study area indicate that the Project will not substantially change the socioeconomic profile of the study area. Second, the substantial number of housing units that the Project will add could alleviate upward pressure on rental rates. Third, most at-risk households identified in the FEIS analysis are more than one-half mile from the project site, and there are intervening established residential communities with upward trends in property values and incomes (not related to the Project) and active commercial corridors separating the project site from the areas with at-risk population.

4. Indirect Business and Institutional Displacement

The Project will not result in a significant adverse impact with respect to indirect business and institutional displacement. Existing businesses will generally benefit from the larger customer base that will be created by the Project's residents, workers, and visitors because increases in sales from the new population will allow them to afford any potential increases in rental rates. In addition, rents in some of the study area's commercial corridors have already substantially increased in recent years, and so businesses or institutions vulnerable to indirect displacement pressures are

expected to relocate by 2010 and 2016 in the Future Without the Proposed Action. Most of the institutional uses in the study area are owner occupied or government owned and therefore will not be vulnerable to indirect displacement pressures.

The potential for indirect displacement will therefore be limited to a small number of businesses and institutions mainly along Vanderbilt Avenue, Flatbush Avenue, and 4th Avenue, within ¼ mile of the project site. These businesses are primarily neighborhood services stores, 99-cent stores, and light industrial or auto-related uses. They are not unique to the study area, do not have substantial economic value to the City, and do not have locational needs that preclude them from relocating elsewhere in the study area or City. The magnitude of any displacement will not be enough to produce changes in neighborhood character and will not represent a significant adverse impact.

5. Adverse Effects on a Specific Industry

The Project will not directly affect business conditions in any industry or category of business within or outside of the study area; nor will it indirectly substantially reduce employment or impair the economic viability of any industry or category of business.

C. Community Facilities

1. Police Protection

There will be no significant adverse impacts on police protection within the study area or on emergency service as a result of the Project. NYPD has indicated that it will continue to evaluate its staffing needs and assign personnel based on population growth, area coverage, crime levels, and other local factors. The Project, including potential effects to police response times, will be taken into consideration during such routine evaluations of service adjustments to continue to provide adequate police coverage. NYPD has protocols to successfully police large venues, such as Madison Square Garden and Yankee Stadium, which have similar events to those that would take place at the arena. Additionally, the Project will implement its own site security plan, which includes measures such as the deployment of security personnel and monitoring and screening procedures.

Police response times are not expected to be significantly affected by the closing of local streets or increased traffic on the surrounding street network as the project site is accessible by three of the Borough's major thoroughfares and service to surrounding areas is from precincts that have a broad geographic distribution and are not clustered around the project site. NYPD vehicles responding to emergencies are not bound to standard traffic controls and are therefore less affected by traffic congestion. NYPD response times (to crime-in-progress calls) have improved citywide and borough-wide from 2005 to 2006.

While there will be no direct displacement of existing NYPD facilities, the reconfiguration of 6th Avenue between Atlantic and Flatbush Avenue will result in the loss of angled police parking in front of the 78th Precinct House. Prior to the elimination of this parking, the project sponsors will provide parking spaces for police vehicles assigned to the 78th Precinct House in a number equal to the spaces lost as a result of the elimination of angled parking on 6th Avenue, which will not exceed 24 spaces. These spaces will be provided without charge at a location that is proximate and convenient to the 78th Precinct House.

2. Fire Protection and Emergency Services

The increase in demand for fire protection and emergency services that could result from the Project will not result in significant adverse impacts on these services. Neither will there be significant adverse impacts from the direct displacement and relocation of the FDNY Special Operations Facility currently located on the project site because the loss of this facility will not have an impact on essential fire protection services to the surrounding community. FDNY has indicated that it will continue to monitor and evaluate its ability to provide fire and medical protection and will continue to provide these services pursuant to standard FDNY operating procedures.

Similar to NYPD operations, FDNY response times are not expected to be significantly affected by the closing of local streets or increased traffic, since the project site is accessible via three of the Borough's major thoroughfares and service to surrounding areas is from FDNY facilities that have a broad geographic distribution, including seven firehouses, a special operations facility (one squad company) and one emergency response unit. FDNY and emergency service vehicles will be able to access the project site and will maneuver around and through congested areas and are not bound by standard traffic controls. Similar to other emergency responders, ambulances will adjust to any congestion encountered en route to their destination, and all ambulances in the 911 system are dispatched by FDNY under the same 911 system, regardless of hospital affiliation. Average FDNY response times to all emergencies decreased citywide and borough-wide from 2005 to 2006. EMS response times to medical emergencies have also decreased citywide and borough-wide during this same period. In addition, the City is implementing an automatic vehicle location system in all ambulances and FDNY apparatus, which is expected to further reduce emergency response times. In light of all these considerations, the Project is not expected to significantly affect the provision of services by fire and emergency vehicles.

3. Public Schools

No significant adverse impacts on school capacity are expected in 2010. In Phase II, the Project will result in a significant adverse impact to both elementary and intermediate schools within the ½-mile study area when enrollment at these schools exceeds their program capacities, which could be as early as 2013. The FEIS indicates that in 2016 there will be projected shortfalls of 1,256 seats in elementary schools and 31 seats in intermediate schools located within ½ mile of the project site. These shortfalls would constitute a significant adverse impact. However, there will remain available capacity in both the larger CSD 13 and CSD 15 (and thus CSDs 13/15 combined).

As discussed in Section VII below, the project sponsors will provide space for construction of a new school within the Project, in order to partially mitigate the impact on school capacity. Other measures that could be taken by DOE to address this impact are also discussed in that Section.

4. Libraries

No significant adverse impacts to libraries in the study area will occur as a result of the Project. Impacts on library services will not be significant due to the proximity of the project site to the Central Library of the Brooklyn Public Library and the fact that residents of the study area will have available to them in their local vicinity four times the number of volumes than the Borough

average. The Project-related increase in population relative to the broader area served by the Central Library will be negligible.

5. Hospitals and Health Care Facilities

The Project will not result in significant adverse impacts to hospitals or health care facilities. The new residential population introduced by the Project will not overburden the existing hospital or health care resources in the surrounding area. Service providers are located at a number of different locations throughout the study area and provisions for emergency vehicle access have been incorporated into the site design. The Project will also include a 20,000-square-foot health care facility that will provide a broad range of health care services to the community. This health care facility will be constructed during Phase I.

6. Day Care Centers

No significant adverse impacts to publicly funded day care center services are anticipated in the study area in either the 2010 or 2016 analysis year as a result of the Project. Publicly funded child care facilities in the area surrounding the project site will be able to accommodate the increased population of children 12 years old or younger from income-eligible households introduced by the Project in 2010. Although the number of eligible children that the Project will introduce to the study area by the 2016 analysis year will cause anticipated enrollment to exceed the existing capacity of the area's publicly funded child care facilities, the Project will construct on the project site and arrange for the long-term operation of a licensed day care center in the Project's intergenerational facility with capacity for at least 100 children with publicly funded vouchers available to income-eligible households (or with some alternate form of publicly funded day care for income-eligible households). The day care center will be placed in operation prior to the expected completion of occupancy for 1,800 affordable housing units at the Project. The future demand for publicly funded day care services will therefore not exceed future capacity within the study area.

D. Open Space and Recreational Facilities

Upon completion of Phase II, the Project will not result in significant adverse impacts on open space and recreational resources.

The FEIS assesses the adequacy of open spaces in a ¼-mile non-residential study area and in a ½-mile residential study area in both 2010 and 2016. For the non-residential study area, the FEIS analysis examines passive open space ratios for the worker population and for the combined worker-resident population. For the residential study area, the FEIS analysis looks at active open space ratios for the residential population and passive open space ratios for the combined worker-resident population.

The Project will introduce large new residential and non-residential (worker) populations to these study area. The Project will also develop 8 acres of publicly accessible open space during Phase II. The new open space will provide passive and active recreational opportunities and new pedestrian and bicycle path connections between the adjacent neighborhoods. Plazas, fountains, boardwalks, water features, lawns, active uses, and other features will be included in the open space. In addition, private open space on the arena's roof and publicly accessible amenities, such as the Urban Room and plazas around the outside of the arena, will be provided during Phase I.

1. Non-Residential Study Area

The Project will result in a temporary significant adverse impact within the non-residential (¼-mile) study area at the end of Phase I until the Phase II open space is phased in. By 2016, the development of the Project's open space will result in an improvement in the passive open space ratios, and the temporary significant adverse impact will be eliminated. The passive open space ratios for the combined worker-residential population in the nonresidential study area will increase in 2016 compared with existing conditions and the Future Without the Proposed Action, although the ratios will continue to be substantially less than DCP's recommended weighted average.

2. Residential Study Area

In 2010, the active and combined passive open space ratios for the residential (½-mile) study area will decrease as a result of the Project and remain below the levels recommended by DCP. Despite the decline in the residential study area's open space ratios upon completion of Phase I, there will be no temporary significant adverse impact in the residential study area. The decline in the open space ratios will be offset by qualitative factors such as the Project's Phase I open spaces and public amenities (including the private open space on the roof of the arena, plaza areas, and the Urban Room) and the presence of Prospect Park and Fort Greene Park just outside the residential study area. In 2016, passive open space ratios will increase above the existing conditions.

The active open space ratio in the residential study area will decrease in both 2010 and 2016. The reduction of the active open space ratio will not be a significant adverse impact because it will be offset by qualitative factors, including the bicycle path through the project site and the presence of Fort Greene and Prospect Parks just outside the Project's residential study area boundaries.

Certain comments submitted with respect to the DEIS expressed the view that demand generated by the Project would overburden existing open space resources such as Prospect Park and Fort Greene Park. Prospect Park, due to its size (585 acres), proximity and accessibility via Flatbush Avenue, is more likely to be used by the future residents of the Project than Fort Greene Park. After full build out of the Project in 2016, the population living within ¾ of a mile of Prospect Park and Fort Greene Park would increase by no more that 5% and 15%, respectively. Such an increase in the potential user population would not be expected to overtax these resources, especially considering the high quality public and private open space that is to be constructed in connection with the Project.

E. Cultural Resources

1. Project Site

With respect to archaeological resources, development of the Project could impact the potentially sensitive areas identified on one lot on Block 1119 and on four lots on Block 1127. To avoid significant adverse impacts on these potential archaeological resources, consultation has been and will continue to be undertaken with LPC and OPRHP. The project sponsors will implement the procedures of the Stage 1B testing protocol accepted by OPRHP and LPC with respect to further study of potential archaeological resources on the project site. The consultation process respecting archaeological resources will occur in accordance with a Letter of Resolution ("LOR")

between ESDC, OPRHP, and the project sponsors. The LOR is included in Appendix B of the FEIS.

With respect to historic resources, the demolition of the former LIRR Stables at 700 Atlantic Avenue and the former Ward Bread Bakery complex at 800 Pacific Street will result in significant adverse impacts.

The subway improvements that will be part of the Project will affect portions of the Atlantic Avenue Subway Station, listed on the State and National Registers of Historic Places. However, such distinguishing elements as the station's decorative tiles, marble, platform plaques, the old LIRR spur, and the subway entrance in the Williamsburgh Savings Bank Building will not be altered. The project sponsors will consult with NYCT and OPRHP regarding the proposed finishes to be used at the station where (i) new construction would connect to the historic tiled platform walls and (ii) in the locations where non-public areas of the station, *e.g.*, the subpassage, would be reopened to the public. In addition, a report will be completed by a qualified historic preservation consultant to evaluate the condition of the existing tiles, mosaics, and marble wainscoting in the non-public areas that have been painted over in the past and that will be removed as part of the Project modifications for their salvage potential. A complete photographic inventory of the evaluation will be submitted to OPRHP for review and comment. If feasible, materials that could be salvaged will be reused in the sub-passage to be reopened to the public. Plans for such reuse will be developed in consultation with OPRHP. Unusable materials will be made available to the New York City Transit Museum. Provided the above measures are taken, the Project will not adversely impact the Atlantic Avenue Subway Station.

To avoid adverse impacts to the Atlantic Avenue Subway Station during construction of the modifications of the subway station, the project sponsors will prepare a Construction Protection Plan ("CPP") in coordination with a licensed professional engineer that meets the requirements specified in the DOB Technical Policy and Procedure Notice #10/88 and that complies with other New York City Building Code regulations. The CPP will be submitted to OPRHP for review and approval prior to implementation.

2. Study Area

The Project will obscure views of the Williamsburgh Savings Bank Building from south of the project site along the Flatbush Avenue corridor and from certain other public vantage points south and southeast of the Building. This will constitute a significant adverse historic resources impact. Views of this resource will be preserved from other principal view corridors, including 4th Avenue, Atlantic Avenue (from the east and the west), and Flatbush Avenue from the north.

In addition, a Project building will adversely affect the Church of the Redeemer by casting new morning shadows on its stained glass windows. The Project will not cause significant adverse contextual impacts with respect to study area historic resources, including nearby historic districts. While Project buildings will be taller and have larger footprints than those located in the historic districts, the Project will not isolate any historic district from its setting or streetscape. Its buildings and open spaces will not constitute incompatible visual, audible or atmospheric elements that diminish the significant characteristics of the buildings in the historic districts in the study area.

To avoid adverse impacts to nearby historic resources during the Project's construction, the project sponsors will prepare a CPP in coordination with a licensed professional engineer that meets the requirements specified in the DOB Technical Policy and Procedure Notice #10/88 and that complies with other New York City Building Code regulations. The CPP will be submitted to OPRHP for review and approval prior to implementation.

F. Urban Design and Visual Resources

With respect to visual resources, the Project will result in one significant adverse impact due to the obstruction of views of the Williamsburgh Savings Bank Building from certain public vantage points, as discussed above. The Project will not result in significant adverse impacts with respect to other visual resources; nor will it have significant adverse impacts on urban design.

1. Urban Design

The Project will not result in significant adverse urban design impacts. As part of the development of the Project, the project sponsors worked closely with DCP and ESDC staff to develop Design Guidelines that establish a framework for the design of the Project. The purpose of the Design Guidelines is to identify the important elements of the Project's master plan developed by Gehry Partners and Olin Partnership and require that these elements be incorporated into the Project, while at the same time providing enough flexibility to allow for the final design of the individual buildings to evolve as the Project is built out. The Design Guidelines are appended to the GPP and will govern the ongoing development of the project site. The Project is designed as a comprehensive plan that establishes a hierarchy of buildings with a mix of architecturally distinctive and more subdued buildings. The buildings will have varying heights, unique shapes, and an architectural style that will differ substantially from the buildings in the surrounding neighborhoods. The Project will consist of structures that are both more traditionally massed and are clad in masonry, mixed with more asymmetrical forms clad in metal and glass.

The Project will change the project site into a high-density mixed use development that will provide physical and visual connections between several vibrant Brooklyn neighborhoods. Development of the project site's western end will be of a scale similar to the buildings in nearby Downtown Brooklyn. The project site east of 6th Avenue will include 8 acres of publicly accessible, landscaped open space. The Project's distinctive modern buildings will attract people to an area that is currently in a blighted and underdeveloped condition.

In general, the Project is expected to alter the built form of the project site and study area through the addition of an arena and 16 additional buildings, most of which will be considerably taller and of a larger scale than the buildings in the surrounding area. Streets will be closed, and blocks will be joined to create the arena block (the three blocks bounded by Dean Street and Flatbush, Atlantic, 5th, and 6th Avenues) and the large residential block (the two blocks bounded by Dean Street and Atlantic, Carlton, and Vanderbilt Avenues), but these changes will not result in significant adverse urban design impacts. The creation of the large residential block will allow the development of the 8 acres of publicly accessible open space as well as the implementation of a advanced stormwater management system. Broad openings into the open space and the provision of north-south pathways and a pedestrian pathway along the right-of-way of Pacific Street will enhance pedestrian activity and create visual links to the residential neighborhoods to the north, south, east, and west. The arena block bounded by Dean Street and Flatbush, Atlantic and 6th

Avenues, which will be necessary to accommodate the arena's footprint, will facilitate access to the arena from the subway. The four buildings surrounding the arena will incorporate a variety of uses, including ground-floor retail and landscaping amenities, which will promote street activity.

2. Visual Resources

The Project will redevelop a largely abandoned-looking area of Brooklyn, three blocks of which are primarily occupied by the below-grade rail yard, with five additional blocks occupied by a miscellaneous collection of warehouses and residential and commercial structures. The Project is designed according to a comprehensive plan with buildings of varying heights, unique shapes, and a style of architecture that will differ substantially from the buildings in the surrounding neighborhoods.

The Project will result in a significant adverse visual resources impact because views of the Williamsburgh Savings Bank Building, a visual resource in the Brooklyn skyline, will be obstructed along the Flatbush Avenue view corridor from south of the project site except from vantage points on Flatbush Avenue immediately adjacent to the project site. Other views south and southeast of the Bank Building that will be obstructed by the Project are those along Pacific Street between 4th and Flatbush Avenues and points along 5th Avenue, and those from Bergen Street between 6th and Carlton Avenues, the Dean Playground, and Vanderbilt Avenue east of the project site. The loss of these views of the Bank Building will constitute a significant adverse impact.

Views of the Williamsburgh Savings Bank Building will be unobstructed from the areas to the north, east, west, and from the south along the 4th Avenue view corridor. Views of the Bank Building from some elevated transportation corridors will remain from some vantage points but will be obstructed from other locations. Building 1 of the Project, designed in consultation with DCP to relate to the Williamsburgh Savings Bank Building in form, will alter views of the Bank Building on the Brooklyn skyline. The relationship between the Williamsburgh Savings Bank Building and Building 1 will change with one or the other building being more prominent depending on the particular vantage point.

Other changes to visual resources and view corridors in the study area are not considered to be adverse. The Atlantic Avenue Control House will remain visible from the east and west along Atlantic Avenue and from the south along 4th and Flatbush Avenues. Similarly, visual resources north of the project site, including the bell towers of the Church of St. Luke and St. Matthew and the Verizon building, will remain visible from areas within the northern and eastern sections of the study area. Views of the bell tower of St. Joseph's Roman Catholic Church at 856 Pacific Street will remain visible from the study area east and south of the project site.

Completion of the Project will create new visual resources. Views east and west along the Atlantic Avenue corridor will be transformed by the arena and nine tall buildings fronting on this portion of the Atlantic Avenue view corridor between 4th and Vanderbilt Avenues. This transformation is not considered to be adverse, in light of the absence of significant visual resources at the project site or in this view corridor. Views southeast along the Flatbush Avenue view corridor, from northwest of the project site will include views of Building 1, the arena and Site 5. These changes will be significant but not adverse. Views northwest along the Flatbush Avenue view corridor will include views of Site 5 and Buildings 1 and 2. From some vantage points along the west side of Flatbush Avenue south of the project site, other buildings on the project site will be

visible along this view corridor. The Project's buildings will serve as new wayfinders in the skyline, becoming new visual resources.

Most views along the east-west tree-lined residential streets identified as view corridors will not be affected by the Project, since most views along these view corridors will not include views of the project site. Due to the height of the Project's buildings, views along some of these low-rise, residential street view corridors will include views of these buildings from some vantage points. Typically, the density of the row houses along these streets, which create solid streetwalls on narrow streets, will obscure street-level views to the project site. The tops of the Project's buildings will be visible along residential street view corridors from some vantage points as viewers move east or west away from the project site. However, the blocks and buildings that intervene between the Project's buildings and the low-rise buildings along these view corridors will create a buffer that will limit the visual presence of the Project's buildings on these view corridors.

3. Nighttime Lighting and Signage

The lighting and signage on the project site will not cause significant adverse impacts. Signage on most of the project site will be typical for local retail and commercial areas throughout New York City with the exception of certain portions of the Atlantic and Flatbush Avenue frontages of the arena block. Signage controls for the retail establishments occupying street-level space in the Phase II developments, the Pacific Street frontage of Site 5, and portions of the arena block will be consistent with the strictest signage controls used in New York City for local retail. Signage along the Atlantic, Flatbush, and 4th Avenue frontages of the Site 5 building will be allowed to a height of 40 (rather than 25) feet due to Site 5's prominent location at the intersection of these avenues. Site 5's lighting and signage is allowed in most commercial districts (including the C6-2 zone covering Site 5) other than commercial overlay zones.

Special signage controls will apply to the Urban Room, Building 1 and the arena façades along Atlantic and Flatbush Avenues. With the exception of limited signage for ground-floor uses, illuminated and non-illuminated opaque signs will be limited to the westernmost 75 feet of the arena block and to the Building 1 façades along Atlantic and Flatbush Avenues and will be limited in terms of overall surface area and height. Additional signage and lighting will also be allowed on the Urban Room (from 80 to 150 feet in height), on Building 1 (to a height of 60 feet) and on the arena façade (to a height of 40 feet); however, this additional permitted signage must be sufficiently transparent to make activity within the building and the interior architecture visible to passersby, and to allow people within the building to see outside. This signage will concentrate lighting and signage at the intersection of Flatbush and Atlantic Avenues and away from residential neighborhoods to the south.

Since most of the Project lighting will be in keeping with commercial areas throughout Brooklyn, the Project lighting will not represent a significant adverse impact. Arena signage will be visible to the east and west on Atlantic Avenue, to the north and south on Flatbush Avenue, and on a small portion of Pacific and Dean Streets west of Flatbush Avenue where there are residential buildings. Other residential areas will not have direct views of the signage. Since the signage will be visible principally along the commercial corridors of Atlantic and Flatbush Avenues, it will not have a significant adverse impact. The effect of the signage on the relatively small residential area on Pacific and Dean Streets south of Flatbush Avenue, from which it will be visible, is localized and not considered significant.

G. Shadows

The Project will result in incremental shadows over a number of privately and publicly owned properties generally west, north, and east of the Project as the sun moves across the sky. In determining whether such shadows constitute significant adverse impacts, the FEIS focused on sun-sensitive resources such as public open spaces and historic resources with significant sunlight-dependent features. The analysis examined incremental shadow coverage and duration and considered factors such as the times of the day and year when the Project will affect the sunlight reaching the resource and how shadow will affect the uses of the resource. This analysis determined that the Project will have significant adverse shadows impacts on two public sun-sensitive resources: the open space resource of the Atlantic Terminal Houses, a New York City Housing Authority development located at the northeast corner of Atlantic and Carlton Avenues, and the stained glass windows of Church of the Redeemer, located on the west side of 4th Avenue between Atlantic Avenue and Pacific Street.

The open space at the Atlantic Terminal Houses, divided into two separate areas (the Atlantic Avenue side and the Carlton Avenue side) by a one-story building, contains both passive and active use areas. With full development of the Project in 2016, incremental shadows from the Project will have a significant adverse impact on this open space when the weather is cooler and shadows are longer, in the spring, fall and winter, as they will diminish the attractiveness of this open space. Both the Carlton Avenue side and Atlantic Avenue side of the open space will receive shadow all day in the winter. In the spring and fall, the Carlton Avenue side will receive shadow for most of the afternoon, and the Atlantic Avenue side will receive shadow for most of the analysis day.

The building on Site 5 will cast shadow in the morning and during all seasons on the Church of the Redeemer, a historic resource eligible for listing on the State or National Register of Historic Places. In the late spring, summer, and late summer, the durations will be the longest, lasting through most of the morning. These shadows will have a significant adverse impact because they will reduce light to the stained glass windows on the church's east façade in the morning when church services are typically held. As a result of the post-DEIS program modification, the building on Site 5 has been reduced in height, and, as a result, its incremental shadows will move off the church earlier in the late spring and summer, but the shadow, although reduced in duration, is still considered a significant adverse impact with respect to the church's stained glass windows.

H. Hazardous Materials

With the implementation of site investigation and remediation measures and inclusion of design controls to prevent vapor intrusion, no significant adverse hazardous materials impacts are expected to occur as a result of the Project's construction or operation.

The project site has a long history of railroad, industrial, storage, manufacturing and commercial uses. Contaminants on the site are known to include asbestos-containing material, lead-based paint and PCB-containing electrical components in buildings and subsurface contamination (fill, soil, soil gas, and/or groundwater). Migration of contaminants from outside the project site is also possible. Development of the Project will involve the demolition of the existing structures on the project site and excavation and removal of much of the existing fill and soil. Hazardous materials only pose a threat to human health or the environment if exposure to them can occur,

such as by breathing volatile and semi-volatile compounds or particulate-laden air released during demolition, excavation, and construction. The soils within the Project's open space will be clean fill, rather than the current soil at the Project site. Following construction of the Project's buildings, the principal potential pathway of concern will be the intrusion of vapors into the buildings from subsurface contamination.

Phase 1 and Phase 2 Environmental Site Assessments ("ESAs") identified the potential for contamination and then confirmed and characterized the contamination through sampling. The ESAs revealed that contamination on the project site is in both the subsurface (mainly from current or former gas stations and historic fill) and inside current buildings (mainly from asbestos and lead-based paint).

To make certain that there will be no potential threats to residents, construction workers, and the surrounding environment from hazardous materials, the Project will closely follow site remediation protocols and procedures in accordance with all applicable City, State, and federal regulations. The Project's remediation measures will comprise:

- The development and implementation of procedures for pre-demolition removal of asbestos in accordance with applicable federal, State and City regulations, which will be monitored by an independent contractor as required by such regulations.

- The development and implementation of procedures for pre-demolition removal of PCB-containing equipment in accordance with applicable federal, State and City laws and regulations.

- The implementation of dust suppression techniques reflecting best construction practices during the demolition of Project buildings and any excavation, grading or earth-moving activities at the project site in connection with the construction of the Project or any related excavation or remediation.

- Additional subsurface investigations as needed to refine and supplement data presented in the Phase 1 and Phase 2 environmental site assessments and provision of the results of such investigations to ESDC. ESDC may require additional sampling as necessary to determine whether remediation is appropriate.

- Preparation of remediation plans, which will include protocols for any remedial activities (and associated additional sampling and investigation) and Health and Safety Plans with respect to any remedial activities to be undertaken by the project sponsors, and which will be submitted to ESDC for review and approval prior to commencement of such remedial activities. In the event that DEP exercises jurisdiction over any portion of the environmental remediation at the Project site, the project sponsors will (in lieu of the remedial plan called for above) submit to DEP a remedial action plan with respect to such portion of the environmental remediation, for review and approval in accordance with DEP requirements, prior to or in connection with excavation activities at the Project site. The project sponsors will simultaneously submit such remedial action plan to ESDC for its review and consultation with DEP.

- Prior to remediation and excavation at the site, the development of a Construction Health and Safety Plan ("CHASP") which will be approved by ESDC (or, for any portion of the environmental remediation under the supervision of DEP, approved by DEP) and implemented by the project sponsors in connection with the remediation or excavation work at the Project site. The CHASP will include a Community Air Monitoring Plan for PM_{10} and VOCs conforming to guidance published by the New York State Department of Health to be implemented during the excavation of site soils (or other activities that involve moving existing site soils around or off the site) in connection with the construction of the Project or any related excavation or remediation. If the CHASP is modified, modifications will be submitted for approval to ESDC or, for any portion of the site subject to supervision of DEP or NYSDEC, approval by such agency. The project sponsors will implement the CHASP during all remediation or excavation work at the site.

- Remediation of the spills to the extent required by NYSDEC and closing of the spill numbers at the gasoline station on Block 1127, Lot 1, and the U-Haul facility on Block 1119, Lots 1 and 64, both of which have active petroleum spill numbers on file with the NYSDEC. Remediation of these spills will be completed under the direction of NYSDEC.

The project sponsors will design and construct the Project so as to prevent VOCs from infiltrating the interior of the Project buildings. Residential and community facility uses will be located either above ventilated underground parking or other facilities or above the platform over the ventilated rail yard.

I. Infrastructure

Although the Project will generate new demands on infrastructure, the municipal systems serving the project site have adequate capacity to meet the needs of the Project, and therefore no significant adverse impacts will result. The conclusion that there will be adequate capacity to meet the Project's demand is based in part on the project sponsors' construction of local improvements in City infrastructure, including local sewers and water mains, as well as on the project sponsors' implementation of a comprehensive on-site stormwater management plan. These measures are described below.

1. Water Supply

The increase in demand on the City's water supply system from the Project will not be significant. As part of the Project, the project sponsors will construct new water mains in and around the project site in accordance with a water main plan to be approved by DEP, and no impacts on local water pressure are expected. The Project will include voluntary water conservation measures, which are described below, as well as those required by the City. Project demand upon full build is conservatively estimated at approximately 0.25% of demand City-wide. Since this incremental demand is minimal, no significant adverse impacts on water supply will result.

2. Sanitary Wastewater Treatment

The Red Hook Water Pollution Control Plant will have sufficient capacity to handle the sanitary sewage volumes that the Project will generate. The project sponsors will also construct new sewer improvements in and around the Project site as specified in an amended drainage plan approved by DEP. In 2016, after completion of the Project, the Red Hook Water Pollution Control Plant is expected to operate at only 56% of its permitted capacity and much less than its treatment capacity. Therefore, no significant adverse impacts on sanitary wastewater treatment will result.

3. Stormwater Runoff and Combined Sewer Overflows

The Project has the potential to create new runoff to the City's sewer system (which is a combined system in the Project area and, therefore, conveys both sanitary sewage and stormwater runoff). However, the Project also includes a number of site-specific stormwater management measures that will result in a reduction of stormwater discharge volumes to the Gowanus Canal and a only a small increase in stormwater discharge volumes to the East River (as compared to the No Build condition), thus minimizing the potential for any adverse water quality impacts on either water body. With implementation of these measures, no significant adverse impacts on the City's combined sewer system or Combined Sewer Overflows ("CSOs") will result from the Project.

The stormwater management measures will include installation or implementation of the following facilities or alternative detention/retention facilities providing the same or greater combined retention and detention capacity:

- Two 100,000 gallon tanks (one for the runoff from Buildings 5, 6 and 7 and one for the runoff from Buildings 8, 9, and 14);
- Two storage tanks in the area of the LIRR yard, with an aggregate capacity of 124,000 gallons;
- Four storage tanks within the arena, with an aggregate capacity of 291,000 gallons; and
- Two 12,000 gallon storage tanks at Site 5.

These stormwater storage tanks (and any tanks installed in lieu of such tanks) will be designed and built to have two outlets, with a smaller outlet at the base and another larger outlet at a higher elevation in the tank wall.

Other features of the comprehensive stormwater management plan will include the following:

- The project sponsors will landscape the Project's open space in accordance with a landscaping plan developed by Olin Partnership that accommodates the use of recycled stormwater for irrigation and the cultivation of native plants that have minimal irrigation needs.
- The open space will include a surface water feature with a capacity of at least 279,000 gallons in the area identified in the Design Guidelines.

- The Project will be designed to utilize recycled stormwater in the cooling towers of the Project buildings for make-up water, and also for cultivation of vegetation planted pursuant to the landscaping plan.

- The Project will include a green roof component on the arena.

- The Project will equip sinks, toilets and showers in the Project buildings with high-efficiency, low-flow fixtures. All leases and condominium documents will require the continued maintenance and use of these fixtures.

- The project sponsors will equip the arena with waterless urinals.

The project sponsors may modify any of these measures, provided that they demonstrate to ESDC through appropriate analysis that such modification results in a level of stormwater management equivalent or superior to that described in the FEIS and a report prepared by HydroQual Environmental Engineers and Scientists, P.C. dated November 8, 2006, which appears in Appendix H in the FEIS. The project sponsors will maintain the equipment and fixtures described above in a proper and well-functioning condition.

4. Gowanus Canal/East River Water Quality

The Project will not result in significant adverse water quality impacts to the Gowanus Canal or the East River. The frequency of CSO discharges to the Gowanus Canal and East River will not significantly increase, and although the volume of the CSO discharges to the East River will increase slightly, the aggregate volume (if both water bodies are considered together) will decrease upon completion of Project construction.

CSO analyses were performed using an existing, calibrated hydrologic and hydraulic model of the Red Hook drainage area. This model and its calibration have been accepted and are being used extensively by the DEP to support its long-term CSO control program for the Gowanus Canal and East River. The model was refined to incorporate the Project, including specific features such as buildings, open spaces, and stormwater control measures. Because the Project will result in a reduction of CSO volume in the Gowanus Canal and a *de minimis* incremental increase in the East River, water quality modeling and sampling were not necessary to conclude that there will be no significant adverse impacts on water quality in these water bodies. In addition, as reflected in the FEIS, DEP is implementing a comprehensive program of capital improvements to reduce CSO impacts on local water bodies, including the Gowanus Canal and East River.

5. Solid Waste Management

The Project will increase the volumes of solid waste and recyclables, but it will not affect the delivery of solid waste disposal services or place a significant burden on the solid waste management system. In addition, the Project will not conflict with, or require amendments to, the City's Solid Waste Management Plan. Therefore, no significant adverse impacts on solid waste management will result.

6. Energy

The Project's increased demands on electricity and gas will be insignificant, relative to the capacity of these systems and the current levels of service in New York City, and no significant impacts on energy systems will be caused. In addition, local distribution grid improvements proposed by Con Edison will improve service to the project site and Downtown Brooklyn as a whole. Moreover, new localized upgrades to the electrical and gas distribution systems will be installed to meet the demand generated by the Project.

J. Traffic and Parking

1. Vehicular Traffic

The FEIS examines the Project's potential impacts on traffic conditions in 2010 and 2016 at 93 study area intersections (87 signalized and six unsignalized) during five weekday peak hours (8-9 AM, noon-1 PM, 5-6 PM, 7-8 PM pre-game, and 10-11 PM post-game) and two Saturday peak hours (1-2 PM pre-game and 4-5 PM post-game). The traffic impact analysis focuses on locations where new traffic is expected to be most concentrated, and does not include more distant locations. Nevertheless, the traffic study area extends upwards of 1.2 miles from the project site and encompasses intersections along corridors expected to be used by concentrations of traffic en route to and from the Project. This traffic study area was reviewed by DOT during both the DEIS and FEIS process and found to be acceptable to adequately describe project impacts. Given the numerous corridors providing access to the project site, including Atlantic, Flatbush, Carlton, Vanderbilt, Washington, 3rd, 4th, 5th and 6th Avenues, project-generated traffic is expected to be dispersed to the north, south, east, and west, and is expected to become rapidly less concentrated with increasing distance from the project site. FEIS Table 19-4 shows the effect of this dispersion with respect to intersections with unmitigated impacts along the key Atlantic Avenue and Flatbush Avenue corridors – along these corridors, all intersections on the periphery of the study area except one (Flatbush Avenue and Tillary Street) were fully mitigated in the weekday peak hours on game days. For these reasons it is expected that there would not be significant impacts on regional access corridors such as the Brooklyn Queens Expressway, the Belt Parkway, Prospect Expressway or Gowanus Expressway or on the street network outside the study area.

The traffic impact analyses utilize the methodology detailed in the nationally applied Transportation Research Board's *Highway Capacity Manual* ("HCM") for both signalized and unsignalized intersections. Adherence to this methodology provides a consistent basis for land use and environmental determinations by City agencies. For a heavily traveled network such as Downtown Brooklyn, the HCM methodology provides a high level of sensitivity to changes in delay at individual intersections and produces conservative results with respect to potential traffic impacts. Analysis methodologies, planning assumptions, and traffic assignments utilized in the traffic analysis were developed in consultation with DOT. DOT has reviewed the FEIS and concurs with the FEIS traffic- and parking-related findings and the feasibility of its proposed traffic mitigation measures.

To account for the increase in traffic and parking demands due to long-term background growth and new development, the FEIS transportation analyses estimated traffic volumes at each analyzed study area intersection to reflect the addition of a cumulative 0.5% per year background growth rate applied to existing baseline volumes. On top of this 0.5% per year background growth, the traffic analysis included traffic that would occur at the analyzed intersections from 33 discrete

No Build sites in and around the project site and Downtown Brooklyn that are expected to be developed by the Project's 2016 analysis year. (For the 2010 analysis year, 14 discrete No Build sites were included.) These 33 projects, which comprise approximately 6,254 dwelling units, 5.19 million square feet of office space, 1.15 million square feet of retail space and 2.43 million square feet of other types of space, include the anticipated development resulting from the Downtown Brooklyn Development rezoning, Brooklyn Bridge Park, Pier 12, the new IKEA store in Red Hook, the development over Atlantic Center, and the new Federal Courthouse and the Marriott Hotel expansion in Downtown Brooklyn. Three developments (a charter school on Waverly Avenue, residential development at 306-313 Gold Street, and the Fairway market in Red Hook) totaling 517 dwelling units and 310,000 square feet of office, retail and other space were added to the transportation analyses in the FEIS in response to recent information and agency and public comments on the DEIS. Development completed prior to Fall 2005 is reflected in the FEIS 2006 traffic baseline condition. Other specific development projects were not included because the relevant sites did not meet certain criteria in that they: (i) fall below minimum threshold densities for inclusion as discrete No Build sites, (ii) are distant from the Atlantic Yards project site (such as the Greenpoint-Williamsburg Rezoning project which includes sites located up to four miles from the project site), or (iii) are speculative sites. An assessment of whether certain No Build sites should be accounted for in the transportation analyses is presented in an October 30, 2006 memorandum prepared by Philip Habib & Associates entitled "Summary of No Build Sites Considered for the EIS Transportation Analyses," which appears as Appendix C to the FEIS.

With completion of Phase I in 2010, of the 93 intersections analyzed, a total of 58 will have significant adverse impacts in one or more peak hours. The Saturday 4-5 PM post-game peak hour will have the highest number of impacted intersections with 46, followed by the weekday 7-8 PM pre-game and Saturday 1-2 PM pre-game peak hours with 34 impacted intersections each. There will be 27 impacted intersections in the weekday AM peak hour, 15 in the midday, and 32 in the weekday PM peak hour.[1] The weekday 10-11 PM peak hour will have the lowest number of impacted intersections under 2010 Build conditions with 13.

With completion of the Project in 2016, a total of 68 intersections will be significantly adversely impacted. A total of 46 intersections will have significant adverse impacts in the weekday AM peak hour in 2016, 27 in the midday, 44 in the PM, 39 in the 7-8 PM pre-game peak hour, and 17 in the 10-11 PM post-game peak hour. On Saturdays, 41 intersections will have significant impacts in the 1-2 PM pre-game peak hour and 49 in the 4-5 PM post-game peak hour in 2016.

Tables 12-16 and 12-32 identify the intersections at which significant adverse impacts will occur and provide information about the number of movements with unmitigated significant adverse impacts at these intersections. Tables C-4 and C-6 in Appendix C of the FEIS provide information regarding the delays, levels of service, and volume-to-capacity ratios at the analyzed intersections.

As per *CEQR Technical Manual* criteria, the analysis of future traffic conditions conservatively assumes that traffic volumes within the study area are not metered at congested locations, and that all future traffic volumes occur at analyzed intersections. Drawing from the results of the HCM intersection capacity analyses, the FEIS qualitatively discusses the potential for future queuing and

[1] The FEIS, at page S-33, indicates that there are 28 intersections with significant adverse impacts in the 2010 AM peak hour. The correct number is 27 intersections, as indicated in FEIS Table 12-16.

spillback in the study area. Future queuing can occur when a movement operates substantially over capacity, and such queuing may potentially affect both upstream and downstream intersections along a corridor. For example, extensive queues may spill back through upstream intersections, while at downstream intersections, forecasted volumes may not occur, as traffic will be effectively metered at the first queued location along the corridor. Queuing at an intersection on the periphery of a study area may therefore effectively reduce the volumes that actually traverse the study area during the peak period.

Major corridors serving the project site that will potentially experience queuing and spillback at one or more intersections in one or more peak periods in 2016 No Build conditions include Flatbush, Atlantic and Vanderbilt Avenues. With the Project, queuing and spillback conditions will be exacerbated along these principal arterials, and the potential for queuing will also exist along major corridors where such potential was not identified in the 2016 No Build condition. In particular, queuing and spillback may occur along northbound 4th Avenue and along northbound and southbound Adams Street at Tillary Street. Some future queuing will also likely occur on the Brooklyn and Manhattan Bridges, as is presently the case, due to congestion at metering intersections during peak periods.

The FEIS also includes a screening analysis of the potential for impacts on the Brooklyn and Manhattan Bridges. Based on the results of the screening analysis, no significant adverse impacts to traffic flow on the two bridges are anticipated to result from the Project, although, as mentioned above, some future queuing will likely occur (as is presently the case) due to congestion during peak periods at the metering intersections, such as Flatbush Avenue and Tillary Street, and Adams and Tillary Streets.

Traffic mitigation measures to address these impacts are discussed below in Section VII.

2. Bicycles

The Project is likely to generate new commuter bicycle trips, as well as recreational and discretionary trips. Although the Project will generate new vehicular traffic on roadways used by bicyclists, there will be no Project-related permanent street closures or changes in street directions along any street segment with an existing or planned on-street bike lane or along a bicycle route recommended by the City's Bicycle Network Development Program. The Project will include construction (by 2016) of new off-street bike route segments through the project site that will more safely connect existing and planned on-street bike routes. The Project will include a secure indoor facility on the arena block for the storage of up to 400 bicycles.

3. Accidents

In 2016, peak hour Project-generated vehicular traffic through the Atlantic and Flatbush Avenue intersection will increase by 4 to 15 percent, and crosswalks will have up to 2,700 new peak hour pedestrian trips. New pedestrian trips and vehicular traffic at this intersection (as well as at Atlantic and Vanderbilt Avenues and other intersections near the project site) may increase the potential for vehicle-vehicle and vehicle-pedestrian conflicts or accidents, especially during the weekday and Saturday pre-game and post-game peak hours when the greatest increases will occur. To enhance overall safety, the Project will eliminate several roadway segments through the project site, build a major new on-site entrance to the Atlantic Avenue/Pacific Street subway station to

eliminate the need for subway riders en route to and from the south to cross Atlantic Avenue, provide high-visibility crosswalks and lighting at key intersections near the project site and build new off-street bike route segments through the project site that will more safely connect existing and planned on-street bike routes.

Along with these physical improvements, police or traffic control officers ("TCOs") are expected to be deployed at the Atlantic and Flatbush Avenue intersection and other locations to minimize conflicts between vehicles and pedestrians during the pre-game and post-game periods when a basketball game or other major event is scheduled. The project sponsors will work with DOT and NYPD to ensure that needed resources are available for this purpose.

4. Parking

The Project will not cause any significant adverse impacts on parking conditions. Street closures and operational changes associated with the Project will result in a loss of about 180 on-street spaces, as well as up to 24 spaces for police vehicles along 6th Avenue. Mitigation-related parking restrictions (discussed below in Section VII) will result in the loss of an additional 90 curbside parking spaces. This loss of on-street spaces will not result in a deficit of on-street parking capacity available to accommodate non-Project demand in 2016. Sufficient off-street parking capacity will be available both on-site and at existing public facilities within one-half mile of the arena to fully meet the Project's demands in all peak periods in 2010 and 2016. However, as some drivers en route to the project site will choose to park on-street if spaces are available, it is likely that much of the on-street parking capacity available near the arena will be used by Project-generated demand during a Nets basketball game or other major arena event. On-street parking in the vicinity of the project site will therefore likely be fully utilized during such events. However, as there will be sufficient off-street capacity to meet demand during major arena events, no significant adverse impacts to parking conditions will result from implementation of the Project.

K. Transit and Pedestrians

1. Subway Service

The majority of new subway trips will occur at the three stations that make up the Atlantic Avenue/Pacific Street subway station complex, which will be immediately adjacent to the project site and accessible via a new on-site entrance. In addition, the Bergen Street IRT, Fulton Street IND and Lafayette Avenue IND subway stations will all attract 200 or more Project-generated trips in at least one peak hour.

Overall, the new on-site entrance and internal circulation improvements at the Atlantic Avenue/Pacific Street subway station complex will be adequate in accommodating new Project-generated demand at acceptable levels of service during the analyzed 8-9 AM, 5-6 PM, and 7-8 PM peak hours in 2010 and 2016, as will existing analyzed stairways and fare arrays at the station. All analyzed stairways and fare arrays at the Bergen Street IRT, Fulton Street IND, and Lafayette Avenue IND subway stations will also continue to operate at acceptable levels of service during these periods in 2010 and 2016. The Project will therefore not result in significant adverse impacts to subway station stairways, escalators, passageways, and fare arrays. However, crowding on the platforms at the Atlantic Avenue/Pacific Street subway station complex could occur after major

arena events. If such crowding were to occur, it would be a significant adverse impact, which will be addressed by providing additional subway trains during such post-event periods.

All subway routes serving the project site are expected to continue to operate below their practical capacity in the peak direction in the 8-9 AM and 5-6 PM commuter peak periods with the Project in 2010 and 2016. (The line haul analysis focused on these time periods because, although Project-related demand is higher in the 7-8 PM pre-game peak hour, overall demand on the subway system is typically lower in this period than during the commuter peak hours.) The Project will therefore not result in significant adverse impacts on subway line haul conditions.

2. Bus Service

With the Project, new bus trips will be added to the 11 NYCT local bus routes serving the project site during the analyzed weekday 8-9 AM and 5-6 PM commuter peak hours. With this added demand, all 11 routes will continue to operate with available capacity at their maximum load points in the peak direction in each of these peak hours in 2010, and no significant adverse impacts to local bus service will occur with Phase I development. In 2016, Project-generated demand in the 8-9 AM peak hour will cause a significant adverse impact on westbound B38 buses at their current service frequency.

In addition, traffic congestion and significant adverse traffic impacts were identified at a number of intersections along corridors used by local bus routes. Although the proposed traffic mitigation plan would address many of these impacts, delays to bus travel may occur, especially in the vicinity of the arena during the pre- and post-game peak periods. Additional buses may therefore be needed during these periods to maintain the current headways and service schedules.

3. Pedestrians

The Project will include improved pedestrian elements at the project site, such as wider sidewalks (20-foot-wide sidewalks along Atlantic and Flatbush Avenues adjacent to portions of the project site, for example), high-visibility crosswalks, and improved lighting at key intersections. However, 6th Avenue south of Pacific Street will be reconstructed with 15-foot-wide sidewalks, compared with the existing 18-foot-wide sidewalks to accommodate two-way traffic on 6th Avenue between Atlantic and Flatbush Avenues. This narrowing is not expected to result in any significant adverse impacts.

Development of the Project will also add new pedestrian demand to sidewalks, corner areas, and crosswalks. In general, the highest numbers of pedestrian trips in both 2010 and 2016 will typically occur during the weekday 7-8 PM and Saturday 1-2 PM pre-game periods. The analysis of pedestrian conditions therefore focuses on these peak hours as well as the weekday 8-9 AM and 5-6 PM commuter peak hours.

With full development of the Project in 2016, the north crosswalk on Carlton Avenue at Dean Street would experience a significant adverse impact in the weekday and Saturday pre-game peak hours. The Project would also cause a significant adverse impact on the north crosswalk on 6th Avenue at Dean Street in 2016 during the Saturday pre-game peak hour. Much of the Project-generated demand on these crosswalks in the pre-game periods will be en route to the arena from the 1,970-space parking garage that will be located on Block 1129. Since many of these pedestrians

will use these crosswalks to walk back to the parking garage at the end of a game, these two crosswalks may have similar significant adverse impacts in the weekday and Saturday post-game periods. To mitigate these impacts, the north crosswalk on Carlton Avenue at Dean Street will be widened to 20 feet (from 16 feet) and the north crosswalk on 6th Avenue at Dean Street will be widened to 17 feet (also from 16 feet). All other analyzed crosswalks, sidewalks, and corner areas will continue to operate at acceptable levels of service in all analyzed peak hours in both 2010 and 2016.

L. Air Quality

The Project will not result in any significant adverse air quality impacts from either mobile or stationary sources.

Vehicular traffic generated by the Project will not result in any violations of the National Ambient Air Quality Standard ("NAAQS") or any significant adverse air quality impacts. Carbon monoxide (CO) impacts will not exceed CEQR *de minimis* criteria, while increments of particulate matter less that 2.5 microgram in size ($PM_{2.5}$) from mobile sources will not exceed the City's interim guidance criteria.

With respect to stationary sources of emissions, all Project boilers will operate exclusively on natural gas, the cleanest fossil fuel and will be equipped with low NO_x burners. Standby or emergency diesel generators without such controls may be used for very short periods as set forth in the FEIS. The boilers will have maximum emission rate specifications that do not exceed the emission rates specified in Table 14-3 and pages 14-16 and 14-17 of the FEIS. (Upon a demonstration to ESDC through appropriate analysis that an alternative fuel or technology would achieve the same or superior emission levels, the project sponsors would be allowed to substitute that alternative fuel or technology.)

The Project will likely be required to obtain a state facility permit from NYSDEC and permits to construct from DEP for the its stationary sources of emissions. Analyses of the emissions and dispersion of nitrogen dioxide (NO_2), CO, particulate matter less than 10 microgram in size (PM_{10}), and sulfur dioxide (SO_2) from the Project's stationary sources indicate that such emissions will not result in violations of NAAQS or in significant adverse air quality impacts.

Because of the Project's low particulate matter emissions, the impacts of its $PM_{2.5}$ emissions will also be insignificant under the NYSDEC policy guidance on $PM_{2.5}$ because maximum annual emissions of PM_{10} will be below the NYSDEC applicability threshold of 15 tons per year. Nevertheless, a $PM_{2.5}$ analysis was conducted for the EIS. The analysis identified a limited number of receptors on upper floors of Phase II Project buildings that will exceed the NYSDEC annual $PM_{2.5}$ threshold for determining potential significance. These exceedances will not result in significant adverse impacts. The potential exposure to $PM_{2.5}$ at these locations will be limited since occupants will not be expected to have their windows open continuously throughout the year and no exceedances were found at the locations of air intake manifolds on the Project's buildings. In addition, the maximum predicted $PM_{2.5}$ concentration levels are comparable to ambient levels of $PM_{2.5}$ measured at various locations in New York City over the past several years. On a neighborhood scale, $PM_{2.5}$ annual average impacts were below the City's interim guidance criterion. No off-site impacts were projected to exceed the NYSDEC criteria for potentially significant $PM_{2.5}$ impacts. The analysis also indicates that there will be no exceedance of the interim criterion for 24-

hour $PM_{2.5}$ increments. Therefore, no significant adverse air quality impacts are anticipated from the Project's stationary sources.

The results of the industrial source analysis demonstrate that there will be no significant adverse air quality impacts on the Project from nearby industrial sources.

M. Noise

The Project will result in significant adverse noise impacts at four locations around the project site, including residential locations adjacent to the project site, during one or more peak hours in both 2010 and 2016. These locations are: (i) Flatbush Avenue in the area near Dean Street; (ii) Dean Street from approximately Flatbush Avenue to Vanderbilt Avenue (including the Dean Playground); (iii) 6th Avenue from approximately Dean Street to Atlantic Avenue; and (iv) Carlton Avenue from approximately Dean Street to Atlantic Avenue. The impacts would be localized and would occur on street segments immediately adjacent to the project site. (As explained in Section VII.H.4 below, traffic-related mitigation measures mitigate noise impacts in certain of these areas.) In each of these locations, noise levels would be in the "marginally unacceptable" range, which is not unusual for New York City residential areas.

Noise levels within the new open space areas created on-site as part of the Project will be above the 55 dBA $L_{10(1)}$ noise level for outdoor areas requiring serenity and quiet contained in the *CEQR Technical Manual* noise exposure guidelines. Noise levels at open space areas located on the rooftop of the proposed arena, adjacent to Atlantic and Flatbush Avenues, will be in the high 50 dBA to low 60 dBA range. While noise levels in these areas will be above the 55 dBA $L_{10(1)}$ guideline noise level, they will be comparable to noise levels in a number of open space areas and parks in New York City, including Hudson River Park, Riverside Park, Bryant Park, Fort Greene Park, and other urban open space areas.

N. Neighborhood Character

The Project will not cause significant adverse impacts to neighborhood character. Some areas immediately surrounding the site will, however, experience localized adverse neighborhood character impacts. The Project will significantly change the character of the project site, but this change will not be adverse. Although the project site sits at a major crossroads and transit hub, it contains virtually none of the neighborhood characteristics or vitality of Boerum Hill, Fort Greene, Clinton Hill, Prospect Heights and Park Slope, and in fact creates a barrier between these neighborhoods. The project site's character stands in contrast to the character of much of the surrounding area, which includes uses more typical of vibrant urban neighborhoods, including medium- to high-density residential and commercial development to the north. The Project can be expected to improve the character of the project site.

The change in character on the project site will not alter the basic character of the surrounding neighborhoods, whose defining elements are located at some distance from the project site and are protected by zoning and, in many cases, historic district designations. However, the Project will affect the character of areas immediately surrounding the site and, as noted above, will result in localized adverse neighborhood character effects in a few of those areas. The greatest change will occur on Dean Street between Flatbush and Vanderbilt Avenues, which forms the southern border of the project site and is at the northern edge of Prospect Heights. The character

of Dean Street will change from a nondescript, but quiet, mixed-use former industrial street to an active street with a mix of uses; there will be adverse impacts due to increases in traffic and noise, as well as to the arena's loading facility on Dean Street between Flatbush and 6th Avenues. The Project will also affect the character of a few residential rowhouses facing Site 5 (within sight of the arena's illuminated signs). Project-generated traffic will result in a deterioration of traffic flow on Bergen Street in Prospect Heights. These affected locations will be clustered adjacent to the project site, in areas that are located along the perimeters of and not in the cores of their respective neighborhoods. Thus, even when considered together, the changes in these transition areas will not constitute a significant adverse impact to neighborhood character.

In response to public comments on the DEIS, an evaluation of wind conditions was conducted. The evaluation indicated that although some increase in wind speed at pedestrian levels is expected, the Project will not result in adverse wind conditions at or around the project site.

The Project will be visible in the skyline from portions of several of the adjacent residential neighborhoods. However, these views will be perceived as middle-distance or background conditions, and will not affect the character of the neighborhoods' cores, all of which will also be protected from changes in land use and density by underlying zoning and, in many areas, regulations applicable to City-designated historic districts. The dense mix of commercial, entertainment, residential, and open space uses at the project site will advance the goals of the Special Downtown Brooklyn District.

O. Construction

1. Construction Activities

All construction is expected to be completed over a 10-year period (2007-2016). The nature and extent of construction activities will vary over time, and have been analyzed in two phases. Phase I will begin with the demolition of existing structures on the site, reconstruction of the rail yard and the construction of the arena block and Site 5 buildings on Blocks 1118, 1119, and 1127 and a portion of Block 927. Environmental remediation and demolition of existing buildings will be the first tasks. Demolition on all blocks will occur in Phase I. The arena for the Nets basketball team is expected to be open in October 2009, and the rest of the Phase I development will be completed by the 4th quarter of 2010.

Also included in Phase I are construction of the West Portal between the rail yard and Atlantic Terminal; the new entrance to the Atlantic Avenue/Pacific Street subway station complex on the southeast corner of Atlantic and Flatbush Avenues; installation of major new sewer and water lines; and other utility lines, such as telecommunication facilities with capacity for the complete Project. During Phase I, the period with the greatest number of buildings simultaneously under construction will be in late 2008 to early 2009, when the arena, the LIRR improvements and five buildings will be in various stages of construction. The levels of construction activities before and after the Phase I peak will be of lesser intensity.

In Phase II, the construction activity will be less intense than during Phase I. From 2010 to 2014, the activity will be centered on Block 1120 with a peak period of activity at the end of 2011 and the beginning of 2012. In 2014, the work will shift to Blocks 1121 and 1129 with a secondary peak in 2016.

It is anticipated that construction activities for the buildings and the arena will generally take place Monday through Friday with exceptions that are discussed below. Over the course of construction, it is expected that evening and night work will be required. For example, some of the rail yard reconstruction work will be scheduled to start after the rail yard has been vacated to meet the evening rush hour and be completed before trains return from the morning rush hour. Some of the larger construction tasks within the rail yard and the arena may require continuous periods of time to complete. Weekend work would be required at times over the course of construction. The typical weekend workday would be on a Saturday from 7 A.M. with worker arrival and site preparation to 5 P.M. for site cleanup. It is expected that weekend work may be required on one weekend day for approximately 50% of the weekends over the course of construction and, in exceptional circumstances (*e.g.,* very large continuous concrete pours), two weekend days would be required. When work is required in the evenings during the week or on weekends, the project sponsors will be required to obtain the proper approvals from the appropriate agencies (*i.e.*, from MTA/LIRR with respect to work done on its property and from DEP with respect to other work).

During the construction of various components of the Project (buildings, infrastructure replacement and upgrades, transportation improvements), traffic lanes and sidewalks will be closed or protected for varying lengths of time, bus stops will be temporarily relocated and crosswalks redirected. This work will be coordinated with and approved by the appropriate governmental agencies.

The project sponsors have committed to implementing a wide variety of measures to reduce or avoid the potential for significant adverse impacts. These measures are described in detail below. To ensure such measures are implemented, the project sponsors will be required to include appropriate provisions requiring contractors to adhere to these construction measures in their contractor agreements and to enforce provisions as necessary to assure compliance.

Project construction will not result in significant adverse impacts on the following areas: land use, socioeconomic conditions, community facilities, open space, hazardous materials, infrastructure, parking, transit; pedestrians, air quality, or public health. However, some significant construction related impacts will occur with respect to noise, traffic, cultural resources and neighborhood character.

2. Air Quality

With the implementation of dust suppression measures and an agressive emissions reduction program, the Project will have no significant adverse impacts on air quality during construction. The measures that will be implemented are as follows:

To ensure that the construction of the Project results in the lowest feasible diesel particulate matter ("DPM") emissions, the project sponsors have committed to implementing a program consisting of the following components:

- Diesel Equipment Reduction. The project sponsors will implement a diesel emissions reduction program, which will include minimizing the use of diesel engines and maximizing the use of electric engines in lieu of diesel. In particular, the project sponsors will: (i) ensure sufficient grid power is available to each site as early as practicable and commission permanent grid power service for

Buildings 2 and 3 prior to the peak period of construction (currently scheduled for the third quarter of 2007); (ii) ensure the distribution of power throughout the Project at all locations where electric engines are to be used, in order to avoid the use of portable or stationary generators where practicable; (iii) use only electric engines where practicable (*e.g.*, welders, compressors, electric saws, forklifts, *etc.*); (iv) ensure that all contractors plug into the grid where available and do not use portable generators (diesel or gasoline, small or large); and (v) ensure that generators will not be used for tasks where grid power is available, and that diesel engines will not be used for tasks that can be performed with electric engines.

- Clean Fuel. Ultra-low sulfur diesel ("ULSD") fuel will be used exclusively for all diesel engines throughout the site. This will enable the use of tailpipe reduction technologies (see below), and will directly reduce DPM emissions. The exclusive use of this fuel for all diesel engines will also reduce the emission of sulfur oxides to a negligible level.

- Best available tailpipe reduction technologies. The project sponsors will employ best available tailpipe emissions reduction technologies, including utilization of diesel particulate filters ("DPF") (or, subject to ESDC approval, improved technologies verified by EPA or the California Air Resources Board to reduce particle emissions by at least 85%) on all nonroad engines of 50 hp or greater and on all concrete trucks and concrete pump trucks. All nonroad engines used for the construction work will be inspected (and labeled where practicable) to indicate that a DPF is installed and functioning and that the engine is to be fueled only with ULSD. The project sponsors will bar any non-complying equipment from the work site or expeditiously bring into compliance any equipment found not to be in compliance. If with respect to a specific nonroad engine of 50 hp or greater, the project sponsors determine that it would not be practicable to equip the engine with a DPF and that use of the engine is required for the construction to proceed, the project sponsors will use a substitute particulate control technology such as a diesel oxidation catalyst instead of a DPF upon the concurrence of ESDC that the DPF is impracticable for the type of equipment needed for the construction work.

- Idling. The project sponsors will require its contractors to limit all unnecessary idling of vehicles and non-road engines, ensure that engines are shut off when not in use, and enforce idling limits on queuing trucks.

- Location. The project sponsors will require that all stationary engines be located at least 50 feet from sensitive locations such as sidewalks, residential or school windows, and building air intakes, to the extent practicable.

The program to reduce DPM emissions from construction exceeds that of any large-scale private construction project in New York City to date. In addition to measures directed towards reducing DPM emissions from construction activities, the Project will also implement the following dust suppression measures:

- Limiting on-site speed to five miles per hour. Signage of the 5-mile per hour limit will be posted at all site entrances and along routes within the sites.

- Using sleeves and wetting during demolition activities, and wetting equipment. All demolition activities, including but not limited to building, roadway, and pavement demolition, will utilize dust suppression. All drop transfer operations will be via closed sleeves and into sealed bins. Sleeves will have no openings other than the loading chute. During all breaking up of material such as concrete, an employee will be assigned to wet the surface while the activity is taking place.

- Watering unpaved surfaces, including haul roads and excavation faces. All unpaved haul roads and excavation surfaces will be continuously watered by watering trucks or constant misting, so that surfaces remain damp at all times when in use during construction. Gravel cover will be applied to unpaved surfaces which are regularly traveled.

- Covering or water-misting of stockpiled materials. All stockpiled dry materials (*e.g.*, sand, aggregate) will be water-misted; sprayed with non-hazardous, biodegradable suppressing agent; covered; or otherwise enclosed.

- Loading of any dry material which may release dust from trucks will be accompanied by manual water spraying of the material.

- Covering all trucks carrying loose material such as debris, excavate or fill, and verifying that covers on all such trucks have been properly sealed. Outgoing trucks will be inspected at the gate, and not allowed to exit if covers are not properly sealed.

- Washing the wheels of all trucks as they exit from the site. A washing station will be constructed at each truck exit, whereby truck wheels shall be washed, and the water shall be contained and recycled to avoid tracking mud out of the site.

To ensure that the foregoing commitments are implemented during construction, the project sponsors will submit to ESDC for review and approval a written plan to adequately and reasonably demonstrate compliance with the foregoing construction air quality measures (the "CAQM Plan"). Elements of the CAQM Plan shall include: (i) incorporation into construction contracts appropriate terms requiring the contractors to implement the air quality measures contemplated by the FEIS; (ii) periodic meetings between the project sponsors' construction manager and the relevant contractors to discuss implementation of the air quality measures; (iii) practicable documentation requirements; (iv) recordkeeping with respect to the equipment and vehicles used during construction; and (v) compliance monitoring by a field engineer (to be employed by the project sponsors' construction manager) whose principal responsibility would be to monitor compliance.

With implementation of these measures, the Project construction will not result in significant adverse air quality impacts. Dispersion modeling for the air pollutants of greatest potential concern from construction was performed to determine the air quality increments from the construction equipment and activity during time periods of the most intensive construction activity.

Concentrations of CO, NO_x, and PM_{10} were predicted to result in no significant impacts in any phase of construction. Concentrations of $PM_{2.5}$ were predicted to increase by more than the applicable 24-hour and annual average guidance thresholds for potentially significant impacts in certain areas immediately adjacent to the construction activity, but the threshold exceedances were predicted to be limited in extent, duration and severity (as discussed in the FEIS, pages 17-65 through 17-74) and, accordingly, would not result in a significant impact to air quality.

3. Noise

The Project will implement measures to reduce noise levels due to construction activities as set forth below. Even with these measures in place, however, the Project's construction will result in significant adverse impacts. Three open space resources will experience significant adverse noise impacts during some portion of the construction period: the Brooklyn Bear's Community Garden, the Dean Playground, and the northern half of South Oxford Park. In addition, construction of the Project will result in a significant adverse impact, of limited duration and magnitude, at the Pacific Branch of the Brooklyn Public Library. (The Church of the Redeemer will also be affected by construction-related noise, but will not experience significant adverse impacts since construction activities at Site 5 will be of a limited duration, and measures will be taken to reduce the effects of construction on surrounding uses. Moreover, the Church of the Redeemer currently holds services only on Sunday at 11:00 AM, which will not be adversely affected since no regular construction activity is anticipated on Sundays.) Significant adverse noise impacts will also occur at a number of residential locations during some portion of the construction periods. The following locations are expected to experience significant construction noise impacts:

- along Flatbush Avenue from approximately south of Atlantic Avenue to Bergen Street (including the site of the Brooklyn Bear's Community Garden),
- Dean Street from approximately 4th Avenue to Vanderbilt Avenue (including the location of the Dean Playground),
- Pacific Street between 4th Avenue and Flatbush Avenue (including the portion of the Pacific Street Branch of the Brooklyn Public Library facing Site 5) and from 6th Avenue to Carlton Avenue,
- Carlton Avenue from approximately Pacific Street to Bergen Street,
- 6th Avenue from approximately Dean Street to Bergen Street,
- Atlantic Commons between South Oxford Street and Cumberland Street (including the northern portion of the South Oxford Park),
- Vanderbilt Avenue from approximately Pacific Street to Dean Street,
- South Elliot Place from approximately 150 feet south of Hanson Place to South Portland Avenue,
- on the upper floors of buildings on South Portland Avenue from Atlantic Avenue north approximately 300 feet,

- on the upper floors of buildings on South Oxford and Cumberland Streets from approximately Atlantic Avenue to Atlantic Commons,

- on the upper floors of buildings on Carlton Avenue from Atlantic Avenue north approximately 500 feet, and

- on the upper floors of buildings on Atlantic Avenue between approximately South Portland Avenue and the mid-block between Carlton and Clermont Avenues which have a direct line of sight to the project construction.

These impacts are localized in the area near the project site. The locations where significant impacts are predicted to occur are typically the building floors or open spaces that have a direct line of sight to the construction site.

Under the New York City Noise Code, the project sponsors are required to develop a construction noise mitigation plan prior to commencement of construction and to implement such plan during construction. In conjunction with (or in addition to) the steps required under that plan the project sponsors will implement the following measures to minimize construction noise:

- Use of equipment that meets the sound level standards specified in the Noise Code;

- Use of construction equipment that meets the noise emission levels specified in Table 17c-3 of the FEIS, "Construction Equipment Noise Emission Levels," where such levels are more stringent than those imposed by the Noise Code;

- Where practicable, use of quiet construction procedures;

- Scheduling work that would generate high noise levels during weekday daytime hours to extent feasible, rather than during weekday nighttime or weekend hours, unless required as a result of safety or other agency requirements;

- To the extent feasible, scheduling equipment and material deliveries during weekday daytime hours, and not during weekday nighttime or weekend hours;

- As early in the construction period as practicable, replacing diesel-powered equipment with electrical-powered equipment, such as electric scissor lifts and electric articulating boom lifts;

- Requiring all contractors and subcontractors to properly maintain their equipment and have quality mufflers installed;

- Wherever feasible, locating noisy equipment, such as generators, cranes, tractor trailers, concrete pumps, concrete trucks and dump trucks, at locations away from sensitive receptor locations and are shielded from sensitive receptor locations. For example, during the early construction phase of work delivery trucks and dump trucks will be located approximately 20 feet below grade to take advantage of shielding benefits. Once building foundations are completed,

delivery trucks will be located adjacent to noisy streets – Atlantic Avenue, Flatbush Avenue, 6th Avenue, *etc.* – rather than at quieter streets – such as Dean Street and Pacific Street – where there are residences.

- Use of noise barriers to provide shielding. Construction sites will have a minimum 8-foot barrier (constructed of 3/4-inch thick plywood), with a 16-foot barrier (of 3/4-inch thick plywood) adjacent to sensitive locations – including locations along Pacific Street, Dean Street, and Flatbush Avenue opposite residences and the Brooklyn Bear's Pacific Street Community Garden. Where practicable, truck deliveries will take place behind these barriers once building foundations are completed. Noisy delivery trucks, such as concrete trucks, are to be operated behind the barriers.

- Where practicable, noise curtains and equipment enclosures will be utilized to provide shielding from significant noise-generating equipment to sensitive receptor locations.

4. Traffic During Construction

The Project will include the implementation of temporary construction period traffic measures pursuant to maintenance and protection of traffic ("MPT") plans, as described in Chapter 17 of the FEIS. The project sponsors will coordinate with the DOT Office of Construction and Mitigation Coordination ("OCMC") to develop, implement and fund the implementation of MPT plans developed by OCMC. Construction will proceed in accordance with the requirements set forth in such MPT plans. (While detailed MPT coordination will continue throughout the duration of the construction project, preliminary strategies, as shown on Figures 17a-1 to 17a-6 of the FEIS, were used as the basis for developing assumptions on roadway conditions during construction and more detailed MPT plans for approvals by OCMC.)

The project sponsors will fund and/or implement the physical improvements associated with and cooperate with DOT in implementing these construction period traffic measures, which shall include the following: (i) converting 6th Avenue to two-way operation during the period that the Carlton Avenue bridge is closed for reconstruction; (ii) temporarily striping Carlton Avenue from Pacific Avenue to Dean Street for two-way traffic during the Carlton Avenue bridge reconstruction; (iii) prohibiting left turns along Atlantic Avenue at locations where roadways are expected to be narrowed during the Carlton Avenue and 6th Avenue bridge reconstruction work, the LIRR West Portal reconfiguration, and utility relocation; (iv) providing temporary left-turn bays or channelized lanes for traffic detours and added capacity; (v) prohibiting parking or displacing "dropping off" areas during peak periods or at all times, where needed, to provide added lane capacity; (vi) temporarily eliminating the traffic signal control at Atlantic and Carlton Avenues; and (vii) changing signal phasing and/or timing.

The project sponsors will also undertake the following measures to minimize the impacts of construction-related vehicles on traffic:

- The project sponsors will make arrangements for security guards and flaggers to be deployed to manage vehicle access to the construction site. To the extent feasible, curbside deliveries shall occur within delineated closed-off areas.

- Truck deliveries will be scheduled, and untimely deliveries will, in general, be turned away or reassigned with different delivery times. Trucks will be required to use DOT-designated truck routes for traveling to and from the construction site, which include primarily Atlantic Avenue, Flatbush Avenue, 4th Avenue, and the Brooklyn-Queens Expressway except as required for movement between staging and construction areas.

- On-site designated staging areas will be maintained throughout the construction period to store materials and to accommodate construction vehicles that require early arrival and marshalling for immediate material delivery to high-demand construction areas.

- As described below, the project sponsors will provide on-site paid parking for construction workers to reduce the number of construction workers who use on-street parking spaces presently used by local residents. The provision of such parking is expected to also reduce construction worker traffic resulting from circling for an on-street parking space in the area.

The detailed construction traffic analysis shows that significant adverse traffic impacts will occur at numerous locations throughout the construction period. However, these impacts will be attributable primarily to factors other than the added traffic from construction trucks and worker vehicles. The permanent closure of several streets within the project site, the lane disruptions during utility installation and rail yard improvements and the reconstruction of two bridges over the rail yard were determined to be the main reasons for changes in area travel patterns and traffic diversions. These traffic diversions, when combined with construction-generated traffic, will concentrate traffic at specific intersections near the project site and result in the projected significant adverse traffic impacts for 12 intersections in proximity to the project site (identified in FEIS Table 17a-3) and 7 outlying intersections (identified in FEIS Table 17a-5) during one or more periods of construction activity.

5. Transit

The construction-worker related increase in transit demand is not expected to result in any adverse impacts to subway or bus services or transit elements such as the capacity of the subway stations or lines in the vicinity of the project site. However, temporary relocation of existing bus stops is likely to be required as a result of lane or street closures (as described in the FEIS, page 17-58), and limited additional buses may be needed to maintain the current headways and service schedules. NYCT will be given at least four weeks notice prior to the date on which a bus stop is to be temporarily relocated. Any change in a temporary location from that identified in the MPT plans will be subject to the approval of NYCT. The construction will not affect access to any of the nearby subway stations, although temporary nighttime and weekend service disruptions may be required to facilitate certain connections to the existing station elements. All such work will be coordinated with NYCT and will not materially affect pedestrian circulation within and outside of the subway station.

6. Pedestrians

Construction-worker related increases in utilization of sidewalks and crosswalks are not expected to result in significant adverse impacts. Certain sidewalks adjacent to the project site will be closed during certain portions of the construction work, as shown on FEIS Figures 17a-1 through 17a-6. In most cases, overhead projections on existing sidewalks or temporary sidewalks would be provided to DOT standards to maintain pedestrian flow. In some cases, as discussed in the FEIS page 17-59, in connection with the reconstruction of the bridges over the rail yard and the construction of the West Portal, it may be necessary to close certain sidewalks altogether, which would be done only with DOT approval. In such cases, diverted pedestrian flow to other sidewalks and cross-walks in the area would not result in utilization increases that would result in significant adverse impacts.

7. Parking

The project sponsors will provide on-site parking for construction workers at levels appropriate in light of the number of workers employed at the site during different stages of construction, to a maximum of 800 spaces. The project sponsors will monitor the work force levels throughout the construction period and will report to ESDC on a quarterly basis as to the number of on-site spaces and the utilization of such spaces. The parking facilities will have perimeter fencing and will be accessible only during work hours. Parking fees at rates comparable to commercial off-street facilities in the surrounding area will be imposed for these spaces. The project sponsors will consult with and obtain the approval of ESDC prior to reducing the number of construction worker parking spaces at the project site as the number of workers changes and permanent parking locations within the project site become available for construction worker parking. By charging a fee to construction workers and also limiting its parking capacity to accommodate only the anticipated demand, the on-site construction parking facility will help to minimize the number of construction worker vehicles circulating for on-street parking in the area, while at the same time not encouraging the use of private automobiles as the means of construction worker travel to the project site.

The spaces provided in the on-site construction worker parking facility, in combination with the available supply on-street, will accommodate all construction worker vehicles during all phases of construction. In the event that additional parking is needed, the nominal overflow could be satisfied by the available supply at the nearby off-street parking facilities. Since all projected construction worker parking demand will be met, no parking shortfall is anticipated during any phase of construction. The construction is not expected to result in any significant adverse parking impacts.

8. Vibration During Construction

The construction is not expected to result in any significant adverse vibration impacts.

9. Effects of Construction on Cultural Resources

As discussed in Section VI.E, the Project will involve the demolition of two historic resources on the project site: the former Ward Bread Bakery complex at 800 Pacific Street and the

former LIRR Stables at 700 Atlantic Avenue. To avoid construction-related impacts on nearby historic resources, the project sponsors will prepare a CPP in coordination with a licensed professional engineer that meets the requirements specified in the DOB Technical Policy and Procedure Notice #10/88 and that complies with other New York City Building Code regulations. The CPP will be submitted to OPRHP for review and approval prior to implementation. The buildings of most concern with regard to the potential for structural or architectural damage due to vibration are the Swedish Baptist Church (the Temple of Restoration) and nearby row houses along Dean Street, which are immediately adjacent to the site of Building 15. As part of the CPP, a monitoring program will be implemented to ensure that no architectural or structural damage will occur.

10. Effects of Construction on Land Use and Neighborhood Character

No portion of the project site or the immediately adjacent areas would be subject to the full effects of construction for the entire 10-year time period. Nevertheless, construction activity associated with the Project will have significant adverse localized neighborhood character impacts in the immediate vicinity of the project site during construction. The project site and the immediately surrounding area will be subject to added traffic from construction trucks and worker vehicles, partial and complete street closures, and the reconstruction of two bridges over the rail yard, resulting in changes in area travel patterns and significant adverse traffic impacts. Construction traffic and noise will alter the quiet character of Dean Street and Pacific Street in the immediate vicinity of the project site. A number of specific measures to minimize noise, vibration, dust, and other construction-related nuisances will be employed where practicable. The impacts will be localized and will not change the character of the larger neighborhoods surrounding the project site.

With respect to land use, construction will not significantly change or affect land use in the surrounding area, and no significant adverse impacts to land use are anticipated.

11. Socioeconomic Conditions

Construction activities associated with the Project will, in some instances, temporarily affect socioeconomic conditions in the vicinity of the project site. However, access to businesses near the project site will not be impeded, and most businesses are not expected to be significantly affected by a temporary reduction in the amount of pedestrian foot traffic that could occur as a result of construction activities or the loss of some on-street parking. Overall, construction of the Project is not expected to result in any significant adverse impacts to surrounding businesses.

12. Community Facilities

Construction of the Project will not block or restrict access to any facilities in the area, and will not affect emergency response times significantly. No community facility will be affected by construction activities for an extended duration. In addition, the construction sites will be surrounded by construction fencing and barriers that limit the effects of construction on nearby facilities.

13. Open Space

Construction activities will not displace any existing open space resources. Three open spaces would experience temporary significant adverse impacts from construction-related noise. The Brooklyn Bear's Pacific Street Community Garden would be impacted during 2008 and 2009 from construction on Site 5; the Dean Playground would be impacted over three years (2008, 2009, and 2011) from construction of the arena block and Building 15; and the northern portion of South Oxford Park would be impacted from 2008 through 2012. The use of the Project's open spaces would be temporarily affected by the construction of adjacent buildings.

14. Hazardous Materials

Prior to and in the course of remediation or excavation, the project sponsors will implement a CHASP and, during excavation, shall implement a Community Air Monitoring Plan. These and other measures that would be undertaken to avoid hazardous materials impacts during construction are discussed in Section VI.H above.

15. Infrastructure

Construction of the Project will not cause any significant impacts on infrastructure systems or their users. Several water and sewer lines (as well as smaller utility lines) will have to be relocated and connected to the Project's buildings. New service lines will be constructed and operational before the lines currently in service to buildings outside the project site are removed from service. All water and sewer infrastructure relocation or replacement will be approved by DEP and meet its standards. Construction-generated solid waste will be disposed by private carters at off-site landfills. Energy for the construction activities will be provided through grid power and on-site generators. Relative to the capacity of the City's electric system, the increase in demand will be insignificant.

16. Rodent Control

The project sponsors will implement a rodent control program approved by DOB. No hazards to people, domestic animals, or wildlife are expected.

17. On-Site Construction Coordinator

The project sponsors will maintain an on-site construction coordinator to function as a liaison between the project sponsors and the community with respect to construction-related issues. The coordinator will be available to consider specific concerns raised by the community with respect to the construction issues and seek to resolve such concerns.

P. Public Health

No significant adverse impacts to public health are anticipated as a result of the operation or construction of the Project. Analysis of the potential public health impacts of air pollution and noise levels due to the Project is based on the results of the air quality and noise impact assessments presented in the FEIS and summarized above.

Certain air pollutants – particularly $PM_{2.5}$ – have the potential to result in significant adverse impacts on public health if such pollutants are emitted in quantities that result in significant increases in incremental concentrations in areas of significant potential exposure by members of the public. For this reason, the FEIS undertook a detailed analysis of the potential air quality impacts of the Project's construction and operation, with respect to $PM_{2.5}$ and other relevant air pollutants. Based on this analysis, ESDC has determined that during both the construction and operational periods, the predicted neighborhood-scale average incremental concentrations from the Project will be less than the applicable interim guideline concentration for $PM_{2.5}$. Localized exceedances of interim guidance thresholds for $PM_{2.5}$ in areas immediately adjacent to the construction activity will be limited in extent, duration and severity. The only exceedances of the interim guidance thresholds for $PM_{2.5}$ from the project operation will be on a limited number of windows of two Phase II project buildings, as a result of the operation of the Project's gas-fired boilers. These exceedances will be limited in extent and severity and will occur on the outside of the buildings. The HVAC intake vents for the Project buildings will not be located in areas that have a modeled aggregate impact from Project buildings exceeding the interim guidance threshold of 0.3 micrograms per cubic meter (annual average), using the dispersion modeling assumptions (including boiler load) used for the FEIS analyses. Therefore, no significant adverse impacts on public health from $PM_{2.5}$ (or other pollutant) emissions are expected from the construction or operation of the Project.

The changes in noise levels due to the project are not of a magnitude that will significantly affect public or mental health. Therefore, no significant adverse health impacts due to noise are expected due to construction and operation of the Project.

VII. Summary of Mitigation Measures to Be Implemented

As described in Section VI of these findings, the Project, if undertaken without mitigation, would cause significant adverse environmental impacts in a number of analysis areas. ESDC has identified certain measures that will either mitigate or partially mitigate these impacts. This section of the findings discusses those measures, and describes their effectiveness in minimizing or avoiding the impacts they would address. With respect to historic resources, this section discusses why it is not prudent or feasible to avoid the demolition of the former LIRR stables and the former Ward Bread Bakery complex, and describes the measures that will be taken to document those structures prior to their demolition. Concerning visual resources, it discusses why no practicable mitigation measures are available to avoid or minimize the impacts on views of the Williamsburgh Savings Bank Building.

A. Schools

The Project will result in a significant adverse impact to elementary and intermediate schools within one-half mile of the project site when enrollment at these schools will exceed their capacities, which could occur as early as 2013. The project sponsors will, if requested by DOE prior to January 1, 2010 (or other date agreed to in writing by the project sponsors and DOE), convey or lease to DOE without charge or for nominal consideration ($1) space within a residential parcel sufficient in size to allow for the development of an approximately 100,000 gross square foot elementary and intermediate public school of contiguous space, a portion of which shall be located on the ground floor of the building. The project sponsors will also provide to DOE, by lease, easement, or other conveyance acceptable to DOE, access to suitable outdoor space for use as a playground, without charge or for nominal consideration ($1). It is likely that the school will be located in the lower

floors of Building 5, but, in the event that an alternative location is selected, the school site will be one of the other residential parcels located east of 6th Avenue. The project sponsors will undertake the construction of the school on DOE's behalf, and DOE will be responsible for all costs of constructing, fitting out, and operating the school (excluding the cost of land, infrastructure, site remediation, and the platform over the rail yard). The school will be constructed to provide adequate noise attenuation so that noise in the vicinity of the school (including Project-related traffic, general construction, and the School playground) will not result in interior noise levels within the school in excess of 45 dBa L_{10}. The space provided for the school will be in addition to the program described in Table S-1 of the FEIS and will not replace or result in a reduction of any part of the program. Unless otherwise agreed between DOE and the project sponsors, the school will be built at the beginning of Phase II.

This measure will fully mitigate the impact on intermediate schools and partially mitigate the impact on elementary schools. With respect to elementary schools, a deficit of approximately 986 seats within one-half mile of the project site would remain after construction of the on-site school.[2] In light of this shortfall in elementary school seats, other potential mitigation measures – including relocation of the boundaries of school catchment areas within the CSDs, creating new satellite facilities in less crowded schools, and building new schools off site – would be implemented at the discretion of DOE. Without the implementation of one or more of these measures, the significant adverse impacts on elementary schools within one-half mile of the project site would be unmitigated, although there would be sufficient elementary school capacity in the larger CSD 13 and CSD 15. Since such other measures are available to DOE and available capacity would, in any event, exist in the school districts to accommodate the demand generated upon full build out of the Project, ESDC finds that construction of a school with the capacity described herein will minimize the adverse impact identified in the FEIS on school to the maximum extent practicable.

The FEIS determined that the addition of the school to the Project would not result in any significant adverse impacts, with the exception of noise impacts. The playground noise could increase the ambient noise levels at the Project's open space in the vicinity of the school to a level that is above that desirable for an open space amenity; however, these levels would be comparable to noise levels found in parks containing playgrounds in the city's urban environment. The noise generated by the school's playground would constitute a significant adverse impact to Project buildings, but the Project buildings would include both double-glazed windows and central air-conditioning, which would provide appropriate attenuation to satisfy applicable interior noise criteria. Depending on the location of the school within the project site, it is possible that there could be significant adverse noise impacts on nearby residential buildings; however, the noise mitigation for the Project's operational and construction impacts would also mitigate this impact.

B. Open Space

The FEIS identified a temporary significant adverse open space impact in the non-residential study area at the end of Phase I. This impact will be mitigated as the Project's open space is phased in during Phase II as specified in the Design Guidelines. The phased schedule will call for the

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[2] Page 19-3 of the FEIS states the Project-related shortfalls in the number of school seats in 2016 based on the DEIS Project program, rather than the reduced FEIS program. The smaller shortfall numbers based on the reduction of the Project program between the DEIS and FEIS are correctly stated in Table 5-18 on page 5-26 of the FEIS.

construction of a portion of the open space as each building in Phase II is constructed. The temporary significant adverse impact will be partially mitigated by the project sponsors' construction of a comfort station for users of the Dean Playground, which is a mitigation measure described in Section VII.H.3 below.

C. Cultural Resources

Mitigation measures for significant adverse impacts to cultural resources are set forth in the LOR between ESDC, OPRHP, and the project sponsors. The LOR is included in Appendix B of the FEIS, and its relevant provisions are summarized below.

1. Archaeological Resources

Should archaeological resources be identified within the five potentially sensitive lots on the project site, OPRHP and LPC will make determinations of significance, and any mitigation measures will be developed by ESDC, after consultation among ESDC, OPRHP, LPC and the project sponsors. Any mitigation measures will be determined based on the characteristics and significance of the resource, and will be conducted pursuant to *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*, prepared by the New York Archaeological Council and adopted by OPRHP (1994) and pursuant to *Guidelines for Archaeological Work in New York City* established by LPC (April 12, 2002). The consultation process respecting archaeological resources will occur in accordance with the LOR.

2. Historic Resources on the Project Site

The Project will result in significant adverse impacts on historic resources due to the demolition of the former LIRR Stables and former Ward Bread Bakery complex, both of which are eligible for listing on the State and National Registers of Historic Places. As described in the FEIS, the potential reuse of these properties as part of the Project was examined in detail in a study undertaken by the project sponsors, who worked with Gehry Architects New York, the Project's design architects, and Ismael Leyva Architects, P.C., interior architects also working on the Project. Specialized professionals, including a structural engineering firm and façade restoration experts, were consulted regarding the former Ward Bread Bakery complex. (Structural and façade assessments could not be performed on the former LIRR stables because the project sponsors were not able to obtain access to the property from its owner.) A report of the adaptive reuse study is included in Appendix B of the FEIS. As documented in the study, the conversion of these buildings to residential use would, at great expense, create large and inefficient units without the qualities (such as air, light, and views) that characterize the loft market in Brooklyn. In addition, the significant modifications to the buildings required for conversion to residential use would significantly alter and compromise the historic character of the buildings, and due to the construction of a platform over the LIRR rail yard, the former LIRR stables would lose their original context, which related to the stables' location adjacent to and function as part of the LIRR freight yards. The expense associated with converting the buildings would preclude the provision of affordable housing in either building. In comments dated October 30, 2006, OPRHP accepted the findings of the adaptive reuse study and determined that it is not prudent or feasible to convert the buildings due to their condition and layout, and ESDC also concurs in those findings.

The project sponsors will undertake measures to partially mitigate the demolition of the former LIRR stables and the former Ward Bread Bakery complex. These measures include Historic American Buildings ("HABS") Survey Level II documentation of the buildings. The HABS report will be reviewed by the project sponsors, ESDC, and OPRHP for completeness and acceptance. Copies of the documentation will be provided to the Brooklyn Historical Society, the Museum of the City of New York and to OPRHP.

The project sponsors, in consultation with OPRHP, will also develop additional measures that will document the history of the buildings, including one or more of the following: (i) incorporation of historic plaques in the Project's open space; (ii) reuse, recreation, or interpretation of the "WB" mosaics located in the entrance of the Ward Bread Bakery; (iii) interpretation of the wave pattern on the Pacific Street façade of the former Ward Bread Bakery (*e.g.*, the motif could be either recreated or reinterpreted in the Project's open spaces); (iv) permanent interpretative exhibits to be located appropriately in relation to the former Ward Bread Bakery and the former LIRR stables; and/or (v) decorative outdoor paving that makes reference to the former Ward Bread Bakery and the former LIRR stables.

3. Historic Resources in the Study Area

The measures to partially mitigate the shadows impact on the Church of the Redeemer are identified below in Section VII.E.2. Section VII.D discusses why no practicable mitigation measures are available to avoid or minimize the impacts on views of the Williamsburgh Savings Bank Building.

D. Visual Resources

The Project will result in a significant adverse impact due to the loss of views of the Williamsburgh Savings Bank Building from certain public vantage points south and southeast of the Project Site and along the Flatbush Avenue view corridor from south of the project site except from vantage points on Flatbush Avenue immediately adjacent to the project site.

Even the development of low-rise, as-of-right buildings on the project site, particularly on Blocks 1119, 1120, and 1121, could partially obstruct views of the Williamsburgh Savings Bank Building from the public vantage points south and southeast of the project site identified in the FEIS. Thus, to avoid these impacts, future development of the site would need to be prohibited along Pacific Street between 4th and Flatbush Avenues, along 5th Avenue near Flatbush Avenue, along Pacific Street between 5th and Vanderbilt Avenues, along Dean Street between Flatbush and 6th Avenues, and along Dean Street between Carlton and Vanderbilt Avenues. These sites presently enjoy views of the Williamsburgh Savings Bank Building due to the absence of development on the project site. Prohibiting development – even low-rise, as-of-right development – on these blocks would be inconsistent with the goal of establishing a high-density, mixed-use project in an area that is well served by necessary infrastructure, particularly transportation.

The components of the Project that would block views of the Williamsburgh Savings Bank Building along the Flatbush Avenue view corridor south of the project site are Buildings 1 and 2. To preserve these views, Buildings 1 and 2 would need to be shifted to the east of their proposed location, substantially reduced in height or eliminated from the Project.

Shifting Buildings 1 and 2 to the east of their proposed locations to preserve views of the Williamsburgh Savings Bank Building along the Flatbush Avenue view corridor south of the project site is neither practicable nor desirable. Relocating Building 1 east of 5th Avenue would require the realignment of the arena so that it would be oriented north-south rather than east-west. This orientation would make construction of the arena impracticable due to structural constraints. Other constraints that make shifting Building 1 eastward infeasible or undesirable include: (i) the shift would prevent the Project's construction of the drill track in the LIRR rail yard; (ii) realigning the arena to be oriented north-south would cause a portion of the structure to extend over the property line; and (iii) reorienting the arena to the north-south would require locating the arena's support space along the arena streetwalls, thereby virtually precluding street level retail and resulting in 100-foot-tall, blank facades along 6th Avenue, Dean Street and parts of Atlantic Avenue.

Eliminating Buildings 1 and 2 or substantially reducing their heights would be inconsistent with ATURA, the Special Downtown Brooklyn District and the City's recent practice of locating high-density zoning along arterial streets as a buffer for low-density zoning on residential streets, as well as the Project goal (and City policy) of locating high-density commercial and residential uses at a major transit hub. Furthermore, a building of 495 feet, which could be constructed as-of-right on Block 1118, or even a building of 320 feet, would substantially obstruct views of the Williamsburgh Savings Bank Building from the south along the Flatbush Avenue corridor, which indicates that a very substantial reduction in the height of Building 1 would be necessary to avoid a significant adverse impact. Such a reduction would be inconsistent with the policies and goals mentioned above.

In light of the foregoing factors, ESDC finds that there are no practicable measures to avoid or minimize the significant adverse impact on views of the Williamsburgh Savings Bank Building. In making this finding, ESDC notes that the Williamsburgh Savings Bank Building will remain visible from many vantage points to the north, east, and west of the project site, as well as from south of the project site on the Fourth Avenue view corridor. ESDC also notes that the envelope of Building 1 has been narrowed slightly to provide a slimmer profile as a result of recommendations made by CPC. ESDC notes, in addition, that Building 1 has been designed to act in part as a modern counterpoint to the Williamsburgh Savings Bank Building and will create a visual relationship with this building in the Brooklyn skyline. Building 1 will reflect the prominence of its location, both in the skyline and along the borough's major corridors, through its design, materials, and overall height. It is intended to be an identifiable architectural statement and therefore will fulfill the Project's goal of contributing to the Brooklyn skyline and streetscape with distinctive buildings.

E. Shadows

The FEIS indicates that significant shadow impacts would occur on two resources in the study area as a result of the Project: the Atlantic Terminal Houses open space and the Church of the Redeemer. As discussed in greater detail in Section VIII.C.3 below, measures aimed at fully mitigating these impacts, such as changing the dimensions of the buildings casting the shadows, would substantially compromise the Project's goals, and such measures are, therefore, deemed by ESDC to not be practicable. Accordingly, measures designed to partially offset such impacts have been identified and are discussed below.

1. Atlantic Terminal Houses Open Space

Prior to the time when the Project casts shadows on the Atlantic Terminal Houses open space, the project sponsors will develop and implement measures in consultation with NYCHA to partially mitigate the significant adverse impact on that resource. These measures will include one or more of the following: (i) new landscaping and cultivation of shade-tolerant plantings within the Atlantic Avenue open space; (ii) upgrading of the Carlton Avenue children's play area, including the possible installation of a spray shower; (iii) installation of additional play equipment within the Atlantic Avenue or Carlton Avenue open spaces; and/or (iv) replacement of benches and other fixtures in the Atlantic Avenue or Carlton Avenue open spaces. These measures will be developed and implemented in accordance with a letter between the project sponsors and NYCHA, which NYCHA accepted on November 3, 2006. The letter is included in Appendix I of the FEIS.

2. Church of the Redeemer

Prior to the time when the Project casts shadows on the stained glass windows of the Church of the Redeemer, the project sponsors will implement measures to offset the adverse impact resulting from the shadows by removing the existing protective coverings from all of the stained glass windows, including any patching and repair associated with the removal; cleaning both the interior and exterior of the windows; and installing new transparent protective coverings of similar or greater durability as the existing coverings. The project sponsors and the Church of the Redeemer agreed to these measures in a letter dated October 31, 2006 and included in Appendix I of the FEIS.

F. Traffic

A comprehensive package of traffic mitigation measures will be implemented to reduce the number of significant adverse traffic impacts. The traffic mitigation package will include physical roadway improvements, demand management strategies, transit service recommendations and traffic operational improvements. Because the most severe traffic impacts are for the most part attributable to demand generated by major events at the arena, mitigation measures are targeted to address this use, as well as to address the traffic impacts attributable to the Project's residential and commercial uses and its reconfigured street grid.

The project sponsors will provide funding to DOT for, or implement (as the case may be) the roadway modifications and installation of traffic signals set forth in the conceptual design in Figure 19-1 of the FEIS and will cooperate in implementing the operational changes (including street closures, changes in street direction, signal timing modifications, restriping, and parking regulation modifications) described in the FEIS. However, actions such as signal timing modifications at existing traffic signals, changes to travel direction, and changing parking regulation signs will be implemented by DOT staff at City expense. The roadway modifications, signal installations and operational changes and the timing thereof will be subject to the approval of the DOT. The project sponsors will prepare and submit all drawings and designs (which will meet AASHTO and DOT specifications) required for implementation of such measures identified in the FEIS to DOT for review and approval.

The project sponsors will undertake traffic monitoring following completion of each phase of the Project to gather data and advise DOT of traffic and pedestrian conditions at locations

identified in the FEIS as having unmitigated significant adverse traffic impacts, as described in the FEIS and the letter from DOT to ESDC dated November 22, 2006 (the "DOT letter"), including funding the cost of mitigation measures to the extent provided for in the DOT letter. The DOT letter is included in Appendix I to the FEIS. The project sponsors will also comply with all other requirements of the DOT letter.

1. Physical Roadway Improvements

The most significant physical roadway improvement mitigation measure that the Project will implement will be a reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection to eliminate a northbound "triangular" constraint that severely limits the individual capacities of each of these three arterials and complementary operational changes to the adjacent streets. In conjunction with this improvement, the project sponsors will fund and/or implement physical changes relating to the following: (i) elimination of northbound traffic operations on 4th Avenue between Atlantic and Flatbush Avenues; (ii) modifications to 4th Avenue lane designations between Dean Street and Atlantic Avenue; (iii) widening a portion of Pacific Street and converting it from two-way operation to one-way eastbound operation with two thru-lanes from 4th Avenue to Flatbush Avenue; (iv) installation of a new traffic signal and crosswalk at the intersection of Pacific Street and Flatbush Avenue; (v) introduction of an eastbound left-turn lane on Atlantic Avenue at Fort Greene Place; (vi) striping a westbound right-turn lane on Atlantic Avenue for 150 feet approaching 3rd Avenue; and (vii) construction of expanded pedestrian spaces at Times Plaza along with crosswalk changes. Additional measures related to this improvement include areawide signal coordination and timing changes. The termination of northbound 4th Avenue at Atlantic Avenue will address the queuing and effective reduction of each avenue's capacity that occurs under existing conditions. The improvement will substantially reduce queuing and congestion at this critical location. In addition, pedestrians will benefit from the expansion of pedestrian space at Times Plaza.

The project sponsors will also fund and/or implement physical improvements at the Atlantic Avenue/Vanderbilt Avenue intersection, which will include geometric and operational improvements to enhance vehicle flow and pedestrian safety, including: (i) elimination of the eastbound Atlantic Avenue left-turn movement to Vanderbilt Avenue; (ii) widening of the existing median on this approach to 15 feet to provide additional pedestrian refuge space; (iii) re-striping the eastbound Atlantic Avenue approach at Vanderbilt Avenue to accommodate an exclusive right-turn-only lane, except as such re-striping is undertaken directly by DOT; (iv) re-striping Vanderbilt Avenue between Atlantic Avenue and Pacific Street to provide for four northbound travel lanes and two southbound travel lanes, except as such re-striping is undertaken directly by DOT; and (v) reconfiguration of the west sidewalk along Vanderbilt Avenue between Atlantic Avenue and Pacific Street from 20 feet to 12.5 feet in width to accommodate a new lay-by lane along the west curb. Additional measures at this intersection will include a no standing anytime regulation that will be implemented for 150 feet along the south curb on eastbound Atlantic Avenue approaching Vanderbilt Avenue and various signal timing changes.

The project sponsors will also fund and/or implement re-striping and physical modifications at various other locations in the street network adjacent to the Project site as shown in Figure 19-1 and Tables 19-1 and 19-2 of the FEIS, except as such re-striping is undertaken directly by DOT.

2. Demand Management Strategies

The project sponsors will implement targeted incentives to reduce the overall number of Project-generated auto trips within one-half mile of the arena for Nets games by 30 percent of the project demand as initially identified in connection with the traffic analysis prepared for the FEIS. The six demand management strategies will consist of: (i) remote parking (with free shuttle bus service) containing at least 500 parking spaces, offered at a 50 percent discount from rates for parking at or near the arena controlled by the project sponsors; (ii) free charter bus service from park-and-ride lots on Staten Island, providing an aggregate capacity accommodating approximately 264 persons; (iii) high-occupancy-vehicle ("HOV") requirements for at least 600 on-site arena parking spaces, requiring vehicles using such HOV spaces to be occupied by three or more persons after 5 PM on game days; (iv) free round-trip subway fare to Nets basketball game ticketholders who would otherwise drive (the final design of this fare-incentive program is to be developed with and subject to the review and approval of NYCT); (v) free bicycle parking for any ticketholder traveling to the arena by bicycle in a secure, manned facility designed to accommodate at least 400 bicycles on the arena block; and (vi) cross-marketing of area businesses to encourage ticketholders to patronize local restaurants and stores before and after games to reduce peak surges.

The project sponsors will provide expected attendance data to, and otherwise cooperate with, NYCT as necessary to assist NYCT in determining the appropriate increase in subway service to the Atlantic Avenue/Pacific Street subway station on selected subway lines immediately following basketball games and other major arena events as necessary to alleviate potential platform crowding at that subway station.

The analyses for the FEIS estimate that the transit fare incentive program will result in a roughly 14 percent reduction in arena auto trips, and that additional measures (park and ride bus services, on-site HOV parking requirements, secure indoor on-site bicycle parking and cross-marketing of area businesses) will, in the aggregate, achieve a further six percent reduction in peak hour arena auto trips. This 20 percent reduction in peak hour auto trips generated by a weekday or weekend basketball game will be equivalent to reducing the forecasted auto mode share for arena trips from an average of 35.4 percent to 28.3 percent on weekdays, and from 40 percent to 32 percent on weekends. The remote parking program is expected to further reduce auto trips in the vicinity of the arena by intercepting approximately 250 autos at remote parking facilities on the periphery of the Project's study area. In combination, these demand management and remote parking strategies are expected to reduce the overall number of pre-game peak hour auto trips in the vicinity of the project site by approximately 584 on a weekday and 577 on weekends, a 30 percent reduction. The demand management and remote parking strategies will also be expected to reduce the overall number of post-game peak hour auto trips in the vicinity of the project site.

The project sponsors will collect data midway through the first basketball season from Nets patrons documenting the travel mode of patrons to evaluate the effectiveness of the demand management program, and will provide the data to NYCT and ESDC. Subject to ESDC approval, the project sponsors may adjust the elements of the program to achieve the goal of reducing the auto share by a minimum of 30 percent of the number of vehicle trips projected for the Build Condition in the FEIS within one-half mile of the arena, provided that all practicable and effective demand management measures are maintained.

As noted above, the full mix of demand management strategies are targeted towards Nets basketball games. An event such as a concert would not be expected to result in additional unmitigated traffic impacts compared to those identified for a Nets basketball game that included implementation of these demand management strategies. First, a Nets basketball game would typically attract substantially more spectators than would a concert or other event at the arena; the most common seating configuration for a concert would limit seating capacity to 15,000 seats, instead of the 18,000 seats expected to be sold for a Nets game. Non-game events are expected to attract fewer spectators than basketball events, with attendance ranging from 5,000 to 15,000 persons. Second, data from Madison Square Garden indicates that concert attendees have an approximately 16 percent lower auto/taxi mode share than basketball fans, and a correspondingly higher transit share. Finally, for major arena events other than Nets games, the project sponsors will make available to event promoters practicable demand management measures (such as the reduced rate remote parking and shuttle bus mitigation described above) and encourage the promoters to implement these measures.

3. Traffic Operational Improvements

It is expected that DOT will implement area-wide signal coordination, timing changes, curbside parking regulation changes, changes in travel direction and other operational changes, as described in the FEIS, including Tables 19-1 and 19-2 of the FEIS. The project sponsors will cooperate with DOT in the implementation of such changes including keeping DOT apprised of the progress of the Project's construction.

4. Transit Service Recommendations

ESDC recommends, subject to review and approval by NYCT, that there be increased weekday evening and weekend service to the Atlantic Avenue/Pacific Street subway station complex since improved subway and bus service will enhance transit ridership and potentially reduce the number of vehicles traveling to the arena. To be conservative, the analysis contained in the FEIS with respect to the effectiveness of the identified mitigation did not take credit for this measure.

5. Traffic Enforcement Agents for Major Arena Events

In addition to the package of mitigation measures described above, it is anticipated that on days when a basketball game or other major event is scheduled at the arena, police and traffic control officers will be deployed at key intersections in the vicinity of the arena during the pre-game and post-game periods, as is currently the practice at other major event venues in the City. The FEIS analyses of traffic mitigation did not take this measure into account. The project sponsors will enter into discussions with DOT to determine the extent of the project sponsors' financial responsibility for the traffic enforcement agents ("TEAs") required to manage traffic flow for major arena events and will comply with the terms of any such agreement with DOT.

6. Game-Day Management for Weekend Games

On Saturdays (or Sundays) when a Nets game is scheduled at the arena, a game-day specific plan would go into effect in coordination with NYPD and DOT. Further information on this mitigation measure is described below.

7. Traffic Mitigation Effectiveness

The FEIS indicates that the combination of mitigation measures described in Sections F.1, 2 and 3 above will fully mitigate impacts at more than half of the intersections that will experience significant adverse impacts in 2010. All significant impacts in 2010 will be fully mitigated at 33 out of 58 intersections; the number of significant impacts will be reduced at a further 24 intersections; and no significant impacts will be mitigated at one intersection. There will therefore be unmitigated significant adverse impacts at 25 intersections, but unmitigated impacts will not occur at all 25 intersections in any one peak period. There will be 4 unmitigated significant adverse impacts in the weekday 8-9 AM peak hour in 2010, none in the midday, 6 in the 5-6 PM, 5 in the 7-8 PM pre-game and 1 in the 10-11 PM post-game peak hours. On Saturdays, the number of unmitigated significant adverse impacts will total 10 during the 1-2 PM pre-game peak hour and 13 during the 4-5 PM post-game peak hour. If only the weekday peak periods are examined, only 13 intersections identified as having unmitigated significant adverse impacts in 2010 will have unmitigated impacts during one or more peak periods. During weekday peak periods not associated with arena events, only 9 intersections will have unmitigated significant adverse impacts during one or more peak periods.

In 2016, all significant impacts will be fully mitigated at 33 out of 68 intersections; the number of significant impacts will be reduced at a further 33 intersections,[3] and no significant impacts will be mitigated at two intersections. There will therefore be unmitigated significant adverse impacts at 35 intersections, but unmitigated impacts will not occur at all 35 intersections in any one peak period. There will be 11 intersections with unmitigated significant adverse impacts in the weekday 8-9 AM peak hour, none in the midday, 15 in the 5-6 PM, 6 in the 7-8 PM pre-game, and none in the 10-11 PM post-game peak hours. On Saturdays, the number of intersections with unmitigated impacts will total 15 during the 1-2 PM pre-game peak hour and 28 during the 4-5 PM post-game peak hour. If only the weekday peak periods are examined, only 23 of the 35 intersections identified as having unmitigated significant adverse impacts in 2016 will have unmitigated impacts for one or more movements during one or more peak periods. During weekday peak periods not associated with arena events, 20 intersections will have unmitigated significant adverse impacts for at least one movement during one or more peak periods.

Figures 19-5 to 19-11 in the FEIS show the intersections where unmitigated significant adverse impacts will occur in 2010 and 2016 in each of the peak hours. Tables 19-3 and 19-4 provide information about the number of movements with unmitigated significant adverse impacts at these intersections.

Tables C-9 and C-10 in Appendix C of the FEIS provide information regarding the delays, levels of service, and volume-to-capacity ratios for each movement at each analyzed intersection. A comparison of the data in Table C-10 for the No Build condition and Build with Mitigation condition indicates that the net increases in delay resulting from the Project with mitigation in 2016 range from as low as one second to as high as several minutes at the analyzed intersections. With respect to those movements with unmitigated traffic impacts in 2016, approximately 11% will have net increases in delay of 10 seconds or less, 25% will have net increases in delay of between 10.1 and 30.0 seconds, and 33% will have net increases in delay of between 30.1 seconds and one minute. Thus, the majority of the significantly impacted movements will experience net increases in delay of

[3] Page 19-43 of the FEIS incorrectly states that traffic mitigation measures would reduce the number of impacts at 32 intersections in 2016. The correct number of intersections is 33 as indicated on page 19-53 of the FEIS.

less than or equal to one minute. Approximately 20% will experience increases in delay of more than a minute and a half.

With the implementation of traffic mitigation measures, the number of approaches that may experience queuing and spillback will decrease on the major corridors of Flatbush and Atlantic Avenues and at the intersection of Adams and Tillary Streets, as compared to the 2016 Build condition. The potential for queuing and spillback on 4th and Vanderbilt Avenues that was identified in the 2016 Build condition would not be expected to occur.[4]

As described earlier in this section of the findings, the Saturday pre-game and post-game peak hours will have the highest number of unmitigated impacts. It is important to note that these conditions are projected to occur fewer than four times per year when a Saturday afternoon Nets basketball game will be scheduled. (Other events that will occur at the arena on a Saturday afternoon – a concert, for example – will typically generate substantially fewer peak hour vehicle trips than a Nets basketball game.) The impacts during the Saturday peak hours are attributable in some part to existing Saturday parking regulations; however, eliminating parking and other permanent measures along busy retail corridors such as Atlantic and Flatbush Avenues on Saturday afternoons could be disruptive to adjacent retail land uses, and such measures would not be warranted for conditions that will occur fewer than four Saturdays per year. Furthermore, it is anticipated that on Saturdays when a Nets game is scheduled at the arena, a specific game-day plan will go into effect in coordination with NYPD and DOT. This plan will likely concentrate on improvements to the arterial system, such as implementing temporary (*i.e.*, game day only) parking prohibitions at selected locations along Atlantic and Flatbush Avenues. Game day traffic signal preemption/override and similar traffic management strategies will also be employed, and police and traffic control officers will be deployed at key intersections in the vicinity of the arena during the pre-game and post-game periods as is currently done at other major event venues in the City. The unmitigated impacts on peak Saturday game days reported above do not take into account the traffic benefits of such game day measures.

8. Transit Impacts with Implementation of Traffic Mitigation Measures

Although the transit fare incentive will result in additional subway ridership, the additional ridership will be accommodated at all analyzed stations serving the project site without resulting in any significant adverse impacts. As disclosed in Section VI.K.1, the potential may exist for crowding on subway platforms under certain post-game or major event situations. Such crowding, if it were to occur, would constitute a significant adverse impact, which will be addressed by providing additional subway service (*i.e.*, more trains) during post-game periods or after major events. The implementation of the complete array of traffic mitigation measures discussed above will not be expected to result in significant adverse impacts in any other area of analysis.

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[4] The last full sentence on page 19-50 of the FEIS, pertaining to potential queuing on Vanderbilt Avenue with mitigation in one peak time period, fails to reflect changes in the traffic analysis between the DEIS and FEIS.

G. Transit and Pedestrians

1. Subway Service

As noted in Section VI.K.1, the potential may exist for crowding on subway platforms under certain post-game or major arena event situations. Such crowding, if it were to occur, would constitute a significant adverse impact, which will be addressed by providing additional subway service (*i.e.*, more trains) during post-game periods or after major events. It should also be noted, as discussed above, that the implementation of the complete array of traffic mitigation measures identified in these findings is not expected to result in any new significant adverse impacts on transit or in other analysis areas.

2. Bus Service

In 2016, the Project-generated demand will cause a significant adverse impact on westbound B38 bus service in the AM peak hour. As standard practice, NYCT routinely conducts ridership counts and adjusts bus service frequency to meet its service criteria, within fiscal and operating constraints. Therefore, no mitigation is required for the potential impact to westbound B38 bus service.

3. Pedestrians

In 2016, the Project will result in significant adverse impacts at two crosswalks: (i) the north crosswalk on Carlton Avenue at Dean Street in the weekday 7-8 PM pre-game and Saturday 1-2 PM pre-game peak periods and (ii) the north crosswalk on 6th Avenue at Dean Street in the Saturday 1-2 PM pre-game peak period. To mitigate these impacts, the north crosswalk on Carlton Avenue at Dean Street will be widened to 20 feet (from 16 feet), and the north crosswalk on 6th Avenue at Dean Street will be widened to 17 feet (also from 16 feet). Widening these crosswalks will fully mitigate these pedestrian impacts.

The project sponsors will fund and cooperate with DOT in the design and construction of other crosswalk and sidewalk improvements: (i) provision of a new sidewalk extension at the northeast corner of Atlantic Avenue at Fort Greene Place; (ii) provision of a new crosswalk on the south leg of the intersection of Flatbush Avenue and Pacific Street where the new traffic signal is to be installed; (iii) installation of fencing (consistent in design with DOT-installed fencing throughout the City or as otherwise proposed by the project sponsors and approved by DOT) on the northwest corner of the Flatbush Avenue/Pacific Street intersection to discourage pedestrians from crossing on the north side of the intersection where no crosswalk exists; (iv) installation of fencing (consistent in design with DOT-installed fencing throughout the City or as otherwise proposed by the project sponsors and approved by DOT) at the northwest and southwest corners of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection; and (v) extension of the sidewalk at the northeast corner of Atlantic and Flatbush Avenues.

H. Noise

The Project will result in significant adverse noise impacts at a number of locations both with and without the implementation of traffic mitigation measures.

1. Residences

At all of the residential locations where Project noise impacts are predicted to occur, the project sponsors will make double-glazed or storm-windows and alternative ventilation (*i.e.*, air conditioning) available, at no cost for purchase and installation, to owners of residences to the extent such measures are not already in place. These measures will mitigate noise impacts for residential uses. At locations where owners elect not to take advantage of noise mitigation measures, the Project would have unmitigated noise impacts.

2. Temple of Restoration

At the Temple of Restoration on Dean Street, the project sponsors will also make available and install, free of charge, storm windows for windows that are on the second level of the building (above the Temple of Restoration sign) facing Dean Street and that do not currently have double-glazed or storm windows. With this measure, maximum interior noise levels within the Temple of Restoration building will be in the range of 40–50 dBA L_{10}, which meets the *CEQR Technical Manual* recommended interior noise level requirements for this church use. If this measure is not implemented, the Project would have unmitigated noise impacts at this location.

3. Dean Playground

The Project will result in significant adverse noise impacts at the Dean Playground and on the Project's new open space. There are no practicable and feasible mitigation measures to reduce noise levels to below the 55 dBA $L_{10(1)}$ guideline noise level, but the noise levels at these open spaces will be comparable to noise levels in other urban open space areas and parks in New York City, including Hudson River Park, Riverside Park, Bryant Park, and Fort Greene Park. The noise impact at the Dean Playground will be partially mitigated by the project sponsors' construction of a comfort station for users of the park to be implemented in coordination with the Parks Department with respect to location, design and timing of construction.

4. Traffic-Related Mitigation Effects on Noise

The implementation of the traffic measures described in Section VII.F will affect the Project noise levels. In 2016, the predicted noise increase would no longer result in significant adverse noise impacts on Flatbush Avenue near Dean Street and on Dean Street between Carlton and Vanderbilt Avenues.

I. Construction

Construction of the Project will result in significant adverse impacts from construction-related traffic on the local street network and construction-related noise, and these impacts will cause significant adverse localized neighborhood character impacts in the immediate vicinity of the project site during the construction period. The mitigation measures for construction-related traffic and noise, as well as for the localized neighborhood character impacts, are set forth below.

1. Noise

The Project will result in construction-related noise impacts. To mitigate these impacts, the project sponsors will:

- make double-glazed or storm-windows and alternative ventilation (*i.e.*, air conditioning) available to the extent such features are not already in place, at no cost for purchase and installation, to owners of residences at those locations where there will be significant noise impacts;

- make available and install, free of charge, storm windows for windows that are on the second level of the building (above the Temple of Restoration sign) facing Dean Street and that do not currently have double-glazed or storm windows; and

- make available and install, free of charge interior-fitted storm windows (or suitable alternative windows) for the Pacific Street side of the Pacific Branch of the Brooklyn Public Library.

These measures will be implemented in a timely manner so as to avoid the significant adverse noise impacts identified in the FEIS where practicable. Implementation of the above measures will mitigate the noise impacts at these locations, but the Project would have unmitigated noise impacts at locations where owners (or tenants) elect not to take advantage of these measures. The Project will also have unmitigated construction-related noise impacts on three open spaces – Dean Playground, Brooklyn Bear's Pacific Street Community Garden and the northern half of South Oxford Park – because, although the use of noise barriers for shielding and implementation of the other measures described above will somewhat reduce noise levels, full mitigation of noise impacts at open spaces is not feasible for safety and aesthetic reasons. The noise impact at the Dean Playground will be partially mitigated by the project sponsors' construction of a comfort station for users of the park.

2. Traffic

As set forth at pages 19-78 and 19-79 of the FEIS, certain of the operational mitigation measures (including specified roadway modifications, traffic installations and operational improvements) will be put into place at or about the time that significant construction activity begins at the Project site in order to minimize construction-related traffic impacts, or as otherwise directed by DOT. The project sponsors will fund and/or cooperate with DOT to implement these measures. Changes in signal timing at existing traffic signals, installation of signage, implementation of parking regulations, and changes in traffic direction will be implemented by DOT staff at City expense.

With implementation of these measures, all significant adverse traffic impacts identified at the outlying intersections will be mitigated. However, certain significant adverse traffic impacts identified at 10 intersections adjacent to the project site will remain unmitigated. Those intersections are identified in Table 17a-6 of the FEIS.

3. Neighborhood Character

As discussed above in Sections VI.O and VII.I, measures to minimize noise, vibration, dust, traffic and other construction-related nuisances will be employed where practicable. No portion of the neighborhoods immediately adjacent to the project site will be subject to the full effects of construction for the entire 10-year period, and impacts on neighborhood character will be localized. Except in the immediate vicinity of the project site, the Project will not result in significant adverse neighborhood character impacts during construction. Because of the size of the project site, its location at a major transportation crossroad, and the complexities of building over the rail yard, it is not possible to develop the site without some temporary significant adverse noise and traffic impacts.

J. Enforcement of Measures for the Avoidance, Minimization, and Mitigation of Impacts

As described throughout the FEIS and the Findings Statement, elements have been incorporated into the Project's design and construction plan to avoid and minimize impacts. These measures for the avoidance and minimization of environmental impacts and the measures required of the project sponsors to mitigate environmental impacts will be included in appropriate Project contractual documents, with measures associated with, or the responsibility of, individual buildings or building parcels included in the applicable ground leases, and measures associated with the project site as a whole or not specific to any one building parcel included in other Project documentation. These contractual documents will be drafted so that the requirements to comply with the avoidance, minimization and mitigation measures run with the land and will be binding on future property owners in perpetuity, except for those, such as construction-related measures, that by their nature apply only during the performance of a specific activity.

The Project documentation will provide that ESDC will have the right to enforce the project sponsors' compliance with the avoidance, minimization and mitigation measures described in this Findings Statement and the FEIS with respect to the avoidance and minimization of impacts, and the specific mitigation measures identified to mitigate impacts. ESDC will have the right to enter the project site at all reasonable times, subject to safety and operational constraints, to monitor the project sponsors' and the project sponsors' contractors' compliance with the terms of such measures. The project sponsors and the project sponsors' general contractor will meet with ESDC, at ESDC's request, to discuss compliance with and implementation of the mitigation measures set identified in the FEIS.

During the period in which the Project buildings, or any one of them, are being constructed, the project sponsors will provide funding for the reasonable costs of an environmental monitor, which will be a qualified consulting firm with subconsultants, as appropriate, to be selected by and retained by ESDC to monitor compliance with certain of the avoidance, minimization and mitigation measures set forth in the FEIS and this Findings Statement. The project sponsors' obligation to provide funding for the environmental monitor will cease upon completion of the Phase II buildings.

VIII. Alternatives

The FEIS analyzes a range of reasonable alternatives to the Project, and assesses the extent to which such alternatives could avoid or minimize adverse environmental impacts while still achieving the purposes and needs of the Project. In particular, the FEIS examined the following:

- No Action Alternative;
- As-of-Right Alternative;
- No Unmitigated Impact Alternative;
- Reduced Density – No Arena Alternative; and
- Reduced Density – Arena Alternative.

The Reduced Density – No Arena Alternative and the Reduced Density – Arena Alternative were originally proposed by members of the community and business groups and are representative of lower-density alternatives intended to achieve all or some of the Project's purposes and needs. It should be noted that the FEIS also discusses the "Unity Plan Alternative," which was a proposal developed by local political leaders, residents, and business owners. Because the Unity Plan was not developed to a sufficient level of detail to allow preparation of a quantified analysis of its potential environmental effects, and because its major concepts eventually served as the basis for the Reduced Density – No Arena Alternative, the FEIS does not analyze it as a separate alternative.

All of the alternatives analyzed in the FEIS would be located on all or a portion of the project site. However, alternative sites in Brooklyn for an arena were also considered on pages 10 to 13 of the FEIS based on the following siting criteria:

- The site should be large enough to accommodate an arena with a minimum footprint of 240,000 square feet. In addition, the project site footprint should also allow for other mixed-use development. Recent experience with new arenas, such as the MCI Arena in Washington, D.C., and San Diego's PETCO Park has shown that these facilities thrive in combination with a strong mix of urban land uses, *e.g.*, offices, shops, restaurants, and housing.
- The site should be readily accessible to mass transit, which could serve the arena patrons, workers, residents, and other visitors who would travel to the site regularly.
- The site should be close to or within a Central Business District, so that the office component of the mixed-use development would add to the critical mass of business activity.
- The site should have access to appropriate infrastructure – transportation, roads, sewer, water, *etc.* – to support the mixed-use development.
- The site should be large enough and close enough to major arterial roadways to accommodate truck deliveries for a range of arena events.

- The site shape and size should be adequate to provide security and access control around and beneath the arena and related development.

The sites evaluated included sites identified in a 1974 preliminary feasibility study by the City for the Brooklyn Sports Complex (which identified the project site as a potential location for a sports venue), as well as the Brooklyn Navy Yard. Based on this evaluation, it was determined that the project site is the only site in Brooklyn that meets each of the criteria and that is still available for development as an arena. Moreover, alternative locations would not serve a central purpose of the Project, which is to eliminate the blighted conditions at the site of the Project.

Even if the arena were not to be built in connection with a mixed-use development, the project site is the most appropriate location for a new arena in Brooklyn. Some Brooklyn sites for an arena that have been considered in the past are either too small (Sites 2, 3a, b, and c in the City's 1974 preliminary feasibility study) or are no longer available (the Coney Island site where KeySpan Park is now situated, the Spring Creek site which is now home to mixed-use development, the Fulton Ferry site in DUMBO which is now a City park slated to become part of Brooklyn Bridge Park, and Site 1b which encompasses the Atlantic Terminal/Bank of New York Tower building and Atlantic Center). Other sites are inferior to the project site for a variety of reasons discussed in the FEIS:

- Brooklyn Navy Yard: This location is inferior because there are no sites readily available without the displacement and demolition of active industrial uses and because the Brooklyn Navy Yard is a critical component of the City's industrial business retention policy and the subject of a ten-year capital improvement and expansion plan. Furthermore, the area is not close to mass transit.

- Coney Island: Sites currently available in Coney Island are inferior to the project site as locations for an arena for a variety of reasons. Coney Island is less transit accessible and more remote than the project site, and it is therefore likely that there would be a higher share of automobile trips through the area's limited number of access corridors. The number and variety of events and the capacity of the arena make it likely that the arena will draw visitors from a wide geographic area, and it is important that the arena be located at a site that is readily accessible to a broad visitor population. In addition, constructing below grade level on the waterfront sites in Coney Island poses challenges because of the very shallow water table. If an arena were constructed in one of the Coney Island sites, its enclosed, below-grade loading and servicing areas and the arena parking facilities would likely need to be located above grade, possibly on multiple levels.

- Brooklyn Army Terminal: The Brooklyn Army Terminal is not suitable for an arena because there are limited sites available without the displacement and demolition of active industrial uses. Furthermore, the area is not close to mass transit.

- Broadway Junction: The Broadway Junction site is not centrally located and is not as well served by public transit or major arterial streets as the project site. In addition, the at-grade active rail yard/maintenance facility and bus depot at the site would pose urban design and operational issues because the base of the arena structure would be at least twenty feet above street level. Elevated subway and commuter rail lines on several of

the streets leading to the site would limit the ability to implement necessary roadway and infrastructure improvements.

The alternatives that were considered in the FEIS in detail are discussed below.

A. No Action Alternative

Under the No Action Alternative, the MTA would not dispose of the air rights for the rail yard, and therefore Blocks 1119, 1120, and 1121 would remain essentially in their current configuration. Because the rail yard would remain an open cut, buildings for new residential, retail, community facility uses could not be constructed over it; nor could the publicly accessible open space be developed. The other blocks within the project site would retain their current ownership, and although individual parcels on the project site could be reoccupied or could be redeveloped subject to present zoning or separate discretionary actions and environmental reviews, significant new development would be unlikely given the blighting influence of the rail yard and the predominance of low-density manufacturing zoning on the site.

In the areas in which the Project would have significant adverse impacts, the No Action Alternative would generally not result in impacts or would result in impacts to a lesser extent:

- Schools: Unlike the Project, the No Action Alternative would not result in a significant adverse impact on elementary or intermediate schools, although the Project will fully mitigate the impact on intermediate schools and partially mitigate the impact on elementary schools through the provision of on-site space for a school.

- Cultural Resources: Unlike the Project, the No Action Alternative would not require the demolition of the former LIRR Stables and the Ward Bread Bakery complex. It is likely, however, that under the No Action Alternative these structures would continue to deteriorate. Furthermore, these structures are privately owned and not landmarked and therefore are not protected from alteration or demolition. The structures could be substantially altered or demolished under the No Action Alternative without the documentation of their historic qualities and other mitigation measures that will be undertaken as part of the Project. The No Action Alternative would also not obscure or diminish views of the Williamsburgh Savings Bank Building, an unmitigated impact of the Project, or cast shadows on the stained glass windows of the east façade of the Church of the Redeemer, an impact that the Project will partially mitigate.

- Visual Resources: The No Action Alternative would not obscure or diminish views of the Williamsburgh Savings Bank Building, an unmitigated impact of the Project.

- Shadows: Unlike the Project, the No Action Alternative would not cast shadows on either the Church of the Redeemer or the Atlantic Terminal Houses open space and would not otherwise result in significant adverse shadow impacts.

- Traffic: Under the No Action Alternative, new vehicles associated with background growth and trips associated with new development outside the project site, in combination with existing traffic volumes, would congest a number of area intersections. The Project will result in significant adverse impacts at a number of these intersections.

Many of the Project's impacts could be fully mitigated, and delays at the fully mitigated locations would be comparable for the Project and the No Action Alternative. However, the Project's impacts will not be fully mitigated at numerous intersections, and, at those intersections, traffic operations would be better in the No Action Alternative.

- Transit and Pedestrians: Under the No Action Alternative, there would be no potential for platform crowding in the Atlantic Avenue/Pacific Street subway station since the potential for that condition under the Project is attributable to major events at the arena. Therefore, no additional train service would be required to address this potential impact. Unlike the Project, the No Action Alternative would not result in a significant adverse impact on the B38 bus route or on pedestrian traffic at the north crosswalks at Dean Street and 6th Avenue and Dean Street and Carlton Avenue. The Project's impacts in these areas will be fully mitigated.

- Noise: The No Action Alternative would not result in the noise impacts at residences near the project site or at the Dean Playground. At other locations, the noise levels under the No Action Alternative would be similar to those of the Project in that they would be characteristic of busy commercial areas with high traffic volumes.

- Construction: Because any construction under the No Action Alternative would likely be much smaller in scale and of shorter duration than under the Project, the No Action Alternative would not result in the construction impacts that the Project will cause.

Although it would avoid or reduce the Project's identified adverse impacts, in doing so the No Action Alternative would forgo the opportunity to create a mixed-use transit-oriented development at a site that is well suited for high-density uses. The No Action Alternative would also forgo the economic benefits derived from new jobs and new consumers on the project site.

Unlike the Project, the No Action Alternative would not provide a new substantial supply of affordable and market rate housing on the project site; nor would it provide enhancements to subway facilities at the transit hub; improvements to the rail yard; a venue for professional basketball and other entertainment and community events; or other amenities such as a health care facility, an intergenerational center, 8 acres of open space, or the Urban Room. Piecemeal development of the project site under the No Action Alternative also would not allow for the development of a comprehensive stormwater management plan with on-site detention and retention of stormwater. Therefore, although the No Action Alternative would generate less sanitary wastewater than the Project, it would not reduce aggregate annual CSO volumes discharged to City water bodies (a result the Project will achieve).

With respect to urban design, the No Action Alternative would not activate the streetscape with retail and other ground-floor uses and would not link the neighborhoods surrounding the project site since the below-grade rail yard would remain a barrier between them. With regard to land use, the No Action Alternative would not further the goals of ATURA such as the removal of structurally substandard buildings and the elimination of negative environmental conditions. While the Project will result in remediation of subsurface hazardous materials contamination throughout the site, the extent of any remediation under the No Action Alternative would likely be less since soil underneath roadways and adjacent properties would probably remain in place.

B. As-of-Right Alternative

The As-of-Right Alternative would consist of development that may occur at the project site without any discretionary decision making by a public agency. On the majority of the project site, there is limited development potential given the amount of land held in public ownership, the fractured nature of the project site's zoning, and the number of existing, occupied buildings. The chief exception to this limited development potential is Block 1118, and the As-of-Right Alternative reflects the potential for new as-of-right, high-rise development on this portion of the site. This block is zoned C6-1 and is within the Special Downtown Brooklyn District, which would permit mid- to high-density residential, commercial, or community facility uses. Because this block has a high-profile location and is currently underdeveloped, it is a likely location for an as-of-right development. A building that is up to 495 feet tall could be built at this location under zoning, although it is likely that any building would be somewhat shorter.

With respect to most areas of analysis, the impacts of the As-of-Right Alternative would be the same as those of the No Action Alternative. For shadows and visual resources, however, the As-of-Right alternative would have different impacts.

- Visual Resources: As with the Project, a building of 495 feet on Block 1118, or even a 320-foot tall building, would substantially obstruct views of the Williamsburgh Savings Bank Building from south of the project site along the Flatbush Avenue corridor. Therefore, like the Project, the As-of-Right Alternative would result in a significant adverse impact with respect to this visual resource but to a lesser extent than the Project.

- Shadows: Like the Project, a new building on Block 1118 would cast new shadows on the Church of the Redeemer, but its shadows would be of shorter duration than the Project's and would not constitute a significant adverse impact.

- Traffic: Given current congestion at intersections in the vicinity of Block 1118, the as-of-right development would result in significant adverse traffic impacts. The extent of these impacts and resultant mitigation would depend on the use of this building, but its overall effects on traffic would be substantially less than the Project.

- Construction: It is expected that an as-of-right building would require more than two years to construct, which could result in temporary adverse traffic and noise impacts. However, the extent of these impacts would be substantially reduced as compared with the Project. With respect to the Project, the project sponsors have committed to a comprehensive program of emission reduction measures. These include the use of ultra low sulfur fuel and extensive use of electrified construction equipment and particulate filters. It is unknown whether such measures would be used to construct the As-of-Right Alternative, and therefore, there could be temporary increases in mobile and stationary source emissions from construction of this alternative.

Like the No Action Alternative, the As-of-Right Alternative would forgo the opportunity to create a mixed-use transit-oriented development at a site that is well situated for high-density uses and that could efficiently accommodate the growth anticipated to occur in Brooklyn in a relatively small land area well served by necessary infrastructure. The visual and physical barrier of the rail

yard would remain. Although it would achieve in a limited way the Project's goal to provide new development to support the current and future residents of the Atlantic Terminal area, it would offer only a small fraction of the housing or community facilities that will be developed by the Project. It would not provide an arena or substantial open space. Neither would it improve railroad and subway facilities.

C. No Unmitigated Significant Impacts Alternative

The Project will result in unmitigated impacts with respect to cultural resources, visual resources, shadows, traffic, and noise. Therefore, alternatives were developed to explore modifications to the Project that would allow for the mitigation of these impacts.

1. Cultural Resources

The Project will result in the demolition of the former LIRR Stables and the Ward Bread Bakery complex. Although documentation of these resources and other mitigation measures will be undertaken in consultation with OPRHP (see Section VII.C), the demolition of these structures is a significant adverse impact that will not be fully mitigated.

While OPRHP has identified the former LIRR Stables and the Ward Bread Bakery complex as eligible for listing on the State Register, the two structures have not been designated as landmarks by any agency. To ensure that these buildings would not be adversely affected, each would need to be designated as a New York City Landmark or be excluded from the Project. The exclusion of these sites from the Project without historic designation would not preclude their alteration or demolition independent of the Project, since each is owned by a private property owner who could demolish the building at any time, in the absence of New York City landmark protection.

The No Unmitigated Significant Impacts Alternative would avoid demolition of these historic resources. Under this alternative, any new development at the project site would be designed so as to leave these structures in place. This would reduce the footprint of any new development, which would result in greater density, fewer housing units, less open space or some combination of these possibilities. The preservation of these resources would also significantly constrain the design of the Project in ways that could make future development at the project site more difficult. If the former LIRR Stables are maintained, it would constrain the design of the new rail yard. A straight track, which would be substantially better for LIRR operations and which the Project will provide under Block 1121, could not be accommodated under the No Unmitigated Significant Impacts Alternative since the former LIRR stables would remain under private ownership. The rail yard would therefore have to be built on a curve due to the size and shape limitations of its footprint. If the Ward Bread Bakery building were maintained, the number of residential units that could be provided would be reduced and the functionality of the Project's open space would be compromised substantially. In addition, the continued presence of that building would reduce the area available for below-grade stormwater management basins, which cannot be built over the rail yard area of the project site.

2. Visual Resources

The Project will result in an unmitigated significant adverse impact to views of the Williamsburgh Savings Bank Building because views will be obstructed from certain public vantage

points southeast of the Bank Building and along the Flatbush Avenue view corridor from south of the Project Site (except from vantage points immediately adjacent to the Project Site).

As discussed with respect to the As-of-Right Alternative, a portion of Block 1118 could be developed as-of-right with a tall structure, up to 495 feet under existing zoning, which would significantly obstruct views of the Williamsburgh Savings Bank Building Therefore, with respect to the No Unmitigated Significant Impacts Alternative, and under the assumption that the property would not be developed pursuant to a general project plan adopted by ESDC, the only mitigation for the potential effects on its visual character would be a down-zoning of this property. A down-zoning of Block 1118 would be inconsistent with the ATURA, the Special Downtown Brooklyn District, and recent trends by the City to provide for high-density zoning near transit facilities and along arterial streets as a buffer for low-density zoning on residential streets. Therefore, a down-zoning of Block 1118 would be inconsistent with existing public policy and other public initiatives that are intended to guide development on the project site.

The Project will also block views of the Williamsburgh Savings Bank Building from other areas south and southeast of the project site. Even new low-rise, as-of-right buildings at the project site could partially obstruct views of the Bank Building from some of these locations. Thus, to avoid these impacts, future development of the site would need to be prohibited or substantially constrained along Pacific Street between 4th and Flatbush Avenues and points along 5th Avenue near Flatbush Avenue, in order to preserve views of the Bank Building from Bergen Street between 6th and Carlton Avenues, the Dean Playground, and some points along Vanderbilt Avenue east of the project site that presently enjoy such views due to the absence of development on a portion of the project site. Prohibiting development – even low-rise, as-of-right development – on these blocks would be inconsistent with the goal to establish a high-density, mixed-use project in an area that is well served by transportation facilities.

3. Shadows

The Project will result in significant adverse impacts from new shadows cast on the open space of the Atlantic Terminal Houses and on the stained glass windows of the eastern façade of the Church of the Redeemer. As a result of the post-DEIS program modification, the building on Site 5 has been reduced in height from 350 feet to 247 feet, and as a result its incremental shadows will move off the church earlier in the late spring and summer. In addition, the project sponsors will undertake measures to partially mitigate the impacts to the Church and the Atlantic Terminal Houses open space (see Section VII). However, the shadows impacts to these two sun-sensitive resources will not be fully mitigated.

To fully mitigate the Project's significant adverse impacts on the open space of the Atlantic Terminal Houses, new structures on the eastern portion of Block 1120 and on the western portion of Block 1121 would be reduced to a maximum height of 110 feet, and to fully mitigate the impact on the Church of the Redeemer, the building on Site 5 would be reduced to a maximum height of 200 feet.

A reduction in the height of the buildings on Blocks 1120 and 1121 would require either (i) a substantial reduction in the density on the project site or (ii) a reduction in the Project's open space to allow for shorter buildings with comparable floor area. Reducing the height of these structures would be inconsistent with the goal to establish a high-density, mixed-use project in an area that is

well served by transportation facilities. Increasing the footprint of these buildings to maintain their floor area would reduce visual and pedestrian access through the site. With respect to Site 5, reducing its height to 200 feet would not permit the development suited for this prominent, transit-oriented site. Therefore, measures to fully mitigate the Project's impacts from new shadows cast on the Church of the Redeemer and the open space of the Atlantic Terminal Houses would substantially compromise the Project's goals.

4. Traffic

The Project will result in significant adverse traffic impacts at intersections within the study area that cannot be fully mitigated with practicable mitigation measures. Because of existing congestion at a number of intersections, even a minimal increase in traffic in the study area would result in unmitigated impacts at some locations. Based on a sensitivity analysis of intersections within the study area, it was determined that the addition of five cars during the AM peak period would trigger an impact that could not be fully mitigated. Thus, almost any new development on the project site, including that which would be allowed as-of-right, 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.

5. Construction Impacts

The Project will result in significant adverse traffic and noise impacts during its construction. 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 sensitive receptors along Dean Street.

The Project's localized impacts on receptors along Dean Street and near Block 927 could be avoided if new construction were not undertaken on Site 5 or Block 1127. Avoiding development on Site 5 would be inconsistent with the public policy goals of the ATURA, which call for its redevelopment with high-density uses. The Project's construction on Block 1127 is required to provide for an adequate footprint to site an arena. By avoiding new construction on this block, this alternative would fail to meet the Project's goals and would preclude a professional sports venue that would generate substantial economic and civic benefit for the City and the State.

D. Reduced Density – No Arena Alternative

The FEIS examined a Reduced Density – No Arena Alternative, which would create a mixed-use development on the portions of Blocks 1119, 1120, and 1121 that are currently owned by the MTA. The Reduced Density – No Arena Alternative would not develop other parcels on these blocks; nor would it close streets or develop parcels on the other blocks (Blocks 927, 1118, 1127, 1128, and 1129) that are part of the project site. The Reduced Density – No Arena Alternative would include residential (1,946 units), retail (116,000 sf), and open space (3.84 acres) uses, as well as 1,000 parking spaces. The residential units would include 573 affordable units. The Reduced Density – No Arena Alternative would provide for an above-grade concrete deck over the rail yard on which the alternative's 11 buildings, ranging from 4 to 28 stories with a maximum of height of 287 feet, would be built.

Like the Project, the Reduced Density – No Arena Alternative would have significant adverse impacts in the following areas, although these significant adverse impacts would occur to a lesser extent with the Reduced Density – No Arena Alternative than with the Project:

- Schools: The Reduced Density – No Arena Alternative would cause a shortfall in elementary school capacity within one-half mile of the project site. For both the Project and the Reduced Density – No Arena Alternative, the impacts on elementary schools would be partially mitigated by the provision of space for a school on site. The shortfall in elementary school seats remaining after construction of the on-site school would be less under the Reduced Density – No Arena Alternative than with the Project.

- Visual Resources: The Reduced Density – No Arena Alternative would obstruct views of the Williamsburgh Savings Bank Building from certain public vantage points. The Reduced Density – No Arena Alternative's impacts on the Williamsburgh Savings Bank Building would be an unmitigated significant adverse impact, but the impact would be of a lesser extent than the unmitigated significant adverse impact of the Project since the Reduced Density – No Arena Alternative would not obstruct views of the Williamsburgh Savings Bank Building along the Flatbush Avenue view corridor from the south.

- Shadows: The alternative would cast shadows on the Atlantic Terminal Houses open space. It is expected that the shadows impact on the Atlantic Terminal Houses open space would be partially mitigated under the Reduced Density – No Arena alternative as it will be under the Project.

- Traffic: The alternative would cause significant adverse traffic impacts at multiple intersections during both construction and operations. The Reduced Density – No Arena Alternative's traffic impacts would be mitigated to a greater extent than those of the Project. Because the alternative does not provide for an arena, during peak traffic periods for the arena there would be significantly fewer traffic impacts associated with this alternative. After the implementation of traffic mitigation measures, the alternative would have only 10 intersections with unmitigated impacts, whereas the Project will have a total of 35.[5]

- Construction: Both the Reduced Density – No Arena Alternative and the Project would have significant adverse construction impacts with respect to noise and traffic, although the impacts resulting from the alternative would be of a lesser degree. If the alternative were to be built without the comprehensive emission reduction program that will be used to constructed the Project, it could have adverse air quality impacts during construction.

The Reduced Density – No Arena Alternative would avoid other significant adverse impacts that will occur with the development of the Project:

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[5] FEIS Table 20-16, with respect to its identification of the Project's unmitigated impacts in certain peak time periods, contains several inconsistencies with the presentation of the same information in FEIS Table 19-4. The information in FEIS Table 19-4 is correct, and the inconsistencies in FEIS Table 20-16 are not correct.

- Schools: The Reduced Density – No Arena Alternative would not result in a shortfall of intermediate school seats, but it should be noted that the Project's impacts on intermediate schools are expected to be fully mitigated.

- Cultural Resources: The Reduced Density – No Arena Alternative would not require the demolition of the Ward Bread Bakery complex or former LIRR stables; nor would it cast shadows on the Church of the Redeemer's stained glass windows.

- Transit: The Reduced Density – No Arena Alternative would not result in overcrowding of the B38 bus route, but it should be noted that the Project's impacts on bus service are expected to be fully mitigated.

- Noise: The Reduced Density – No Arena Alternative would not result in significant adverse operational noise impacts due to increases in ambient noise.

- Construction: The Reduced Density – No Arena Alternative would not cause construction-related significant adverse noise impacts at the Brooklyn Bear's Garden or the Dean Playground since none of the alternative's construction activities would take place in close proximity to these open spaces.

In other areas of analysis, neither the Project nor the Reduced Density – No Arena Alternative would have significant adverse impacts, but the differences in their effects would be notable:

- Socioeconomic Conditions: The Reduced Density – No Arena Alternative would not require the displacement of existing residents or businesses on the Project Site since all of its development would take place solely over the rail yard. The Project will displace residents and businesses and institutions, but the displacement of residents and businesses will not result in significant adverse socioeconomic impacts.

- Open Space: Like the Project, the Reduced Density – No Arena Alternative would add new publicly accessible open spaces and increase the open space ratio in the residential study area as compared with the No Build condition, but the quality of the alternative's open space would be inferior to the Project's open space. The alternative's open space is composed of a number fragmented open spaces, most of which would be situated well above street level with public access points provided at limited locations. This open space would not provide an inviting environment for public use because it would have little visibility from the street, would require additional infrastructure to comply with Americans with Disabilities Act guidelines, would be separated from the surrounding neighborhood, would be narrow, and would be in shadow most of the time. The limitations of the alternative's open space are the result of attempting to develop the footprint of the alternative without relocating the rail yard, requiring the alternative's buildings to be located on a platform above street grade to provide proper clearance for the rail yard and for on-site parking.

- Infrastructure: Like the Project, the Reduced Density – No Arena Alternative would not result in significant adverse impacts on infrastructure systems, including on

sanitary sewage and stormwater systems. However, the Reduced Density – No Arena Alternative would provide for about half of the open space of the Project, and it is likely that its constrained footprint would not allow for a comprehensive stormwater management plan comparable to the Project's. Whereas the Project will decrease the volume of CSOs to New York City water bodies by 1.6 million gallons per year, it is estimated that the Reduced Density – No Arena Alternative would increase CSOs by approximately 3.8 million gallons per year compared to the No Build condition.

Although it would avoid or reduce impacts that would occur with implementation of the Project, the Reduced Density – No Arena Alternative would not fully achieve the goals and objectives of the Project. By limiting development to the rail yard, the alternative would allow blighted conditions to continue to exist on the remainder of the project site. Furthermore, despite its development over the rail yard, the Reduced Density – No Arena Alternative would fail to remove the physical and visual barrier created by the rail yard since, under the alternative, the configuration of the rail yard and the platform over the rail yard would require that buildings be elevated above street level, creating a wall along Atlantic Avenue. The alternative would therefore perpetuate the barrier between the blocks north of Atlantic Avenue and south of the project site, failing to achieve the goal of linking the surrounding neighborhoods. The Project, on the other hand, would connect the neighborhoods north and south of the project site by continuing the existing street grid north of the project site into and through the open space as pedestrian corridors.

The Reduced Density – No Arena Alternative would provide much less affordable and market-rate housing than the Project. Because it would have neither commercial space nor an arena, it would also generate far fewer jobs than the Project. Therefore, the economic benefits for the City and State would be substantially diminished. Whereas the total economic effect on the local economy from the construction of either variation of the Project is projected in the FEIS at approximately $4.9 billion in New York City and between $6.3 and $6.4 billion overall in New York State, the total effect of construction of the Reduced Density – No Arena Alternative would be only $1.6 billion in New York City and $2.1 billion in New York State. The overall effect on the local economy from operating the Project is projected at $0.9 to $2.6 billion annually in New York City and $1.1 to $3.0 billion annually in New York State, while the projected overall effect from operating the Reduced Arena – No Arena Alternative would be considerably less at $107 million annually in New York City and $125 million annually in New York State. In addition to the loss of economic benefits from the arena, the Reduced Density – No Arena Alternative would not provide the arena's entertainment and cultural benefits, or provide a valuable facility for colleges and local academic institutions, which currently lack adequate athletic facilities.

Finally, the Reduced Density – No Arena Alternative would not improve railroad and subway facilities. Under the alternative, the smaller footprint of the development would result in less space for underground facilities, including parking and the rail yard itself. The Reduced Density – No Arena Alternative's smaller rail yard would have significantly limited functionality compared with the Project's expanded rail yard and even, in some respects, compared with existing conditions. The rail yard's capacity would be only 32 train cars as compared with the existing capacity of 72 cars; the rail yard would be built on a curve rather than on a straight line because of the limitations imposed on the rail yard footprint by the existence of privately owned parcels on Block 1120; and the new West Portal and drill track would likely not be constructed, forcing a more cumbersome system of switching trains between the lead track and the rail yard. The Reduced Density – No

Arena Alternative would also not provide a new subway station entrance on the southeast corner of Flatbush and Atlantic Avenues. Without the new station entrance, pedestrians approaching the Atlantic Avenue/Pacific Street subway station complex from the south would continue to have to cross Atlantic Avenue to enter the subway station. Pedestrian access within and around the project site would also not benefit from the linkages provided through the Project's open spaces, and bicyclists would not benefit from the bike path through the project site connecting to the citywide bicycle network. The Reduced Density – No Arena Alternative, because of the smaller footprint, would not eliminate the blighted conditions at the project site.

In sum, the Reduced Density – No Arena Alternative, while developing new residential, retail, and community facilities uses over the existing rail yard, would not substantially realize the Project's goals and would not achieve many of the Project's benefits.

E. Reduced Density – Arena Alternative

The FEIS examined a Reduced Density – Arena Alternative, which would involve construction of a mixed-use development on all of Blocks 1118, 1119, 1120, 1121, and 1127, and parts of Blocks 927 and 1128. Unlike the Project, this alternative would not fully redevelop Block 1129, and it would also not develop all of the lots on Block 1128 that will be developed by the Project. The Reduced Density – Arena Alternative would close Pacific Street between 5th and 6th Avenues to accommodate its arena, but 5th Avenue between Atlantic and Flatbush Avenues and Pacific Street between Carlton and Vanderbilt Avenues would remain open. Like the Project, the Reduced Density – Arena Alternative would include an arena, as well as residential (3,649 units), commercial (638,170 sf), retail (236,850 sf), hotel (176 rooms), open space (1.84 acres) uses, and parking (4,262 spaces). The residential units would include 1,165 affordable units. The program for the Reduced Density – Arena Alternative would also include a cinema and space for light industrial uses, as well as 46,120 square feet for community facility uses. The alternative's tallest building would be 320 feet, compared to 620 feet for the Project, and, generally, Pacific Street would be lined with shorter buildings (35 to 110 feet) while taller buildings (115 to 220 feet) would be located along Atlantic Avenue. The Reduced Density – Arena Alternative would extend South Oxford Street, Cumberland Street, and Clermont Avenue through the rail yard from Atlantic Avenue to Pacific Street as vehicular streets – essentially dividing Blocks 1120 and 1121 into five parcels. Access to the arena's subgrade parking would be from a new structure on the southeast corner of 6th Avenue and Pacific Street on Block 1128. The Reduced Density – Arena Alternative's primary open space would be a public square occupying the new block bounded by 6th Avenue, Atlantic Avenue, South Oxford Street, and Pacific Street. It is assumed that there would be a new subway entrance constructed on Block 1118 under the Reduced Density – Arena Alternative.

Like the Project, the Reduced Density – Arena Alternative would have significant adverse impacts in the following areas:

- Schools: The Reduced Density – Arena Alternative would cause a shortfall in elementary school capacity within one-half mile of the project site. For both the Project and the Reduced Density – Arena Alternative, the impact on elementary schools would be partially mitigated by the provision of space for a school on site. The shortfall in elementary school seats remaining after construction of the on site school would be less under the Reduced Density – Arena Alternative than with the Project.

- Historic Resources: The Reduced Density – Arena Alternative would demolish the former LIRR stables on Atlantic Avenue and obstruct views of the Williamsburgh Savings Bank Building along the Flatbush Avenue corridor from the south as well as from other vantage points south and southeast of the project site. As with the Project, the Reduced Density – Arena Alternative's impacts on views of the Williamsburgh Savings Bank Building would be an unmitigated significant adverse impact.

- Shadows: The Reduced Density – Arena Alternative would cast shadows on the Atlantic Terminal Houses open space, resulting in a significant adverse impact. It is expected that the impact on the open space would be partially mitigated under the Reduced Density – Arena alternative as it will be under the Project.

- Traffic: The Reduced Density – Arena Alternative would cause significant adverse traffic impacts at multiple intersections. After implementation of traffic mitigation measures, the alternative and the Project would result in a similar number of unmitigated significantly impacted intersections. Specifically, the Project will result in unmitigated impacts at 35 intersections while the Reduced Density – Arena Alternative would result in unmitigated impacts at 30 intersections. The total number of intersections with unmitigated significant adverse impacts is therefore similar. For the Project, a total of 11 intersections will have unmitigated significant adverse impacts in the weekday 8-9 AM peak hour, 15 in the 5-6 PM peak hour, and 6 in the 7-8 PM pre-game peak hour. On Saturdays, 15 intersections will have unmitigated significant adverse impacts in the 1-2 PM pre-game peak hour and 28 in the 4-5 PM post-game peak hour. For the Reduced Density – Arena Alternative, a total of 8 intersections will have unmitigated significant adverse impacts in the weekday 8-9 AM peak hour, 7 in the 5-6 PM peak hour, and 6 in the 7-8 PM pre-game peak hour. On Saturdays, 14 intersections will have unmitigated significant adverse impacts in the 1-2 PM pre-game peak hour and 25 in the 4-5 PM post-game peak hour. The differences between the Project's and the Reduced Density – Arena Alternative's unmitigated traffic impacts are primarily in the non-arena peak hours. Due to its greater density, the Project has unmitigated impacts at more traffic intersections than the Reduced Density – Arena Alternative in the non-arena peak hours.[6]

- Transit and Pedestrians: The Reduced Density – Arena Alternative would result in impacts on the north crosswalks at Dean Street and 6th Avenue and Dean Street and Carlton Avenue. As with the Project, the alternative's impacts on crosswalks would be fully mitigated.

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[6] FEIS Table 20-31, with respect to its identification of the Project's unmitigated impacts in certain peak time periods, contains several inconsistencies with the presentation of the same information in FEIS Table 19-4. The information in FEIS Table 19-4 is correct, and the inconsistencies in FEIS Table 20-31 are incorrect. In addition, there are three other errors in Table 20-31 pertaining to the unmitigated traffic impacts of the Reduced Density – Arena Alternative: (i) the alternative's unmitigated significant adverse impact at the intersection of 4th Avenue and Union Street occurs during the 5-6 PM period, not the 7-8 PM period; (ii) the alternative's unmitigated significant adverse impact at the intersection of Washington Avenue and Eastern Parkway occurs during the 4-5 PM Saturday period only; and (iii) the alternative's unmitigated significant adverse impact at the intersection of Boerum Place and Livington Street occurs during the 5-6 PM weekday period only. None of the errors requires adjustment to the text of the FEIS.

- Noise: The Reduced Density – Arena Alternative would result in significant adverse operational noise impacts due to increased noise levels from traffic associated with the arena.

- Construction: Like the Project, the Reduced Density – Arena Alternative would result in significant adverse construction impacts with respect to traffic and noise. The duration of the construction for the Reduced Density – Arena Alternative is estimated at 6 years compared to 10 years for the Project. Accordingly, it is estimated that the significant adverse construction impacts for the Reduced Density – Arena Alternative would be shorter in duration than for the Project. If the alternative were to be built without the comprehensive emission reduction program that will be used to construct the Project, it could have adverse air quality impacts during construction.

Like the Project, the Reduced Density – Arena Alternative would require the displacement of existing residents and businesses on the project site. The alternative would displace fewer residents and businesses than the Project, but neither the Project nor the alternative would result in significant adverse socioeconomic impacts due to the direct displacement of residents or businesses and institutions.

The Reduced Density – Arena Alternative would avoid other significant adverse impacts that would occur with the development of the Project:

- Schools: The Reduced Density – Arena Alternative would not result in a shortfall of intermediate school capacity. This impact will be fully mitigated under the Project.

- Transit: The alternative would not result in the overcrowding of the B38 bus route. This impact will be fully mitigated under the Project.

- Historic Resources: The alternative would seek to adaptively reuse the Ward Bread Bakery complex rather than demolish it, although it would still need to be determined whether the structure could feasibly accommodate adaptive reuse and whether changes to the interior or façades would constitute a significant adverse impact with respect to its historic integrity. Although the Reduced Density – Arena Alternative would cast shadows on the Church of the Redeemer's stained glass windows, the shadows would be of shorter duration than the Project's and would not constitute a significant adverse impact.

In other areas of analysis, neither the Reduced Density – Arena Alternative nor the Project would result in significant adverse impacts, but there would be notable differences in their effects.

- Infrastructure: Like the Project, the Reduced Density – Arena Alternative would not result in significant adverse impacts on infrastructure systems, including on sanitary sewage and stormwater systems. However, the Reduced Density – Arena Alternative would provide for less than one-third of the open space of the Project, and its arrangement of buildings on the project site would not likely allow for a comprehensive stormwater management plan comparable to the Project's plan. Whereas the Project will decrease the volume of CSO discharges by 1.6 million gallons per year, it is estimated

that the Reduced Density – Arena Alternative would increase CSO discharges by approximately 0.9 million gallons per year compared to the No Build condition.

- Open Space: The open space provided by the Reduced Density – Arena Alternative would be quantitatively and qualitatively inferior to the Project's open space. The alternative's provision of 1.84 acres of open space along with the addition of 12,450 workers and residents to the study area would result in open space ratios for the alternative that would be lower than the open space ratios for the Project (and with respect to residents, lower than the open space ratio in the No Build condition). Qualitatively, the Reduced Density – Arena Alternative's open spaces would not be as attractive for public use as the Project's. Its 0.85-acre public square would be bordered on all sides by City streets, including the heavily trafficked Atlantic Avenue. Its users would be subjected to traffic noise, and pedestrian safety could be an issue. The open space would be situated between the arena and the hotel, which would isolate it from the residential neighborhood. The remainder of the alternative's 1.84 acres of open space would be discontinuous pocket parks and rear yards. The rear yards would not be publicly accessible.

The Reduced Density – Arena Alternative would leave portions of the blighted project site undeveloped, and its design would not connect the neighborhoods surrounding the project site as effectively as the Project would. Although the alternative would extend the street grid from north of Atlantic Avenue in Fort Greene to Pacific Street, it would effectively shift the boundary between the neighborhoods to Pacific Street, a narrow local traffic corridor. This extension of the street grid would be inconsistent with the existing street grid because of the skewed alignment of the Fort Greene streets that would be extended through the project site. The extension of the street grid would not improve accessibility to the project site since Atlantic Avenue is a heavily trafficked roadway.

Nor would keeping 5th Avenue open have urban design advantages. The segment of 5th Avenue between Atlantic and Flatbush Avenues is a relatively short segment that results in an awkward shape for Block 1118 and contributes to the number of intersections in this congested area of Brooklyn. Generally, the Project's closing of this segment does not adversely affect the circulation of traffic along Flatbush and Atlantic Avenues because it eliminates intersections that are near one another and that greatly complicate the timing of traffic signals. With respect to pedestrian traffic and safety, closing this segment will improve pedestrian circulation before and after arena events because it facilitates the construction of a new entrance to the Atlantic Avenue/Pacific Street subway complex that directly connects to the arena.

The projected economic and fiscal benefits from operating the Project's commercial mixed-use variation as presented in the FEIS ($2.6 billion annually in New York City and $3.0 billion annually in New York State) would exceed those of the Reduced Density – Arena Alternative ($1.3 billion annually in New York City and $1.5 annually in New York State). By contrast, because the Reduced Density – Arena Alternative would have almost twice as much commercial space as the Project's residential mixed-use variation, its operations would result in greater economic and fiscal benefits than the Project's residential mixed-use variation, the effect of which is estimated at $0.9 billion and $1.1 billion annually for the New York City and New York State economies, respectively. The economic and fiscal benefits derived from the construction of either variation of the Project would exceed those of constructing the Reduced Density – Arena Alternative. The total effect on

the local economy from construction of the alternative is projected at $4.14 billion in New York City and at $5.4 billion in New York State, compared with $4.9 billion in New York City for either of the Project's variations and $6.3 billion for the commercial mixed-use variation and $6.4 billion for the residential mixed-use variation in New York State.

To accommodate the footprint of the Reduced Density – Arena Alternative's arena, the bowl of the arena would need to be oriented north-south, which might require the extension of the footprint beyond the lot lines of Blocks 1119 and 1127 and, therefore, the acquisition of City-owned streets and the subsequent realignment of streets and reduction of sidewalk capacity. Space for loading operations would be limited. Because of the reduced footprint for the arena that would result from keeping 5th Avenue open, the Reduced Density – Arena Alternative would have to sacrifice space for luxury suites and back-of-house operations in order to maintain 18,000 seats.

Finally, the Reduced Density – Arena Alternative would not improve railroad and subway facilities and pedestrian access and safety as well as the Project would and in some respects could hamper pedestrian circulation and diminish pedestrian safety. With respect to pedestrian safety, for example, extending the Fort Greene street grid through the project site to Pacific Street would create additional points of potential pedestrian-vehicle conflicts as compared with the Project. Moreover, leaving 5th Avenue between Atlantic and Flatbush Avenues open would separate Block 1118 from the arena, which would be built on Blocks 1119 and 1127, and, because of the lack of substantial subgrade real estate, make it improbable that there could be an all-weather indoor connection between the arena and the subway. The absence of the indoor connection would result in severely congested sidewalks before and after arena events. Keeping 5th Avenue open would also reduce the space available for improvements to the rail yard. Given the north-south orientation of the arena necessitated by its location on Blocks 1119 and 1127 and the infrastructure that would be required to support the arena, there would not be sufficient room on the project site to provide for a drill track to allow for the switching of ten-car trains.

In summary, the Reduced Density – Arena Alternative would result in a mix of uses on the project site comparable to the Project but would provide approximately half of the housing units and less than a third of the open space. To maintain existing streets, this alternative would not include important aspects of the improvements to the rail yard and subway access and would forgo elements of the comprehensive stormwater management system. Rather than improving pedestrian safety and access to the site, the alternative's retention and addition streets could increase the potential for pedestrian-vehicle conflicts and result in severe congestion before and after arena events. In fact, the street may be shut down to accommodate the pedestrian flows between the arena and the subway. In addition, the design of the arena would be inferior to the Project's design because of the constraints of the footprint. This alternative would not provide the same level of housing benefits as the Project, but would result in similar significant adverse environmental impacts.

IX. Summary of Unmitigated Significant Adverse Impacts

A. Community Facilities

A deficit of approximately 986 seats in elementary schools within one-half mile of the project site would remain after construction of the on-site school. If DOE did not implement one or more of the other potential mitigation measures identified in the FEIS and Section VII.A above –

including relocation of the boundaries of school catchment areas within the CSDs, creating new satellite facilities in less crowded schools, and/or building new schools off site – the significant adverse impact on elementary schools within one-half mile of the project site would be unmitigated. There would, however, continue to be sufficient school seats in the community school districts in which the project site is located.

B. Open Space

The Project will result in a temporary unmitigated significant adverse open space impact in the non-residential study area upon completion of Phase I. The temporary significant adverse impact will be fully mitigated when the Project's open space is phased in during Phase II as specified in the Design Guidelines and partially mitigated as described in Section VII.B above.

C. Cultural Resources

The Project will result in unmitigated significant adverse cultural resources impacts due to the demolition of the former LIRR stables and the former Ward Bread Bakery complex. These impacts will be partially mitigated as a result of HABS documentation and other measures described in Section VII.E above and set forth in the LOR between ESDC, OPRHP, and the project sponsors.

The Project will also result in two other unmitigated significant adverse impacts due to (i) the loss of views of the Williamsburgh Savings Bank Building from certain public vantage points and (ii) shadows cast by the Site 5 building on the Church of the Redeemer's stained glass windows in the morning.

D. Visual Resources

The Project will result in an unmitigated significant adverse impact due to the loss of views of the Williamsburgh Savings Bank Building from certain vantage points south and southeast of the Project Site and along the Flatbush Avenue view corridor from south of the project site except from vantage points on Flatbush Avenue immediately adjacent to the project site.

E. Shadows

The Project will result in an unmitigated significant adverse impact due to shadows cast by the Project on the Atlantic Terminal Houses open space when the weather is cooler and the days are longer. The Project will also result in an unmitigated significant adverse impact due to shadows cast by the Site 5 building on the Church of the Redeemer's stained glass windows in the morning. Both impacts will be partially mitigated, as described in Sections VII.E above.

F. Traffic

In 2010, the Project will result in unmitigated significant adverse impacts at 25 intersections after implementation of all traffic mitigation measures. In 2016, the Project will result in unmitigated significant adverse impacts at 35 intersections after the implementation of all traffic mitigation measures.

G. Noise

The Project will result in unmitigated noise impacts at the Dean Playground and at the Project's on-site open space areas.

As discussed in Section VII.H above, the project sponsors will make double-glazed or storm-windows and alternative ventilation (*i.e.*, air conditioning) available, at no cost for purchase and installation, to owners of residences to the extent such measures are not already in place at all of the locations where Project noise impacts are predicted to occur. The project sponsors will also make available and install, free of charge, storm windows for windows that are on the second level of the building (above the Temple of Restoration sign) facing Dean Street and that do not currently have double-glazed or storm windows. The above measures will mitigate noise impacts for residential uses. However, at locations where owners elect not to take advantage of noise mitigation measures, the Project will have unmitigated noise impacts.

H. Construction

The Project will result in unmitigated construction impacts with respect to noise, traffic, and the demolition of two historic resources on the Project site. The Project will also result in unmitigated significant adverse localized neighborhood character impacts during construction. With respect to noise, the Project will not mitigate its construction noise impacts at the Dean Playground, Brooklyn Bear's Pacific Street Community Garden or South Oxford Park. If owners or tenants of the Temple of Restoration, the Pacific Branch Library and residences in the vicinity that will experience noise impacts elect not to take advantage of noise mitigation measures, the Project will have construction noise impacts at these locations.

X. Growth-Inducing Aspects of the Project

The Project will transform a large, prominent – but underutilized – site, at the crossroads of two of Brooklyn's most important avenues, above a major public transportation hub, and at the intersection of six distinct neighborhoods. It will introduce an arena for a major sports team and surround it with a mix of retail, hotel, office, residential, community facility, and open space uses. While the Project will improve existing infrastructure on and around the project site, including water and sewer lines, roadways, and railroad and subway facilities, the infrastructure in the study area is already well-developed such that improvements associated with the Project will not induce additional growth. While the Project's uses are expected to generate economic activity in the form of new businesses, employment, and residents on the project site and will contribute to growth in the City and State economies, they are not expected to induce additional notable growth outside the project site. With the exception of the existing manufacturing zoning districts primarily to the east of Vanderbilt Avenue along Atlantic Avenue, the ability of the Project to alter land use patterns in the study area will be minimal given existing land use patterns, existing zoning regulations, and historic district designations. Even within the manufacturing districts, the density of any development would be severely limited by the M1-1 zoning, which places significant bulk restrictions on new buildings. Unless there are profound zoning changes in the study area, the introduction of a new mixed-use development with an arena use and increased economic activity on the project site will not be expected to spur changes in the established neighborhoods elsewhere in the study area.

XI. Irretrievable Commitments of Resources

A number of resources, both natural and built, will be expended in the construction and operation of the Project. These resources include the building materials used in construction of the project; energy in the form of gas and electricity consumed during construction and operation of the arena and related development; and the human effort (time and labor) required to develop, construct, and operate various components of the Project. These resources are considered irretrievably committed because their reuse for some purpose other than the Project would be highly unlikely. The land use changes associated with the development of the project site may also be considered a resource loss. ESDC's actions constitute an irreversible and irretrievable commitment of the site as a land resource, thereby rendering land use for other purposes infeasible. However, these current land uses are dilapidated, vacated, and underutilized. The rehabilitation of the rail yard will help to modernize LIRR operations, and the renovated and reopened subway entrance will improve access to and flow within the station. Meanwhile, the new land uses associated with the Project will be similar to, and/or compatible with, those in the surrounding area.

XII. Summary Evaluation of the Project and its Alternatives

ESDC has considered carefully the facts, conclusions and analyses set forth in the FEIS, as described above. It also has reviewed in detail the hundreds of comments that have been submitted, the testimony that has been provided, and the oral comments that have been made on the DEIS, as well as the responses to those comments and testimony as they appear in the FEIS and written comments received on the FEIS. In light of all the information in the record, ESDC has determined to issue the findings required under SEQRA with respect to the Project, as set forth in Section XIII, below. This section of the findings summarizes some of the more compelling considerations that formed the basis for that determination.

The Project will have many significant social, environmental, civic and economic benefits. It will eliminate long-standing blight at the project site. It will create 8 acres of publicly accessible open space, which will be designed, landscaped and configured to be inviting to the public. Since the Project will include a network of wide pedestrian walkways and a bicycle path into the open space, it will create visual and physical links between neighborhoods that are currently divided by an open rail yard and blighted conditions. It will add a new subway entrance on the southeast corner of Atlantic and Flatbush Avenues to the 10-line Atlantic Avenue/Pacific Street subway station complex and provide a new and improved LIRR rail yard with the capacity to accommodate 10-car trains and improved train access to the LIRR Atlantic Terminal.

The Project will create an architecturally distinctive development that will invigorate the Atlantic Terminal area of Brooklyn. It will create 17 new "green" buildings that will be, at a minimum, LEED certified, which is the recognized standard for measuring environmental sustainability of new buildings. It will create a new arena that will bring a major professional sports team to Brooklyn, which has lacked such a team for decades, and will provide a venue for many other entertainment, collegiate, community and other events. The arena will be surrounded by other buildings and retail uses that create street-level activity even when there is no event at the arena, avoiding what might otherwise be a poor pedestrian experience characteristic of some other arenas.

The Project will create thousands of new housing units, including a large number of affordable units, to accommodate the demand that will exist, with or without the Project, for

housing in Brooklyn and New York City more generally. It will allow for efficient regional growth by locating a significant new development at a major transit hub and thereby encouraging the use of mass transit. It will create a new 400-bicycle indoor facility adjacent to the transit hub for use by the community. It will stimulate the New York City and New York State economies by providing thousands of jobs, significant annual tax revenues, and billions of dollars in economic activity.

At the same time, the Project will result in a number of significant environmental impacts that cannot be mitigated. These impacts have been thoroughly analyzed in the FEIS and summarized in this Findings Statement. As discussed in Sections VI and VII above, the FEIS has paid particular attention to identifying measures that will avoid or minimize these impacts to the maximum extent practicable. Yet, even after the effect of the mitigation measures is taken into account, the Project will result in a number of significant adverse impacts. Unmitigatible impacts will be caused to cultural resources (including demolition of two privately owned non-landmarked buildings that have been identified as historic resources); community facilities (a deficit in elementary school seats within one-half mile of the project site will remain after incorporating a new school into the Project); visual resources (views of the Williamsburgh Savings Bank Building will be obstructed from certain vantage points, including one of the several view corridors along which this Brooklyn icon is visible); shadows (one open space and the windows of a local church will be adversely affected); traffic noise (residential buildings, open space, a library and a church will experience noise levels in excess of relevant criteria, some of which will be mitigated by new windows); open space (a temporary decline in the passive open space ratio will be experienced prior to the opening of the Project's open space); construction (traffic and noise will increase beyond the relevant criteria and local neighborhood character will be impaired over a prolonged time period); and traffic during operations (even after mitigation, when the Project is fully built, 35 intersections will experience significant impacts in one or more through or turning movements during one or more of the seven analyzed peak time periods).

In issuing this Findings Statement, ESDC has weighed the benefits of the Project against its significant adverse environmental impacts, taking into account not only the effectiveness of the measures imposed to mitigate those impacts, but the reasonable alternatives available to avoid or reduce them. On balance, the benefits of the Project appear even more compelling when they are considered in light of the impacts and benefits of the alternatives. As discussed in Section VII of these findings, the No Action Alternative would achieve none of the Project's goals and objectives. The FEIS analyzes potential alternative locations for a new Brooklyn arena, but each alternative site identified in the City's arena studies (or by the public during the comment period on the DEIS) is inferior to the Project site: the alternative sites are no longer available due to other uses, are less transit accessible, are too small to accommodate an arena, or suffer from a combination of these deficiencies. In addition, locating the development at an alternative location would fail to achieve the central goal of eliminating the blight at the project site. For these reasons and others stated in the FEIS, an alternative location for the arena was found not to be a reasonable alternative to locating the facility at the Project site. The other alternatives to the Project fall into two categories: (i) a development without an arena; or (ii) a development with an arena, but with less housing.

The alternative of not building an arena would fail to achieve a principal benefit of the Project – providing Brooklyn, a "city" in its own right of nearly 2.5 million people but without an arena or major professional sports team – with a facility and team in keeping with the proud sports legacy of the Borough. As identified in the FEIS, the arena will result in significant traffic impacts. These impacts have been mitigated to the maximum extent practicable with a comprehensive

package of physical improvements to the traffic network, operational improvements and an innovative set of demand management strategies. As a result of this mitigation, and the location of the arena at a transit hub to reduce automobile use, the entire Project – after full build-out in 2016 and assuming a sold out Nets basketball game – will result in significant traffic impacts at only 6 intersections during the one hour pre-game period (Monday-Friday): Flatbush Avenue at Tillary Street (with respect to the southbound through movement); Flatbush Avenue at Fulton Street (eastbound approach and southbound left and through movements); Flatbush Avenue at Atlantic Avenue (eastbound through-right and right turn movements); Atlantic Avenue at Vanderbilt Avenue (westbound left-turn movement); 5th Avenue at Dean Street (eastbound and northbound approaches); and Vanderbilt Avenue at Myrtle Avenue (southbound approach). Several of the incremental traffic delays that will be experienced are substantial, and major arena events on weekend afternoons will result in a greater number of unmitigated, significantly impacted intersections due to relaxed on-street parking restrictions on weekends. Nevertheless, an arena is an important civic amenity and an arena event such as a Nets basketball game will bring not only additional traffic congestion, but also additional vitality to enrich the Brooklyn experience. On balance, ESDC finds that the arena's significant traffic impacts (as well as the other adverse impacts, such as the reduced availability of on-street parking during major arena events) are far outweighed by the social, economic and civic benefits that an arena would offer. Accordingly, ESDC, after closely examining the possibility of pursuing development at the project site without an arena, has come to the conclusion that this facility should remain as an essential component of the Project.

ESDC has also considered whether the Project should retain the arena but reduce the housing it will provide. Less housing would mean smaller buildings, fewer residents and a reduction in traffic congestion. There would be some benefits to reducing the bulk of the buildings associated with the Project. Smaller buildings would cast smaller shadows and, depending on the distribution of the massing around the project site, could reduce the visual impact on the Williamsburgh Savings Bank Building (although smaller buildings would continue to block views from a number of publicly accessible vantage points, resulting in a significant adverse visual impact). In addition, a reduction in housing would result in fewer students and less of an impact on the availability of school seats within one half mile of the project site.

Less housing (and a reduction in commercial development at the project site) would also result in some amelioration of traffic impacts in the study area. The analysis hours that best represent traffic impacts unrelated to the arena are the peak commuter rush hours in the morning and evening. The Project variation analyzed in the FEIS during these peak hour periods was the Project's commercial variation, since that variation would generate more traffic during these periods than the Project's residential variation. The Project's commercial variation would have approximately 1,700 more residential units than the Reduced Density – Arena Alternative analyzed in the FEIS, and would also have approximately one million more square feet of office space than the alternative. In the AM peak hour, the commercial variation of the Project (at full build out) would result in unmitigated significant traffic impacts at 11 intersections, compared to 8 for the Reduced Density – Arena Alternative: the three intersections impacted by the Project but not the alternative would be Flatbush Avenue at 6th Avenue (eastbound left-turn movement); Atlantic Avenue at Clermont Avenue (westbound approach); and 5th Avenue at Bergen Street (westbound approach). The Project would also affect an additional movement at the intersection of Flatbush and Myrtle Avenues, an intersection that would be significantly impacted by both the Project and the Reduced Density – Arena Alternative. These differences are significant when considered in relation to the operation of the specific intersections and traffic movements that will be affected.

However, when the network is viewed in its entirety, considering the very large number of intersections analyzed in the study area, these differences between the Project and the Reduced Density – Arena Alternative in the AM peak hour would not result in a markedly different driving experience in the area.

In the PM peak hour, the commercial variation of the Project (at full build out) would result in unmitigated significant traffic impacts at 15 intersections, compared to 7 for the Reduced Density – Arena Alternative. The 8 intersections impacted by the Project but not the alternative would be Flatbush Avenue at Fulton Street (southbound left-turn movement); Flatbush Avenue at Atlantic Avenue (eastbound through-right movement); Atlantic Avenue at Nevins Street (westbound approach); Atlantic Avenue at South Portland Street (westbound left-turn movement); Atlantic Avenue at Clermont Street (eastbound left-turn movement); Vanderbilt Avenue at Dean Street (eastbound approach); Adams Street at Tillary Street (northbound left-turn movement); and Washington Avenue at Eastern Parkway (southbound approach). (The Project would also impact an additional movement at the intersection of Atlantic Avenue and Vanderbilt Avenue and an additional movement at the intersection of Vanderbilt Avenue and Washington/Underhill Avenues, which are intersections that would be significantly impacted by both the Project and the Reduced Density – Arena Alternative.) Several of these incremental delays for turning movements at particular intersections within the study area will be substantial. Nevertheless, when the street network is viewed as a whole, in light of the very large number of intersections analyzed in the study area, these differences between the Project and the Reduced Density – Arena Alternative in the PM rush hour would not be so notable for most drivers. While the differences are significant at individual intersections, they would not substantially alter the area-wide driving experience.

While a development such as the Reduced Density – Arena Alternative would result in a reduction in traffic and other environmental impacts as compared to the Project, it would also have fewer benefits. This alternative would provide much less market rate and affordable housing units than the Project, much less office space than the commercial variation of the Project and much less (and inferior) open space. To meet expected regional growth in the demand for housing and office space, these lost housing units and office space would need to be built elsewhere within the City or region. From a regional planning standpoint, accommodating anticipated growth at a major in-City transit hub such as the project site is good public policy and offers distinct environmental benefits by encouraging the use of mass transit and re-use of urban land. Due to careful planning and the incorporation of sustainable design features, the Project will accommodate the density of the housing and other development located at the project site with minimal impacts to many aspects of the environment. Each of the Project's 17 buildings will be LEED-certified. At full build out, the Project will result in a net reduction in the volume of CSOs to City water bodies. Eight acres of publicly accessible open space will be created by platforming over the rail yard and concentrating the Project's density in tall buildings rather than spreading it across the site. Moreover, the Project has incorporated a number of measures to minimize the environmental impacts of the construction activities required to provide the needed housing and office space, and the arena. For example, a variety of measures will be taken to reduce DPM emissions from what they would be if standard construction techniques were used.

ESDC has taken a hard look at pursuing development at the project site with less housing and less office space. After considering carefully both the benefits of the Project and the associated environmental impacts disclosed in the FEIS, ESDC has determined that the density of the Project at the project site is appropriate and that the social, economic and environmental benefits of its

density outweigh the marginal reduction in traffic and other environmental impacts that could be achieved through a further reduction in density.

XIII. Conclusions and Certification of Findings Required by SEQRA

Having considered the DEIS and the FEIS, including the comments on the DEIS and responses thereto, and comments received on the FEIS, and the preceding written facts and conclusions, ESDC finds and certifies that:

(1) the requirements of Article 8 of the New York Environmental Conservation Law and its implementing regulations, 6 N.Y.C.R.R. Part 617, have been met;

(2) consistent with social, economic and other essential considerations from among the reasonable alternatives available, the Project is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that the FEIS and this Findings Statement have identified as practicable.

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Signature of Responsible Officer: Eileen Milderberger

Name of Responsible Officer: Eileen Milderberger

Title of Responsible Officer: Chief Operating Officer

Date: 12/08/06