## A. INTRODUCTION

In November 2006, the New York State Urban Development Corporation, a public benefit corporation of New York State doing business as Empire State Development (ESD), in cooperation with the Metropolitan Transportation Authority (MTA) and the City of New York (the City), issued the Final Environmental Impact Statement (FEIS) for the Atlantic Yards Arena and Redevelopment Project (the Project) in Brooklyn. The 2006 FEIS was prepared under the State Environmental Quality Review Act (SEQRA), codified at New York Environmental Conservation 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), with ESD as the lead agency. At its December 2006 Board of Directors meeting, ESD adopted its SEQRA findings and affirmed a Modified General Project Plan (the 2006 MGPP) for the Project.

The 2006 MGPP and 2006 FEIS described and examined the Project in two phases (Phase I, assumed to be completed in 2010, and Phase II, assumed to be completed in 2016). Phase I includes an Arena, four other buildings (Buildings 1, 2, 3, and 4) and a new subway entrance on the Arena Block, which is located at the southeast corner of Atlantic and Flatbush Avenues, in the area bounded by Atlantic, Sixth, and Flatbush Avenues and Dean Street. Phase I also includes a building on Site 5, which is located at the southwest corner of Atlantic and Flatbush Avenues, and a new rail yard and associated facilities for the Long Island Rail Road (LIRR) south of Atlantic Avenue in an area spanning portions of the Arena Block to Vanderbilt Avenue. In addition, Phase I includes parking facilities located on the Arena Block, Site 5 and south of Atlantic Avenue between Sixth and Vanderbilt Avenues, including temporary parking facilities on Block 1129, between Vanderbilt Avenue, Carlton Avenue, Pacific Street, and Dean Street. Phase II is comprised of a platform over the new LIRR yard, 11 buildings (Buildings 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15) south of Atlantic Avenue between Sixth and Vanderbilt Avenues, below-grade parking facilities in that area, and 8 acres of publicly accessible open space in that area. Phase I includes all components of the Project west of 6th Avenue and some components east of 6th Avenue; all Phase II components are east of 6th Avenue.

In connection with the preparation of the 2006 FEIS and 2006 MGPP, Design Guidelines for the Project were prepared in close consultation with the New York City Department of City Planning (DCP). The Design Guidelines were annexed as Exhibit B to the 2006 MGPP and provide a design framework for the Atlantic Yards development. They establish "general goals and objectives" for the Project as a whole and provide specific design guidelines for each development parcel and the 8 acres of publicly accessible open space. The Design Guidelines also incorporate their own appendices that include drawings defining an envelope for each building, with dimensions establishing height limits and setback requirements.

The 2006 MGPP also included a one-page exhibit (Exhibit C) titled "Atlantic Yards Building Heights & Square Footages." This document contains a table with the maximum height and floor

area (in gsf) for each building, as well as the maximum floor area for Phase I of the Project, for Phase II of the Project, and for the Project as a whole.

In June 2009, ESD approved a resolution adopting certain modifications to the 2006 MGPP as set forth in a second Modified General Project Plan (2009 MGPP). The 2009 MGPP did not modify the Design Guidelines, which were annexed as Exhibit B to the 2009 MGPP. The 2009 MGPP also did not modify Exhibit C to the 2006 MGPP, which was annexed as Exhibit C to the 2009 MGPP.

A Technical Memorandum (2009 Technical Memorandum) was prepared that described the proposed modifications, changes related to design development, changes to the Project's assumed schedule, and changes in background conditions, and (employing certain updated *City Environmental Quality Review (CEQR) Technical Manual* methodologies) assessed whether the Project as envisioned would result in any new or different significant adverse environmental impacts not previously disclosed in the 2006 FEIS. The 2009 Technical Memorandum discussed shifts in assumed completion years for Phase I of the Project from 2010 to 2014, and full build-out from 2016 to 2019. In addition, the 2009 Technical Memorandum assessed the potential for a delayed completion of Building 1 (the commercial building on the Arena Block) as well as a post-2019 build-out scenario for the Project, for which 2024 was selected as a hypothetical completion year.

On the basis of the 2006 FEIS and 2009 Technical Memorandum ESD determined that an SEIS was not required or warranted in connection with the 2009 MGPP. However, that determination was challenged in a proceeding before the Supreme Court for New York County. In a Decision and Order dated November 9, 2010, the Court directed ESD to make additional findings on the effect of certain Project-related agreements on the schedule for construction of the Project, and on whether an SEIS should be prepared.

Thereafter, a second technical memorandum (the 2010 Technical Analysis) was prepared to comply with that order. The 2010 Technical Analysis evaluated the potential for new significant adverse environmental impacts not previously disclosed in the 2006 FEIS from a prolonged delay beyond the 2024 hypothetical completion year assessed in the 2009 Technical Memorandum. For analysis purposes, the potential post-2024 condition was assumed to extend to 2035. On the basis of the 2006 FEIS, the 2009 Technical Memorandum and the 2010 Technical Analysis, ESD determined that an SEIS was not warranted. That determination was subsequently challenged.

In an Order dated July 13, 2011, the Court rejected the SEQRA challenges to Phase I of the Project "[g]iven the extent to which construction of Phase I has already occurred, under a plan which has been subjected to and withstood challenge," noting that "this is not a case in which the Project has been implemented without any prior 'valid environmental review.'" However, the Order, while allowing Phase I of the Project to proceed, remanded "the matter…to ESD for further environmental review consistent with this decision, including preparation of a Supplemental Environmental Impact Statement assessing the environmental impacts of delay in Phase II construction of the Project; the conduct of further environmental review proceedings pursuant to SEQRA in connection with the SEIS, including a public hearing if required by SEQRA; and further findings on whether to approve the MGPP for Phase II of the Project." In 2012, that Order was affirmed by the Appellate Division of State Supreme Court.

As required by the Court Order, this SEIS has been prepared to examine the potential for impacts from the Project accounting for a prolonged construction of Phase II (the Extended Build-Out

Scenario). However, this SEIS supplements the analysis of environmental impacts in the 2006 FEIS and would not preclude development of the Project pursuant to a schedule comparable to the schedule assumed in the 2006 FEIS.

The *CEQR Technical Manual* will serve as a general guide on the methodologies and impact criteria for evaluating potential effects on the various environmental areas of analysis. That manual has been revised since the 2006 FEIS was prepared. The analysis set forth in the SEIS utilized the updated methodologies and criteria recommended in the most recent version of the manual. The SEIS also examines whether the mitigation for Phase II imposed by ESD in 2006 (based on the 2006 FEIS and its 2016 build year) should be adjusted in light of the conclusions of the SEIS, and whether any additional mitigation should be imposed on Phase II to account for any new or different environmental impacts from the prolonged construction of Phase II.

In addition, the SEIS considers two proposed changes to the project program for Phase II: a proposed shift of up to approximately 208,000 gross square feet (gsf) of floor area from Phase I of the Project to Phase II of the Project, and a reduction of the number of parking spaces on the project site from 3,670 spaces as analyzed in the 2006 FEIS to 2,896 spaces. The proposed increase in the aggregate floor area of Phase II of the Project would not change the location, uses, size and form of the Phase II buildings as governed by the Project's Design Guidelines, nor would it change the maximum square footage of any of the individual Phase II buildings as set forth in Exhibit C of the 2009 MGPP that ESD approved for the Project in 2006. The proposed shift of floor area from Phase I to Phase II would not affect the affordable housing requirements for Phase I or the Project as a whole, and would not modify the maximum square footage permitted for the Project. The proposed change in the number of parking spaces reflects lower demand for on-site Arena parking than was assumed in the 2006 FEIS.

## B. PROJECT BACKGROUND

### PROJECT ANALYZED IN THE 2006 FEIS

The Project analyzed in the 2006 FEIS involved the redevelopment of 22 acres in the Atlantic Terminal area of Brooklyn, New York. The project site is 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 is a land use improvement and civic project of ESD, and would eliminate blighted conditions in the area by implementing development that would include a new Arena for the New Jersey Nets National Basketball Association team (which is now completed), along with commercial office and retail, possible hotel, open space, and residential uses, including affordable housing. The Project would also partially relocate, platform over, and improve the LIRR Vanderbilt Yard (rail yard), which, together with a New York City Transit (NYCT) yard for retired buses, occupies approximately nine acres of the project site. (The buses have been removed since completion of the 2006 FEIS.)

The 2006 FEIS analyzed two build years for the Project: 2010 (assuming completion of Phase I), which included development of the entire program slated for the project site west of 6th Avenue, the new LIRR rail yard and new parking facilities; and 2016 (assuming completion of Phase II), when the buildings at the eastern end of the project site—together with the Phase I development—were assumed to be developed and occupied. As described in the 2006 FEIS, at full Build-Out, the approved Project would comprise the 150-foot-tall Arena and 16 other buildings with maximum heights ranging from approximately 184 feet to approximately 620 feet.

The 2006 FEIS examined two variations of the project program, reflecting what was anticipated as the range of reasonable worst-case development scenarios for the programming of three of the Project's 17 buildings: (1) a residential mixed-use variation containing approximately 336,000 gsf of commercial office space, 165,000 gsf of hotel use (approximately 180 rooms), 247,000 gsf of retail space, and up to approximately 6.4 million gsf of residential use (approximately 6,430 units); and (2) a commercial mixed-use variation with more commercial office use in three buildings closest to Downtown Brooklyn and potentially containing up to approximately 1.6 million gsf of commercial office space, 247,000 gsf of retail space, and approximately 5.3 million gsf of residential use (approximately 5,325 units). Both variations would provide eight acres of publicly accessible open space, and an enclosed, publicly accessible Urban Room. Both variations also assumed that community facility uses would occupy portions of the retail and residential space. In addition, both program variations included approximately 3,670 parking spaces. Both variations included as part of the Project a new subway entrance at the southeast corner of Atlantic and Flatbush Avenues, which would provide direct pedestrian access at the western end of the project site to the Atlantic Avenue/Pacific Street subway complex. In addition, the Project as described in the 2006 FEIS also would include several roadway and pedestrian circulation changes near the project site. Finally, as mitigation, both variations included, at the option of the New York City Department of Education, a 100,000 gsf public school on the Phase II project site.

## MODIFICATIONS CONSIDERED IN THE 2009 TECHNICAL MEMORANDUM

In June 2009, ESD approved a resolution adopting certain modifications to the 2006 MGPP in a revised Modified General Project Plan (the 2009 MGPP). The 2009 MGPP allowed the project sponsors (affiliates of Forest City Ratner Companies [FCRC]) to acquire certain areas of the project site and the air rights over the rail yard in stages, rather than all at once at the outset of the Project.

In addition, certain design changes were made to the Project. In a letter to the Speaker of the State Assembly dated December 20, 2006 (and thus after the FEIS), FCRC stated that it would cap the height of the Project's tallest building (Building 1) at less than 512 feet so that the Williamsburgh Savings Bank building would remain the tallest building in Brooklyn. (Subsequently, new residential buildings at 388 Bridge Street and 111 Lawrence Street surpassed the height of the Williamsburgh Savings Bank building.) At that time, it was assumed that the floor area of Building 1 eliminated by a height reduction would be distributed to the other Phase I buildings within the Design Guideline bulk envelopes for those buildings. Other design changes included the elimination of the private open space on the roof of the Arena; changes to the arena footprint and design layout that resulted in a relocation of 100 parking spaces off the Arena Block; reconfiguration of the LIRR rail yard including a partial relocation of the LIRR drill track; retaining the existing 6th Avenue Bridge; and crosswalk widenings and other changes to lay-by lanes on the Arena Block.

## PROJECT-RELATED AGREEMENTS WITH PUBLIC AGENCIES

At a master closing held on December 21-23, 2009, several hundred contracts were executed to implement the Project, many of which were placed in escrow until certain conditions were satisfied. Among the parties to these contracts were ESD, MTA, the LIRR Company, New York City Transit Authority, the City of New York, Brooklyn Arena Local Development Corporation, several FCRC affiliates and various other entities. After acquisition by condemnation of certain Project properties (as discussed below), several of the documents were released from escrow on

March 4, 2010 and became effective on that date, and, after vacant possession of certain of these properties was obtained, the remainder of the documents were released from escrow and became effective on May 12, 2010, the "Project Effective Date." A detailed description of each contract is not needed for this SEIS, but a general overview of several of the more important contracts is provided to present background information on the status of Project implementation to date, and to highlight contractual provisions relevant to the outside dates of the schedule and the potential sequence of future construction of Project buildings under an Extended Build-Out Scenario.

*AGREEMENTS RELATING TO PUBLIC FUNDING*

In 2006 and 2007, the State Legislature appropriated $100 million towards the Atlantic Yards Project. On September 12, 2007, in order to implement these appropriations, and after affirmation of the 2006 MGPP by the ESD Directors, ESD and certain FCRC affiliates entered into the State Funding Agreement, whereby certain FCRC affiliates agreed, subject to certain specific conditions, to carry out the Project in accordance with the General Project Plan (as modified from time to time), and ESD agreed, subject to certain specified conditions, to reimburse the FCRC affiliates for up to $100 million for certain costs incurred by the FCRC affiliates for Project infrastructure. The infrastructure costs eligible for reimbursement under the State Funding Agreement included the new subway station entrance on the Arena Block, the Carlton Avenue Bridge over the rail yard, the LIRR temporary and permanent rail yard, the platform over the rail yard, environmental remediation, Arena-related parking facilities and certain sitework and utilities. As of September 17, 2009 (the date the 2009 MGPP was affirmed by the ESD Directors), ESD had funded or approved disbursements totaling approximately $75 million (of the $100 million) for infrastructure costs incurred by FCRC affiliates. On December 23, 2009, and again on August 27, 2010, the State Funding Agreement was amended to encompass, among other things, additional infrastructure work and certain other Project costs. The balance of the $100 million State contribution towards the Project has been paid to FCRC affiliates to reimburse the affiliates' infrastructure expenses for the Project in accordance with the Agreement.

The City also provided capital funds towards the Project. On September 12, 2007, the New York City Economic Development Corporation (EDC) and ESD signed the City Funding Agreement under which EDC agreed to provide ESD with up to $100 million to fund the purchase of certain land comprising the Arena Block contingent upon FCRC having spent $100 million on eligible Project infrastructure not reimbursed by State or City contributions. On October 20, 2009, and again on August 27, 2010, the City Funding Agreement was amended, initially to increase funds available for Project land purchase by $31 million (to $131 million total) and subsequently to provide an additional $32.5 million for further Project and City infrastructure, including Carlton Avenue bridge work and certain water main work not required for the Project, but built on behalf of the City. The $131 million of acquisition funds, and the bulk of the $32.5 million of infrastructure funds, have been expended. The City is also expected to provide subsidies to the Project's affordable housing units through the Project's participation in the City's affordable housing programs.

As a condition of receiving the State or City funding, these funding agreements impose certain obligations on FCRC affiliates. The funds received must be utilized solely for construction of the identified Project infrastructure work. More generally, the funding agreements obligate the FCRC affiliates to carry out the Project in accordance with the General Project Plan as the same may be modified from time to time.

*LAND ACQUISITION FUNDING, PROPERTY MANAGEMENT AND RELOCATION AGREEMENT*

On September 18, 2009, ESD and certain FCRC affiliates entered into the Land Acquisition Funding, Property Management and Relocation Agreement as amended by the First Amendment to Land Acquisition Funding, Property Management and Relocation Agreement, dated December 23, 2009 (the document as amended is referred to below as the "Land Acquisition Agreement"), in which ESD agreed to acquire certain properties required for the Project, including, if required, commencing eminent domain proceedings, and certain FCRC affiliates agreed to pay the costs incurred by ESD in connection with the acquisition of those properties. ESD commenced an eminent domain proceeding in the New York State Supreme Court for Kings County on December 23, 2009 for portions of the project site. The properties sought to be acquired in that proceeding were:

- The Arena Block (comprising Block 1118, Block 1119, Block 1127, the segment of Pacific Street between Flatbush and Sixth Avenues and the segment of Fifth Avenue between Flatbush and Atlantic Avenues), for the Arena, Urban Room, new subway entrance, and residential Buildings 1 through 4;
- Block 1129, for interim surface parking and construction staging and thereafter Buildings 11 through 14 and open space;
- Block 1120, Lot 35, for interim use as access to the Vanderbilt Yard and surface parking, and thereafter Building 7 and open space;
- Block 1121, Lots 42 and 47, for interim use in connection with the Vanderbilt Yard and thereafter Building 10 and open space; and
- Pacific Street between Carlton and Vanderbilt Avenues, for interim surface parking and construction staging and thereafter Buildings 9, 11, and 13 and open space.

On March 1, 2010, the New York State Supreme Court for Kings County vested title in all of the aforementioned properties in ESD.

On June 5, 2011, ESD commenced an eminent domain proceeding in the New York State Supreme Court for Kings County to acquire permanent and temporary easements in two properties adjacent to the Vanderbilt Yard. The two properties in which easements were sought to be acquired were: Block 1120, Lots 19 and 28. ESD sought the easements in order to permit the installation of a support-of-excavation system. The support-of-excavation system was necessary in order to protect the as-built structures on Lots 19 and 28 during the excavation for construction of the new Vanderbilt Yard. The Lot 19 easements were acquired on June 30, 2011. The Lot 28 easements were acquired on December 22, 2011.

Pursuant to the Land Acquisition Agreement, the FCRC affiliates have reimbursed (and continue to reimburse) ESD for the cost of acquiring these properties.

*THE DEVELOPMENT AGREEMENT*

The Development Agreement among ESD and certain FCRC affiliates, which was executed in December 2009 and effective in March 2010, requires FCRC, through those affiliates, to develop and construct the Project defined in the MGPP, in accordance with the Design Guidelines.

The Development Agreement establishes the general legal framework for the Project and sets forth the contractual commitments among the parties on matters such as property acquisition, ownership and control; asbestos remediation and building demolition; Project construction; Project construction schedules; implementation of environmental remediation and mitigation measures; affordable housing requirements; school construction obligations; the provision of open space; parking requirements; events of default; and remedies for default. Some provisions of the Development Agreement relating to Project construction are as follows:

- FCRC was required to substantially complete the Arena by 6 years after May 12, 2010 (the "Project Effective Date"), subject to specified force majeure provisions. The Arena was completed in 2012, well within this deadline. All Arena pre-conditions were also timely satisfied, including but not limited to construction of the new subway entrance and reconstruction of the Carlton Avenue Bridge.
- FCRC must commence and construct the new LIRR rail yard in accordance with the Yard Relocation and Construction Agreement.
- The Development Agreement outlines a process for the development of a non-Arena building. Upon acquisition by ESD of the applicable property, ESD and an FCRC affiliate enter into an interim ground lease with respect to the property under which the tenant has the right to request a development lease for all or a portion of the property demised under the interim ground lease. The tenant is then required to deliver a completion guaranty in accordance with the terms of the development lease prior to the commencement of construction under the development lease. Upon completion of construction of the applicable building under the development lease, ESD conveys fee title to the premises to the tenant or its designee, and the development lease is terminated.
- The Development Agreement allows FCRC to assign its interest under an interim lease or a development lease (and thus its right to develop the building to be constructed under a development lease) to another developer (or to a joint venture of FCRC and another developer), subject to certain terms and conditions, allowing additional capital resources to flow into the development process. FCRC is also permitted, subject to certain terms and conditions, to enter into a joint venture with another developer or investor (or multiple joint ventures with more than one developer or investor) for one or more of the Project buildings. Such an assignment or joint venture is subject to the Project requirements, including those imposed by the General Project Plan, Development Agreement, and the applicable lease provisions.
- FCRC must substantially complete a minimum of 1.5 million gross square feet of Phase I development (not including the Arena) not later than 12 years after the Project Effective Date (i.e., by May 12, 2022), subject to specified force majeure provisions.
- In addition to the 12-year outside date for substantial completion of most of the Phase I development, deadlines are imposed for the construction of individual Phase I buildings. Subject to specified force majeure provisions, FCRC must begin construction of (i) the first non-Arena building on the Arena Block within 3 years of the Project Effective Date (i.e., by May 12, 2013) (this obligation was timely met, with ground being broken for Building 2 in December 2012); (ii) the second non-Arena building on the Arena Block within 5 years of the Project Effective Date (i.e., by May 12, 2015); and (iii) the third non-Arena building on the Arena Block within 7 years of the Project Effective Date (i.e., by May 12, 2017), with certain rights to increase the time frames by up to 3 years in certain circumstances.

- Within 10 years of the Project Effective Date (i.e., by May 12, 2020), subject to specified force majeure provisions, FCRC is required to commence construction of one of the residential buildings on Block 1129.
- Within 15 years of the Project Effective Date (i.e., by May 12, 2025), subject to specified force majeure provisions, FCRC is required to commence construction of the LIRR platform and deliver a guarantee of completion of the platform.
- FCRC must use commercially reasonable efforts to cause the Substantial Completion of the Project to occur by December 31, 2019 but in no event later than the Outside Phase II Substantial Completion Date, in each case as extended on a day-by-day basis as a result of specified force majeure provisions. The Outside Phase II Substantial Completion Date is the 25th anniversary of the Project Effective Date (i.e., May 12, 2035).

The Project must comply with the Amended Memorandum of Environmental Commitments (MEC) dated as of December 21, 2009. The MEC specifies certain environmental commitments and mitigation measures that FCRC is required to adhere to with the respect to implementation of the Project.

*LEASES WITH FCRC AFFILIATES*

As set forth in the Development Agreement, and as mentioned in ESD's legal notice dated June 26, 2009, simultaneously with the acquisition of any parcels by ESD, those parcels are to be leased to FCRC affiliates under "interim leases" prior to the time they are slated for construction, and "development leases" as the time for construction of each individual parcel approaches. At the December 2009 closing, ESD entered into various interim leases with FCRC affiliates for the Arena Block and certain of the Phase II properties. These leases became effective shortly after March 1, 2010 when ESD acquired title to certain parcels on the project site pursuant to the vesting Order of the New York State Supreme Court for Kings County as described above. Some of the more relevant provisions of the leases with respect to the Phase II properties are discussed briefly below.

On March 4, 2010, ESD as landlord entered into an agreement of interim lease with an FCRC affiliate (Atlantic Yards Development Company, LLC) as tenant with respect to land acquired by ESD on and adjoining Blocks 1120 and 1121 (Lot 35 on Block 1120; the portion of Lots 42 and 47 on Block 1121 lying at and above a specified horizontal plane; and the northerly half of Pacific Street between Carlton and Vanderbilt Avenues). An amendment to this lease was made on February 28, 2012. The interim lease provides that the Project buildings on Blocks 1120 and 1121 may only be constructed if and when the interim lease tenant has caused the creation of individual development parcels pursuant to the terms of the interim lease. The interim lease allows its rights to be assigned to a Permitted Developer not affiliated with FCRC under certain circumstances

On March 4, 2010, ESD as landlord entered into an agreement of interim lease with an FCRC affiliate (AYDC Interim Developer, LLC) as tenant with respect to land acquired by ESD on and adjoining Block 1129 (all lots on Block 1129 and the southerly half of Pacific Street between Carlton and Vanderbilt Avenues). The interim lease provides that the Project buildings on Block 1129 may only be constructed if and when the interim lease tenant has caused the creation of individual development parcels pursuant to the terms of the interim lease. The interim lease allows its rights to be assigned to a Permitted Developer not affiliated with FCRC under certain circumstances.

On July 26, 2011, ESD as landlord and an FCRC affiliate (AYDC Regional Development Company, LLC) as tenant entered in a development lease with respect to a development parcel on Block 1129 (Parcel 12, the development site for Building 12). The development lease allows its rights to be assigned to a Permitted Developer not affiliated with FCRC in certain specified circumstances. On the same date, an amendment was made to the interim lease for Block 1129 severing the premises demised under this development lease from the premises demised under the interim lease.

On February 28, 2012, ESD as landlord and an FCRC affiliate (AYDC Regional Development Company, LLC) as tenant entered in a development lease with respect to a development parcel on Block 1129 (Parcel 11, the development site for Building 11). The development lease allows its rights to be assigned to a Permitted Developer not affiliated with FCRC in certain specified circumstances.

Also on February 28, 2012, ESD as landlord and an FCRC affiliate (AYDC Regional Development Company, LLC) as tenant entered in a development lease with respect to a development parcel on Block 1129 (Parcels 13/14, the development site for Buildings 13 and 14). The development lease allows its rights to be assigned to a Permitted Developer not affiliated with FCRC in certain specified circumstances.

*MTA-RELATED AGREEMENTS*

At the December 2009, March 2010 and May 2010 closings, MTA, LIRR, ESD, ESD-affiliate Brooklyn Arena Local Development Corporation, various FCRC affiliates, and various other entities entered into a complex series of agreements, declarations and transactions under which, among other things: ESD acquired title to certain MTA properties and leased those properties over to an FCRC affiliate for development and operation of the Arena; MTA subdivided the air space above the Vanderbilt Yard to create up to six separate air space parcels, and granted FCRC affiliates the right to acquire such parcels for development of the Project, subject to extensive obligations imposed under related agreements; and MTA created the easements necessary to allow the Project to be constructed. A brief summary of some of the fundamental terms of certain of these agreements is set forth below.

*Sale-Purchase Agreement for Arena Block Properties*

Pursuant to the Sale-Purchase Agreement dated March 4, 2010, MTA conveyed Block 1119, Lot 7 (on the Arena Block) to ESD upon payment of the purchase price by an FCRC affiliate. ESD (through Brooklyn Arena Local Development Corporation) subsequently entered into a ground lease with an FCRC affiliate for construction and operation of the Arena on this and certain other Arena Block properties.

*Declaration of Easements by MTA for Vanderbilt Yard, Brooklyn, Block 1120, Lot 1 and Block 1121, Lots 1, 42, and 47; and Air Space Parcel Purchase and Sale Agreement for Air Space over Block 1120, Lot 1 and Block 1121, Lot 1*

Under these documents, MTA subdivided portions of the Vanderbilt Yard property into a "Yards Parcel" lying below a specified horizontal plane and an "Air Space Parcel" above that plane, and granted easements allowing Project construction within and over the Yard. The Air Space Parcel may be subdivided into six Air Space Subparcels (corresponding to the six buildings over the Yard, i.e., Buildings 5, 6, 7, 8, 9, and 10) to facilitate acquisition and development of the Air Space Subparcels. Key provisions include:

- An FCRC affiliate is granted the right "from time to time" until June 1, 2031 to purchase any of the Air Space Subparcels, subject to certain conditions. One such condition is that FCRC has constructed the new LIRR rail yard in accordance with the Yard Relocation and Construction Agreement (which is discussed below).
- At the closing of such Air Space Subparcel, MTA is to deliver fee title to such Subparcel to a specified FCRC affiliate or its designee. It is anticipated that ESDC will be the designee, and will simultaneously lease such Air Space Subparcel to an affiliate of FCRC. The FCRC affiliate that has so acquired the Air Space Subparcel for the Project is granted the right to convey its rights in such Air Space Subparcel to another entity (such as a third-party developer) subject to certain conditions.
- The MTA may terminate FCRC's right to acquire the Air Space Parcel if the new LIRR rail yard is not completed by 90 days after September 1, 2016, subject to certain extensions and payment of per diem fees.
- The Declaration also: (i) creates various easements allowing construction of the platform and other Project components within and above the Yards Parcel; and (ii) imposes upon the developer of those improvements various obligations relating to the design, construction and maintenance of the Project components within and over the Yards Parcel.
- Each separate Air Space Subparcel owner must build and contribute to the continued maintenance of its portion of the platform in accordance with plans and specifications approved by the MTA parties.

The specific parties to the Air Space Parcel Purchase and Sale Agreement, dated as of March 10, 2010, are MTA as seller and an FCRC affiliate (Atlantic Yards Development Company, LLC) as purchaser. LIRR is also a party to this agreement. Pursuant to this agreement, the FCRC affiliate holds the exclusive right to purchase the air space parcel over the rail yard on Phase II of the project site. ESD is not a party to this Agreement, but it contemplates a conveyance of title from the FCRC affiliate to ESD and a leaseback to FCRC.

*Yard Relocation and Construction Agreement*

The Yard Relocation and Construction Agreement among MTA, LIRR, and certain FCRC affiliates, effective as of March 2010, sets forth the terms and conditions for the construction of the new Vanderbilt Yard. Under that agreement, FCRC was obligated to first provide a temporary rail yard and maintenance facility to support rail operations for an interim period, and then construct a new rail yard and associated facilities (such as an employee facility, access ramp, parking area, substation, drill track and storage area). Construction of the temporary rail yard has already been completed in accordance with this Agreement. Under the Agreement:

- The new yard must be designed and constructed in accordance with specific design criteria, which are attached as exhibits to the Agreement. The Agreement also puts into place an orderly process for the development, review and approval of the design for the new yard, and the schedule for its construction.
- Several preconditions must be satisfied before construction of the new yard may commence, including the delivery of a guarantee of the performance of the work from Forest City Enterprises, Inc. (a publicly traded Ohio corporation) to the MTA and the posting of a letter of credit in favor of the MTA.
- Construction of the permanent yard was initially required to begin by June 30, 2012, subject to specified force majeure provisions. That deadline was subsequently modified by the MTA

in connection with FCRC's commitment to continue construction of certain rail yard improvements. Currently, the contractual outside date for FCRC's delivery of a completion guarantee to MTA for the permanent rail yard is June 30, 2014. The New Yard Construction Completion deadline of September 1, 2016 remains unchanged.

*Air Space Parcel Development Agreement*

The parties to this Agreement, dated March 2010, are MTA, LIRR and certain FCRC affiliates. The Agreement sets forth the parties' obligations with respect to the construction of the Project in and above the Vanderbilt Yard. Certain relevant provisions are summarized below:

- The Agreement allows work on the new platform(s) over the Yard to be performed within up to three separate "Platform Construction Periods," with the work within each period being completed as a single coordinated development. The Air Space Subparcels affected during each Platform Construction Period must be contiguous to each other, and the work in each subsequent Platform Construction Period must be contiguous to completed work. The Agreement allows the Platform Construction Periods to be "continuous with one another and [to] overlap in timing." It also expresses the MTA parties' preference, but not a requirement, that construction of the platform proceed from east to west across the rail yard.
- The Agreement establishes an orderly process for the MTA parties' review of the design of the platform(s), requiring among other things, phased design submissions by FCRC.
- Similarly, an orderly process is set up for the development and periodic updating of a schedule for the construction of each phase of the platform work.
- FCRC is obligated to have substantially completed construction of the entire platform within 25 years from the "Project Effective Date" (i.e., May 12, 2035), subject to specified force majeure and other provisions.

## CURRENT PROJECT STATUS

Since approval of the project in December 2006, a number of project-related construction and design tasks have been undertaken. Key areas of construction include: clearance of most of the buildings on the project site; completion and opening of the Arena, which is now known as Barclays Center; completion and opening of the new subway entrance on the Arena Block; the re-routing of water, sewer and utility lines around the Arena Block; a new water main built on behalf of the City on Atlantic Avenue; roadway modifications; work on the new LIRR rail yard and the new Carlton Avenue Bridge spanning the rail yard; construction of a surface parking lot on Block 1129; and commencement of construction of the first residential building (Building 2) on the Arena Block (on which ground was broken on December 18, 2012). Concurrently, ESD and the project sponsors have implemented many of the commitments and mitigation measures described in the 2006 FEIS and MEC and have provided relocation assistance to residents and businesses displaced from the project site. ESD maintains an active website to provide updates on the Project and a venue for public information on the Project's construction.

Progress to date on key construction and mitigation tasks includes:

- **Site Clearance:** Abatement and demolition work has been completed across most of the project site.
- **Water and Sewer Improvements:** The water and sewer infrastructure work for Phase I of the Project has been completed, including new sewer pipe installation along Flatbush Avenue, installation of a new water main on the west side of Flatbush Avenue, installation

of a new trunk water main and associated distribution main along Atlantic Avenue, and the relocation of certain storm water drains and discharges.

- **Street Network and Roadway Improvements:** Portions of Pacific Street and 5th Avenue have been permanently closed, and the new traffic flow has been implemented. Traffic flow on Pacific Street between 4th and Flatbush Avenues has been reversed from one-way westbound to one-way eastbound. The segment of 4th Avenue between Atlantic and Flatbush Avenues has been converted to one-way southbound to improve traffic flow at the Flatbush Avenue/Atlantic Avenue/4th Avenue intersection. Curb extensions have been completed at various locations along Atlantic Avenue, Flatbush Avenue, Dean Street, Pacific Street and 4th Avenue. Raised medians along Atlantic Avenue east of Flatbush Avenue are complete.
- **Rail Yard Reconfiguration:** Construction of the temporary LIRR rail yard has been completed. Work in anticipation of the new LIRR permanent rail yard is underway. Work related to the demolition and reconstruction of the Carlton Avenue Bridge, necessary for construction of the new yard, has been completed, and the new bridge was opened to traffic in September 2012.
- **Subway Entrance:** The new subway entrance at the southeast corner of Atlantic and Flatbush Avenues has been completed and has been operational since September 2012.
- **Arena Construction:** Arena construction has been completed, and the arena was opened on September 28, 2012.
- **Building 2 Construction:** Construction has commenced on Building 2, the first residential building on the Arena Block, and is expected to be completed in late 2014.
- **Building 4 Design:** On October 17, 2013, ESD approved certain minor modifications to setbacks along 6th Avenue at all levels of the building and at the upper portion of the southern façade of Building 4 as specified in revised Design Guideline Drawings SK-1935, SK-1943 and SK-1944.
- **Measures to Reduce or Avoid Construction Impacts:** ESD has been monitoring the conformity of construction to the requirements of the MEC. MEC measures include the following items (among others): Maintenance and Protection of Traffic (MPT) Plans have been implemented to minimize traffic disruption during construction; New York City Department of Buildings (DOB)-approved rodent control measures have been implemented on the project site; measures such as vibration monitoring and Phase 1B archaeological studies have been taken to protect historic resources during construction; an emissions reduction program has been implemented, including the requirement to use ultra-low sulfur fuel and diesel particulate filters on certain construction equipment; and, the project sponsors have offered double-glazed or storm windows and air conditioning units to all affected sensitive uses as identified in the 2006 FEIS (e.g., residential, community facility, houses of worship) to partially mitigate the project's noise impacts during construction.
- **Relocation:** Former project site residents and businesses have been provided with relocation offers by the project sponsors, and the majority of the buildings on the project site have been vacated.
- **Barclays Center Transportation Demand Management Plan (TDM Plan):** A draft TDM Plan was presented to the local community and public officials in late May 2012 in preparation for the opening of the Arena. The primary goals of the Plan are to encourage transit use and to reduce the use of automobiles for travel to Arena events. The Plan outlines

measures to inform Arena patrons of mass transit options; enhance mass transit service during post-game peak hours; develop event day operational plans; reduce on-site parking on Block 1129 in the Arena-opening condition; encourage bicycling as a means to and from the Arena with the provision of free, secured bike parking for event ticket holders; and develop a coordinated parking system within the area. The public comment period on the draft TDM Plan closed on July 3, 2012 and a Final TDM Plan was accepted by ESD in August 2012. One element of the TDM Plan was the reduction of Arena-parking on Block 1129 from the 1,100 spaces assumed in the 2009 Technical Memorandum to 541 parking spaces for event-goers (and an additional 24 parking spaces on Block 1129 reserved for NYPD use), in the Arena opening condition; this is a reduction of 535 parking spaces from the 1,100 spaces assumed in the 2009 Technical Memorandum. Further information about the TDM Plan is provided in Chapter 4D," Operational Transportation."

Additionally, a program was undertaken to observe transportation conditions and to assess the effectiveness of the TDM Plan. This program included travel pattern surveys of event attendees. There was also a post-opening traffic study focused on approximately 56 intersections in the vicinity of the Arena in early 2013 as required by the 2006 FEIS. In June 2013, the results of the program were shared with the public and confirmed that the TDM Plan was successful in meeting the goals for the program established in the 2006 FEIS.

In addition to the above, the project sponsors are considering the construction and installation of a green roof on Barclays Center as a new sustainable feature of the Arena. If installed, it would consist of the construction of a secondary roof with a structural system to hold a green sedum tray system very similar to the sedum roof at the transit entrance in front of the Arena. It is expected to cover most of the roof and would consist of approximately 130,000 square feet of sedum, making it one of the largest green roofs in New York City. It is expected that installation of this Phase I component would commence in 2014.

## EXISTING CONDITIONS ON THE PROJECT SITE

The project site (Phase I and Phase II) is an approximately 22-acre area, 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 portion of the project site comprising the Phase II development—the subject of this SEIS—includes the following parcels: Block 1120: Lots 1, 19, 28, 35; Block 1121: Lots 1, 42, 47; Block 1128: Lots 1, 4, 85-87; and Block 1129: Lots 1, 3-6, 13, 21, 25, 39, 43-46, 49, 50, 54, 62, 76, 81 **(see Figure 1-1)**. Sections of Pacific Street between Vanderbilt and Carlton Avenues would also be incorporated as part of the Phase II project site.

The current status of the Phase II parcels is as follows:

### Block 1120

- Lot 1 is owned by MTA. As noted above, on March 10, 2010, an FCRC affiliate entered into a purchase and sale agreement with MTA to purchase the air space parcel over Lot 1.
- Lot 35 is owned by ESD (leased to the project sponsors) and is used by LIRR for access to the LIRR rail yard.
- Lots 19 and 28 are privately owned storage facilities; ESD has condemned certain below-grade easements to support rail yard improvements.

10.22.13

Source: AKRF, Inc.

*Phase I Project Site Boundary*

*Phase II Project Site Boundary*

**1120** *Blocks*

7501 *Lots*

0 500 FEET

SCALE

Project Site Blocks and Lots

**Figure 1-1**

**Block 1121**

- Lot 1 is owned by MTA. As noted above, on March 10, 2010, an FCRC affiliate entered into a purchase and sale agreement with MTA to purchase the air space parcel over Lot 1.
- Lots 42 and 47 above an elevation approximately equal to the adjoining sidewalks are owned by ESD and leased to the project sponsors. Below such elevation, Lots 42 and 47 are owned by MTA, and they have been extensively excavated to meet rail yard elevations.

**Block 1128**

- Lots 1 (previously Lots 1, 2, 88, and 89) is owned by the project sponsors and is being used on an interim basis as a broadcasting lot for arena events.
- Lot 4 is privately owned and believed to be used for storage/warehousing.
- Lots 85-87 are privately owned and occupied by residential uses.

**Block 1129**

- All lots are owned by ESD (leased to the project sponsors); the existing building on Lot 13 is in use on an interim basis as a construction field office; remaining lots are used for interim parking and there is a LIRR construction staging area fronting Vanderbilt Avenue.

The street bed on Pacific Street between Carlton and Vanderbilt Avenues has been acquired by ESD (and has been leased to the project sponsors). It is used as a construction staging area and for access and egress to the Block 1129 parking lot.

## PROPOSED JOINT VENTURE

In December 2013, Forest City Enterprises, Inc. (FCE) announced that FCE and Shanghai-based Greenland Group Co. (Greenland) had signed an agreement for a joint venture to develop portions of Phase I of the Project and all of Phase II of the Project. As described by FCE, Barclays Center and Building 2 would not be assigned to the joint venture, but the joint venture would: complete construction of the new LIRR rail yard; build the platform over the new rail yard; build Buildings 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, and 15 and Site 5; create the 8 acres of publicly accessible open space; and make certain modifications to the Barclays Center roof. It is expected that the joint venture transaction will close in 2014, but the closing of the agreement is subject to certain regulatory approvals, including the Committee on Foreign Investment in the United States and the government of China. As further described by FCE, under the proposed joint venture Greenland would acquire a 70 percent ownership interest in the Project (excluding the Arena and B2, as noted above), co-develop the Project with FCE and its affiliates, and pay for 70 percent of its development costs going forward. In its filing with the Securities and Exchange Commission on December 10, 2013, FCE stated that the creation of the proposed joint venture "will help accelerate vertical development of the project, including the delivery of affordable housing." The statement also noted that the joint venture "would develop the project consistent with the approved master plan [i.e., the 2009 MGPP and Design Guidelines]." The joint venture documentation includes a target development schedule for Phase II construction that is substantially shorter than the one being analyzed in this SEIS. The schedule is comparable in duration to the schedule studied in the 2006 FEIS.

## C. DESCRIPTION OF THE PROJECT

As discussed in more detail below, there have been two proposed modifications to the Project under consideration: a proposed shift of up to approximately 208,000 gross square feet (gsf) of floor area from Phase I of the Project to Phase II of the Project, and a reduction of the number of parking spaces on the project site from 3,670 spaces as analyzed in the 2006 FEIS to 2,896 spaces.

Because the July 13, 2011, Court Order directed ESD to prepare an SEIS "assessing the environmental impacts of delay in Phase II Construction," Phase I of the Project—including the Arena and the other Project buildings west of 6th Avenue and the new roadway configurations for the area and the parking plans for Phase I of the Project—will be assumed to be part of the background condition. Thus, all Phase I elements of the Project, including associated mitigation measures as well as any recent changes to the traffic network, will be assumed as part of the baseline conditions for the Future Without Phase II (i.e., the No Build condition). This SEIS will assess the environmental impacts of Phase II of the Project (including these proposed modifications) with a Build Year of 2035 (collectively, the "Extended Build-Out Scenario").

This section first describes in detail the proposed Project modifications, then provides a comparison of the Project components (both Phase I and Phase II) analyzed in the 2006 FEIS, with the Project components that form the basis of this SEIS analysis. Finally, this section provides a description of proposed Phase II residential, retail, open space, community facilities and parking uses.

### PROPOSED PROJECT MODIFICATIONS TO BE CONSIDERED IN THE SEIS

As project planning has progressed, the project sponsors have further developed the design of certain buildings and propose modifications to certain project elements. None of the proposed uses of the project buildings would change; in addition, they would all still need to conform with the Design Guidelines and the maximum square footages for each building and for the overall Project as detailed in Exhibit C of the 2009 MGPP. The maximum number of residential units and required affordable units would not be altered by the proposed modifications. At this time the project sponsors are proposing two modifications: a shift in up to approximately 208,000 gsf of floor area from Phase I to Phase II; and a reduction in the number of on-site parking spaces, as described below:

#### *PROPOSED SHIFT OF FLOOR AREA FROM PHASE I TO PHASE II*

The 2006 FEIS analyzed a Phase I program that anticipated a certain amount of programming to be developed within the maximum building envelopes for each of the development sites on both the Arena Block and on Site 5. As described in the 2009 Technical Memorandum, it is assumed that the height of Building 1 would be reduced from 620 feet (as analyzed in the 2006 FEIS) to 511 feet, so that this structure would be less than the height of the nearby Williamsburgh Savings Bank building. In December 2006, when the project sponsors agreed to limit the height of Building 1 to 511 feet, it was anticipated that the floor area that would be lost in Building 1 could be accommodated within the maximum design envelopes of the other proposed buildings on the Arena Block (Buildings 2 through 4). At the time, these buildings were designed to be integrated with the Arena, with portions of their envelopes extending above the arena. Because the Arena has been developed as a stand-alone building, it is no longer feasible to utilize the full envelope of Buildings 2 through 4 as set forth in the Design Guidelines and as a result, it is

likely that the Phase I program will be slightly less than as described in the 2006 FEIS. Therefore, the project sponsors propose to shift up to approximately 208,000 gsf of floor area that was anticipated as part of the Phase I development program into the Phase II development program. This shift in floor area would be distributed among the Phase II residential buildings and is anticipated to be allocated to the buildings proposed for Block 1129 (Buildings 11, 12, 13, and 14), Block 1128 (Building 15) and Block 1120 (Building 6).The maximum building envelopes for the Phase II buildings as set forth in the Design Guidelines and the maximum square footages for each building and for the overall Project as detailed in Exhibit C of the 2009 MGPP would not be affected by this proposed shift in floor area.

*PROPOSED REDUCTION IN ON-SITE PARKING*

With respect to on-site parking, the data collected from the opening of the Barclays Center on September 28, 2012 through the last day of the first Nets season on May 4, 2013 show that during this time period there were an average of 122 automobiles parked on Block 1129 for an Arena event, and an average of 160 automobiles parked on Block 1129 for a Nets game. Only six events at the Arena during this time period resulted in more than 300 event-related automobiles using the parking lot on Block 1129. Records for the parking facility since May 4, 2013 have shown a decline in both the average and peak utilization. Consequently, as project planning has progressed, the project sponsors have proposed modifications to the number of parking spaces and the location of parking facilities to be provided on the project site.

The 2006 FEIS analyzed a parking plan that anticipated a total of 3,670 parking spaces on the project site. These spaces included: a below-grade parking facility with approximately 350 parking spaces below Building 2 and Building 3 on the Arena Block; a below-grade parking facility with approximately 350 spaces in the southwest corner of Block 1120; a below-grade parking facility with approximately 450 spaces in the northeast portion of Block 1120; a below-grade parking facility with approximately 150 spaces below Building 15; a below grade parking facility with approximately 400 spaces below Site 5; and a below-grade parking facility with approximately 1,970 spaces on Block 1129.

Subsequently, in 2009 (as analyzed in the 2009 Technical Memorandum), due to the reconfiguration of below-grade space on the Arena Block, up to 100 spaces of the 350 spaces of parking that would have been provided under Building 2 were relocated from the Arena Block to Block 1129.

Building 2 is currently under construction and does not provide for any below-grade parking in its footprint.

The current proposed parking plan for the project site proposes between 50 and 100 parking spaces to be located below Building 3 on the Arena Block; the elimination of the below-grade parking facility on the southwest corner of Block 1120; and reducing the size of the below-grade parking facility on Block 1129 to account for the lower anticipated demand for on-site Arena parking.

Under this proposal, the overall total parking proposed on the project site would be reduced from 3,670 spaces as analyzed in the 2006 FEIS to 2,896 spaces.

## PROJECT COMPONENTS

As described in the 2006 FEIS, to allow the project to respond to market forces and to address needs for housing and commercial office space, the project would permit some flexibility in the

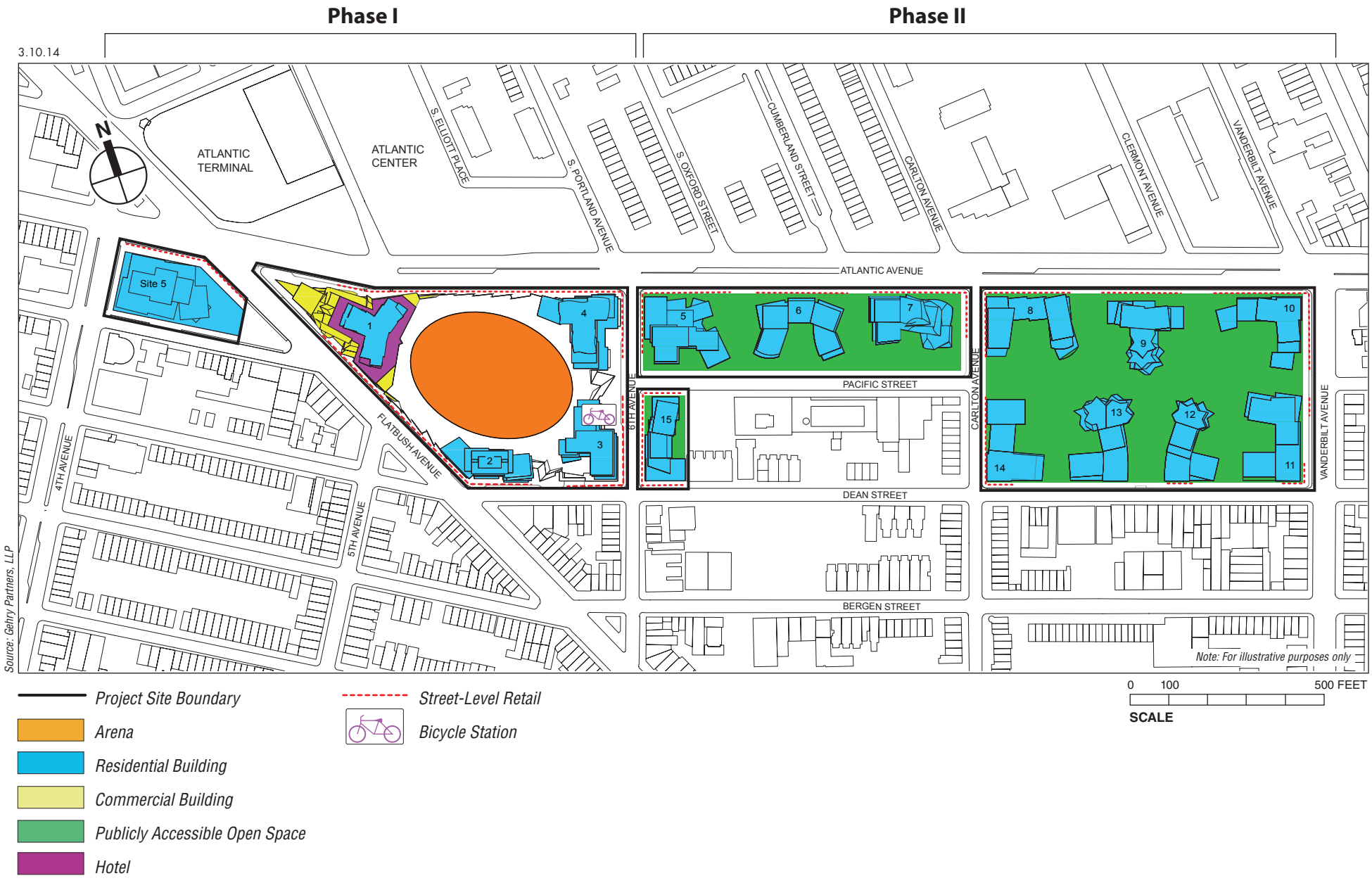
development program for portions of the site within or close to the Special Downtown Brooklyn District. Therefore, at the time of the 2006 FEIS, two variations of the project program were under consideration to allow for flexibility in the program of three of the proposed project's Phase I buildings: (1) a residential mixed-use variation and (2) a commercial mixed-use variation, which would allow for more commercial office use in the three buildings closest to Downtown Brooklyn. The differences between the residential and commercial mixed-use variations applied only to the proposed development programs of Buildings 1 and 2 and on Site 5 in Phase I. Since the 2006 FEIS, the program for Building 2 (currently under construction) has been finalized to include only residential and retail uses. Therefore, for the purposes of this SEIS, the commercial mixed-use variation would apply only to Building 1 and Site 5 in the Phase I development (thus reducing the amount of commercial space and increasing the amount of residential space in the commercial mixed-use variation as compared with that assumed in the 2006 FEIS), because that variation now assumes a residential program for Building 2. In addition, in light of the reduction in the height of Building 1 after preparation of the 2006 FEIS and subsequent planning, the current program for Building 1 is expected to include a smaller residential program in the residential mixed-use variation than that assumed in the 2006 FEIS, but the office, hotel and retail components in Building 1 would be the same as proposed in the 2006 FEIS (see **Figures 1-2 and 1-3**). As mentioned above, Phase I is considered as part of baseline conditions for the Future Without Phase II (No Build condition).

**Table 1-1** provides a comparison of the 2006 FEIS and SEIS residential and commercial mixed-use programs. As shown in the table, the Project would introduce a maximum total of 6,430 dwelling units (Phases I and II).

As shown in **Table 1-1**, the Phase II development could include up to 4,932 dwelling units and approximately 156,000 square feet of local retail in 11 buildings to be located on Blocks 1120, 1121, 1128, and 1129 to the east of 6th Avenue. The local retail space may also house community facility uses, such as the intergenerational community center planned for Phase II of the Project which would include space for a child care facility.

At the time of the 2006 FEIS, a 100-seat child care facility was planned as part of the Project. While the 2006 FEIS did not identify any significant adverse child care impacts, the analysis of publicly funded child care facilities in the 2009 Technical Memorandum found that the updated background conditions and updated methodologies would result in additional demand for publicly funded child care facilities in the study area, which could result in a future shortfall of child care slots. Therefore, the project sponsors have committed to monitor and, if necessary, work with the Administration for Children's Services (ACS) to provide up to approximately 250 additional child care slots either on-site or in the vicinity of the site to meet Project-generated demand. Chapter 4B, "Operational Community Facilities," of this SEIS updates the analysis of anticipated day care demand.

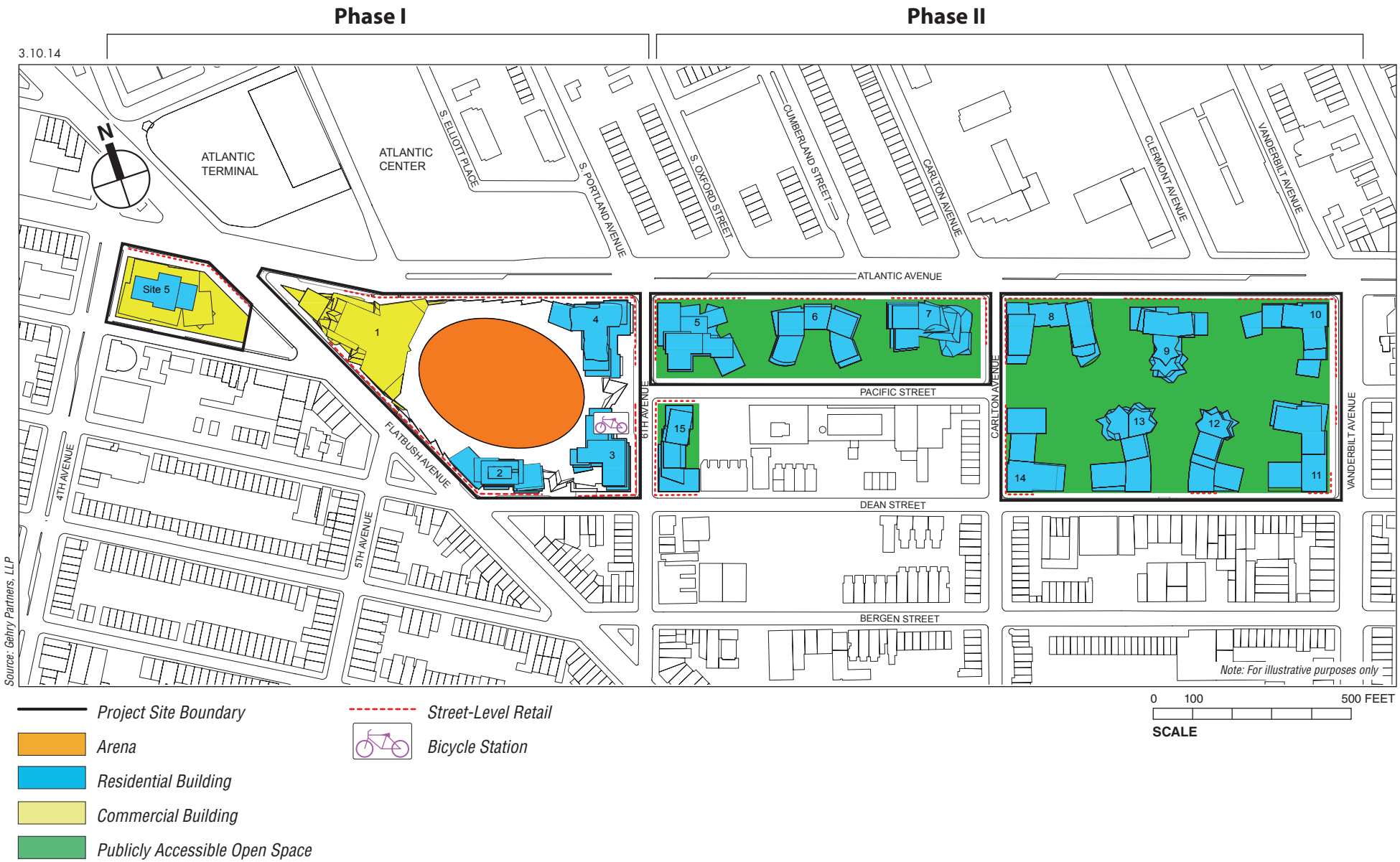
Additionally, to partially mitigate the significant adverse impact on public schools identified in the 2006 FEIS, the project sponsors have committed to provide, at the election of the New York City Department of Education (DOE), adequate space for the construction and operation of a 100,000 gsf elementary and intermediate school in the base of one of the Phase II residential buildings. Therefore, the proposed program for the SEIS includes the development of the proposed 100,000 gsf school. The floor area for the proposed school would be in addition to the floor area indicated in **Table 1-1** (i.e., the proposed school would not replace any of the floor area dedicated to residential use in the Phase II building in which it would be located).




**SEIS • ATLANTIC YARDS ARENA AND REDEVELOPMENT PROJECT**

Residential Mixed-Use Variation Site Plan

**Figure 1-2**




**SEIS • ATLANTIC YARDS ARENA AND REDEVELOPMENT PROJECT**

Commerical Mixed-Use Variation Site Plan

**Figure 1-3**

**Table 1-1**
**Comparison of 2006 FEIS and SEIS Residential and Commercial Mixed-Use Variation Programs**

| Proposed Uses | 2006 FEIS | | SEIS | |
|---|---|---|---|---|
| | Residential Mixed-Use Variation | Commercial Mixed-Use Variation | Residential Mixed-Use Variation | Commercial Mixed-Use Variation |
| **Phase I[1] : Development of Arena Block and Site 5** | | | | |
| Residential[3] | 2,085,000 gsf (2,110 units) | 994,000 gsf (1,005 units) | 1,890,000 gsf (1,922 units) | 1,329,000 gsf (1,498 units) |
| Hotel (180 rooms) | 165,000 gsf | 0 gsf | 165,000 gsf | 0 gsf |
| Retail[3] | 91,000 gsf | 91,000 gsf | 91,000 gsf | 91,000 gsf |
| Commercial | 336,000 gsf | 1,606,000 gsf | 336,000 gsf | 1,076,000 gsf |
| Arena[7] | 850,000 gsf | 850,000 gsf | 662,000 gsf | 662,000 gsf |
| Parking (spaces) | 2,346 spaces[4] | 2,346 spaces[4] | 1,161 - 1,211 spaces[5] | 1,161 - 1,211 spaces[5] |
| Private Open Space | ±1 acres | ±1 acres | 0 acres | 0 acres |
| Publicly Accessible Open Space | 0 acres | 0 acres | 0 acres | 0 acres |
| **Phase II[2]: Development East of 6th Avenue[6]** | | | | |
| Residential[3] | 4,278,000 gsf (4,320 units) | 4,278,000 gsf (4,320 units) | 4,486,000 gsf (4,508 units) | 4,486,000 gsf (4,932 units) |
| Retail[3] | 156,000 gsf | 156,000 gsf | 156,000 gsf | 156,000 gsf |
| Parking (spaces) | 2,920 spaces | 2,920 spaces | 2,396–2,446 spaces | 2,396–2,446 spaces |
| Publicly Accessible Open Space | 8 acres | 8 acres | 8 acres | 8 acres |
| **Phase I and Phase II: Full Build-Out[6]** | | | | |
| Residential[3] | 6,363,000 gsf (6,430 units) | 5,272,000 gsf (5,327 units) | 6,376,000 gsf (6,430 units) | 5,815,155 gsf (6,430 units) |
| Hotel (180 rooms) | 165,000 gsf | 0 gsf | 165,000 gsf | 0 gsf |
| Retail[2] | 247,000 gsf | 247,000 gsf | 247,000 gsf | 247,000 gsf |
| Commercial | 336,000 gsf | 1,606,000gsf | 336,000 gsf | 1,076,000 gsf |
| Arena[7] | 850,000 gsf | 850,000 gsf | 662,000 gsf | 662,000 gsf |
| Parking (spaces) | 3,670 spaces | 3,670 spaces | 2,896 spaces | 2,896 spaces |
| Private Open Space | ±1 acres | ±1 acres | 0 acres | 0 acres |
| Publicly Accessible Open Space | 8 acres | 8 acres | 8 acres | 8 acres |

**Notes:** All gross square foot numbers are rounded to the nearest thousand.
1 For the purposes of this SEIS, the Phase I program is considered as part of baseline conditions for the Future Without Phase II condition (No Build condition).
2 For the purposes of this SEIS, the Phase II program is considered the Extended Build-Out Scenario, for the Future With Phase II condition (Build condition).
3 A portion of the retail and residential space is anticipated to house community facilities. Approximately 13,000 gsf of retail space is located in the Arena.
4 Includes 1,596 temporary spaces.
5 Includes 711 temporary spaces that will be eliminated through the development of Phase II.
6 Phase II (and thus the Full Build-Out) may also contain a 100,000 gsf public school at the option of DOE.
7 The 662,000 gsf of Arena floor area does not include the approximately 13,000 gsf of retail space in the Arena.

*PHASE II RESIDENTIAL USES*

In Phase II of the Project, residential use is planned for each building. Of these, there would be a mix of market rate condo units, and market rate and affordable rental units. As per the Project commitments, Phase I and Phase II of the Project are to include a minimum of 2,250 units of affordable housing on site for low-, moderate-, and middle-income persons and families, and at

least 30 percent of the residential units built on the Arena Block (in buildings 1, 2, 3 and 4) in Phase I (but no fewer than 300 units) are to be affordable units. The remainder of the affordable units are to be built in Phase II or on Site 5. For the purposes of this SEIS analysis, it is assumed that no affordable units would be built on Site 5. Therefore, it is assumed that Phase II would include approximately 2,737 market rate (condo and rental) units and approximately 1,771 affordable units (for a total of approximately 4,508 units) under the residential mixed-use variation, and approximately 3,132 market rate (condo and rental) units, and up to approximately 1,800 affordable rental units (for a total of approximately 4,932 units) under the commercial mixed-use variation. Additionally, as per the Project documents, not more than 50 percent of the Phase II units are permitted to be built without completion of at least 50 percent of the Phase II affordable units. It should be noted that while the SEIS assumes for purposes of analysis the minimum required number of affordable units in Phase I, the project sponsors may elect to build more than this minimum, which would have the effect of increasing the number of affordable units in Phase I and decreasing the number of affordable units in Phase II.

As described in the 2006 FEIS, affordable units would be reserved for households making between 30 percent and 160 percent of citywide Area Median Income (AMI) for the New York City metropolitan area. The AMI is set annually for metropolitan areas and non-metropolitan counties by the U.S. Department of Housing and Urban Development (HUD), and varies according to family size. It is therefore referred to as the median family income (MFI). As of December 11, 2012, MFI for the New York, NY HUD Metro Fair Market Rent (FMR) Area for a family of four was $85,900. The affordable program would be subject to adjustment to accommodate the requirements of any city, state, or federal affordable housing program utilized for this housing.

Rent for all rental units introduced under the proposed project would be rent stabilized, and rent for the affordable units would be targeted at 30 percent of household income. **Table 1-2** shows the distribution of the affordable housing units across household income bands, assuming a household size of four persons per household. If the household size were lower, the minimum and maximum incomes for each income band would be lower.[1]

The income bands outlined in **Table 1-2** are based on the Mixed-Income Program administered by the New York City Housing Development Corporation (HDC). Under that program, low income units can be rented to those earning at or below 50 percent of AMI and middle-income units can be rented to those earning at or below 175 percent of AMI.

Ten percent of the total rental units would be reserved for senior residents.

Additionally, it is a Project goal that 50 percent of the affordable units on a square foot basis would be two- and three-bedroom units, subject to the availability of programmatic support for larger affordable housing units by the city, state and federal housing programs utilized for the affordable housing at the project site.

The affordable program would 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 would be subject to applicable agency approval.

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[1] Income limits were estimated based on the HUD-calculated Very Low-Income (50 percent) Limit.

**Table 1-2**
**Income Bands for Phase II under the Extended-Build-Out Scenario**
**Affordable Housing Units**
**(Based on Family Size of 4.0 Persons per Household)**

| Income Band[1] | AMI Income Range | Number of Affordable Units | Minimum Income for Family of 4[2] | Maximum Income for Family of 4 |
|---|---|---|---|---|
| Income Band 1 | 30-40% | 185 | $25,770 | $34,360 |
| Income Band 2 | 41-50% | 555 | $35,219 | $42,950 |
| Income Band 3 | 60-100% | 353 | $51,540 | $85,900 |
| Income Band 4 | 101-140% | 353 | $86,759 | $120,260 |
| Income Band 5 | 141-160% | 353 | $121,119 | $137,440 |

**Notes:** 1. Income limits were estimated based on the HUD-calculated Very Low-Income (50 percent) Limit.
2. All dollar values are presented in 2013 dollars. Income minimums and maximums are based on the MFI which is set annually for metropolitan areas and non-metropolitan counties by HUD. As of December 11, 2012, MFI for the New York, NY HUD Metro FMR Area for a family of four was $85,900.
**Sources:** FCRC; US Department of Housing and Urban Development FY 2013 Income Limits; AKRF, Inc.

A small portion of the residential space could house community facilities.

*PHASE II RETAIL USES*

Consistent with the assumptions of the 2006 FEIS, the Phase II program under the Extended Build-Out Scenario would include an approximately 156,000 gsf retail component consisting of retail and eating establishments primarily serving the local population and tenants on the project site. As described above, a component of this retail space would also be for use as a community facility. These retail spaces would not have footprints large enough to house “big box” retail.

*PHASE II OPEN SPACE AND COMMUNITY FACILITES*

As described in the 2006 FEIS, when completed, Phase II of the Project under the Extended Build-Out Scenario would include eight acres of publicly accessible open space.

On Block 1120, the space between Pacific Street and the buildings would be landscaped, creating a green corridor along the Pacific Street block with the residential buildings serving as a backdrop to the landscaped edge. The open space would continue along the Pacific Street corridor eastward on Blocks 1121 and 1129 through the introduction of an undulating walking path, preserving this corridor as a pedestrian thoroughfare east of the arena block. The open space would have a variety of both active and passive spaces and planted and paved areas, and would incorporate features such as playing fields, water features, walking paths, seating areas, and extensive landscaping throughout. The open space has been planned, and the buildings around the open space have been arranged, to promote public access to and use of the space by the general public. In the north-south direction, the open space would extend to Atlantic Avenue across from the terminus of each of the neighborhood streets to the north, linking the site to the area to the north both visually, through the creation of landscaped view corridors at the end of each street, and functionally, through the introduction of walking paths into the park at each of these points. The publicly accessible open space would be available for public use from 7:00 AM to 10:30 PM from May through September, and from 7:00 AM to the later of 8:00 PM and sunset in other months, seven days a week. This open space would be owned by a conservancy or other not-for-profit entity established by the project sponsors, which would be responsible for maintenance, operation

and security of this public amenity. In addition, some of the residential buildings constructed during Phase II may have private rooftop open space.

It is anticipated that a dedicated southbound bicycle path would enter the project site along Atlantic Avenue at Cumberland Street and would continue southbound between Buildings 6 and 7 (see **Figure 1-4**). The route would turn east running along Pacific Street where it would reenter the project site at a pedestrian pathway at Carlton Avenue. As presently conceived, it would continue southeast around Building 14 to Dean Street. The bike path would continue eastward along Dean Street toward Vanderbilt Avenue where it would connect with the larger city bicycle network. There would be a storage area for 400 bicycles on the Arena Block, anticipated to be located in the base of Building 3. The bicycle station would include space for supporting ancillary uses.

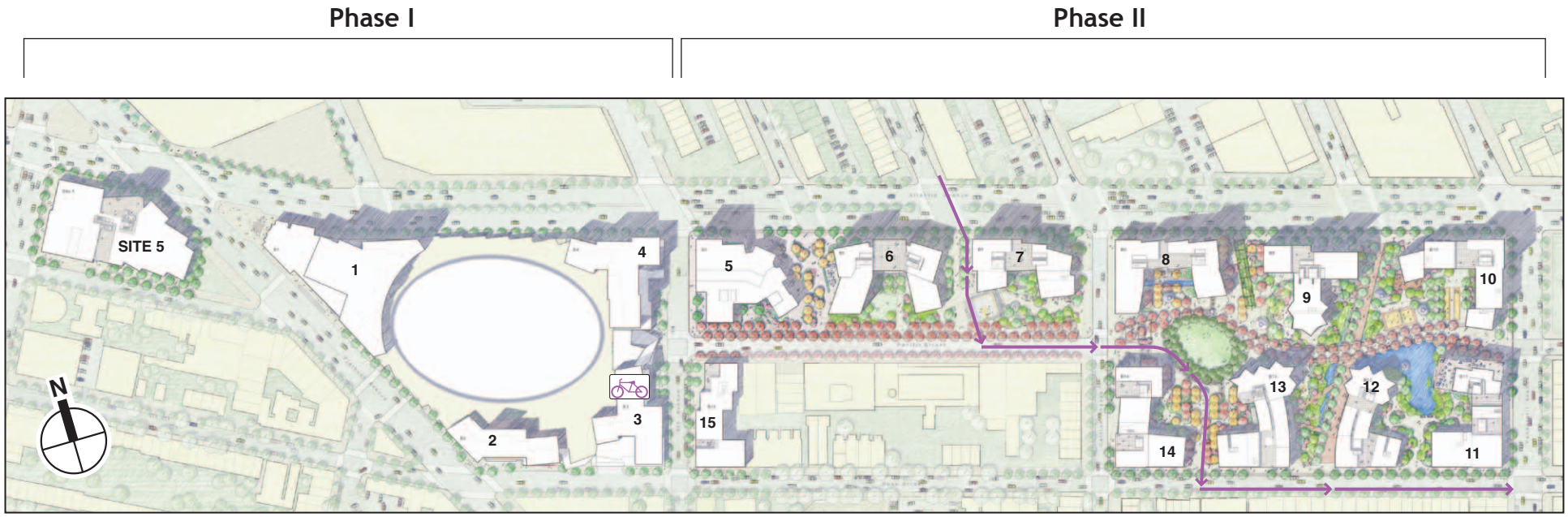
A central community facility element would be an intergenerational community center located in the base of one of the buildings on Block 1120 (programming and exact site location to be determined); this approximately 15,000-sf community center would replace a portion of the retail space. The intergenerational facility would consist of child care, and youth and senior centers in one building with an atrium. The childcare center would accept Agency for Child Development (ACD) vouchers. Additionally, the Project would include, at the election of DOE, adequate space for the construction and operation of a 100,000 gsf elementary and intermediate school in the base of one of the Phase II residential buildings. As per the Amended Memorandum of Environmental Commitments, the location of the proposed school would be determined by the project sponsor and DOE; however for the purposes of this SEIS, it is assumed to be located within the base of either Building 6 or Building 15.

*PHASE II PARKING*

Upon Phase II completion, the Project (both Phases I and II) would provide up to 2,896 below-grade attended parking spaces on the project site. As currently envisioned, in Phase I, these would include: approximately 50-100 spaces in a below-grade facility on the Arena Block with access from Dean Street and 400 spaces in a below-grade facility on Site 5 with access from Pacific Street. In Phase II, these would include: 450 spaces in a below-grade facility on Block 1120 with access from Carlton Avenue; 150 spaces in a facility below Building 15 on Block 1128 with access from Pacific Street; and 1,796-1,846 below-grade spaces on Block 1129 with access from Dean Street and Carlton and Vanderbilt Avenues (see **Figure 1-5**).

## D. CONSTRUCTION SCHEDULE

Under the Extended Build-Out Scenario, the SEIS will assess the potential for impacts during the Phase II construction period through the 2035 Build Year. Construction impacts will be analyzed under various construction scenarios that are described in more detail in Chapter 2, "Analysis Framework," and Chapters 3A, through 3M. ✷



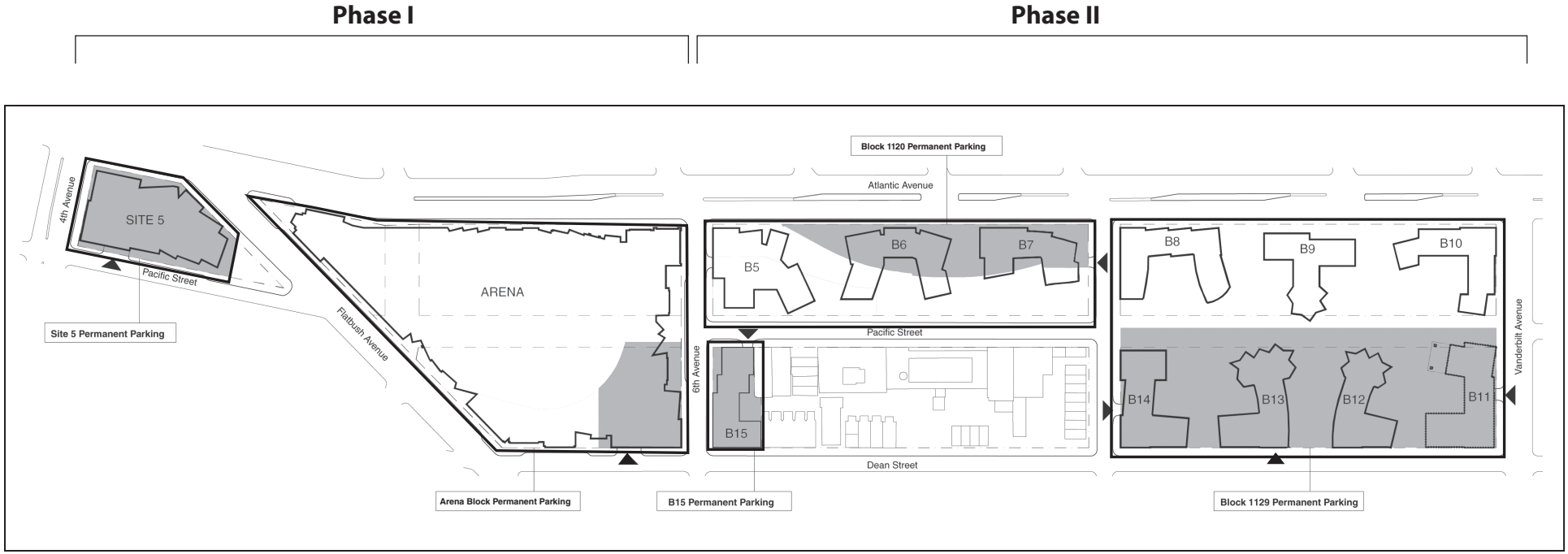

Source: Olin Partnership

*Proposed Bicycle Path*

*Bicycle Station*



Conceptual Open Space and Streetscape Plan
**Figure 1-4**




Source: Philip Habib and Associates

*Project Site Boundary*

*Below-grade Parking Location*

*Vehicular Access*



Proposed Parking Plan
**Figure 1-5**