

# **Supplemental SEQRA Findings Statement**

**Atlantic Yards Project  
Empire State Development  
June 27, 2014**

**SUPPLEMENTAL FINDINGS**  
**BY THE NEW YORK STATE URBAN DEVELOPMENT CORPORATION**  
**D/B/A EMPIRE STATE DEVELOPMENT**  
**FOR THE ATLANTIC YARDS LAND**  
**USE IMPROVEMENT AND CIVIC PROJECT**

**TABLE OF CONTENTS**

|  | <b><u>Page</u></b> |
|--|--------------------|
| I. Introduction .....  | 1                  |
| A. Location of Action and Brief Description .....  | 3                  |
| B. Lead Agency .....   | 3                  |
| II. Project Background, Status and Description .....   | 3                  |
| A. Introduction .....  | 3                  |
| B. Project Background.....   | 5                  |
| 1. Project Analyzed in the 2006 FEIS .....   | 5                  |
| 2. Project Modifications Considered in the 2009 Technical Memorandum.....  | 6                  |
| 3. Project-Related Agreements with Public Agencies.....  | 6                  |
| a. Agreements Relating to Public Funding.....  | 7                  |
| b. Land Acquisition Funding, Property Management and Relocation Agreement.....                                       | 7                  |
| c. The Development Agreement.....  | 8                  |
| d. Leases with FCRC Affiliates.....  | 10                 |
| e. MTA-Related Agreements .....  | 11                 |
| C. Project Purpose, Benefits and Current Status .....  | 14                 |
| D. Joint Venture with Greenland .....  | 16                 |
| E. Proposed Modifications and Phase II Project Component Description .....   | 17                 |
| 1. Proposed Shift in Floor Area From Phase I to Phase II .....   | 17                 |
| 2. Proposed Reduction In On-Site Parking.....  | 18                 |
| F. Description of Phase II Project Components.....   | 18                 |
| a. Phase II Residential Uses .....   | 19                 |
| b. Phase II Retail Uses .....  | 22                 |
| c. Phase II Open Space and Community Facilities .....  | 22                 |
| d. Phase II Parking .....  | 23                 |
| III. SEQRA Process and Environmental Analysis Framework.....   | 24                 |
| A. The SEQRA Process.....  | 24                 |
| B. Overview of the Environmental Impact Analysis Approach in the FSEIS.....  | 25                 |
| 1. FSEIS Methodology .....   | 25                 |
| 2. FSEIS Overview.....   | 26                 |
| 3. FSEIS Development Program Variations and Extended Build-Out Scenario Illustrative Construction Phasing Plans..... | 28                 |
| a. Construction Phasing Plan 1: Continuous Sequential Phasing With Block 1129 First .....                            | 29                 |

|     |    |  |    |
|-----|----|--|----|
|     | b. | Construction Phasing Plan 2: Continuous Sequential Phasing .....   | 29 |
|     | c. | Construction Phasing Plan 3: Start and Stop Sequential Phasing<br>with Intense Construction Activities.....  | 30 |
| IV. |    | Areas of Environmental Impact That Would Not Be Affected By The Extended<br>Build-Out Scenario.....  | 30 |
|     | A. | Construction Period Impacts That Would Not Be Affected By The Extended<br>Build-Out Scenario.....  | 30 |
|     |    | 1. Construction – Cultural Resources.....  | 30 |
|     |    | 2. Construction – Shadows .....  | 31 |
|     |    | 3. Construction – Hazardous Materials .....  | 31 |
|     |    | 4. Construction – Infrastructure .....   | 31 |
|     |    | 5. Construction – Public Health.....   | 32 |
|     | B. | Operational Impacts That Would Not Be Affected By The Extended Build-<br>Out Scenario.....   | 33 |
|     |    | 1. Operation – Land Use, Zoning, and Public Policy.....  | 33 |
|     |    | 2. Operation – Cultural Resources.....   | 35 |
|     |    | 3. Operation – Urban Design and Visual Resources .....   | 35 |
|     |    | 4. Operation – Shadows.....  | 35 |
|     |    | 5. Operation – Hazardous Materials .....   | 36 |
|     |    | 6. Operation – Infrastructure .....  | 36 |
|     |    | 7. Operation – Public Health.....  | 37 |
| V.  |    | Consideration of Relevant Construction-Related Environmental Impacts, Facts and<br>Conclusions Analyzed in the FSEIS.....  | 38 |
|     | A. | Construction – Zoning and Public Policy.....   | 42 |
|     |    | 1. Zoning .....  | 43 |
|     |    | 2. Public Policy .....   | 43 |
|     | B. | Construction – Socioeconomic Conditions.....   | 44 |
|     | C. | Construction – Community Facilities.....   | 45 |
|     |    | 1. Indirect Effects.....   | 45 |
|     |    | a. Public Schools .....  | 45 |
|     |    | b. Child Care.....   | 46 |
|     |    | 2. Direct Effects .....  | 46 |
|     | D. | Construction – Open Space.....   | 47 |
|     |    | 1. Analysis of Extended Duration of the Temporary Significant Adverse<br>Impact on Passive Open Space Resources in the Non-Residential Study<br>Area Identified in the 2006 FEIS ..... | 47 |
|     |    | 2. Analysis of Adequacy of Open Space Resources During the Phase II<br>Construction Period Under the Extended Build Out Scenario .....   | 48 |
|     |    | a. Indirect Effects Within the ¼-Mile Non-Residential Study Area .....   | 48 |
|     |    | b. Indirect Effects Within the ½-Mile Residential Study Area.....  | 48 |
|     |    | c. Direct Effects .....  | 49 |
|     | E. | Construction – Urban Design and Visual Resources.....  | 49 |
|     |    | 1. Views Analysis from One Block Away From the Project Site.....   | 51 |
|     |    | 2. Views Analysis from 100 Feet of the Project Site.....   | 51 |
|     |    | 3. Views Analysis from Adjacent Sidewalk Locations to the Project Site.....  | 52 |
|     |    | 4. Summary of Effects of Prolonged Phase II Construction on Views.....   | 52 |

|     |   |    |
|-----|---|----|
| F.  | Construction – Hazardous Materials .....  | 53 |
| G.  | Construction – Transportation.....  | 53 |
|     | 1. Traffic .....  | 53 |
|     | 2. Parking.....   | 54 |
|     | 3. Transit and Pedestrians .....  | 54 |
| H.  | Construction – Air Quality.....   | 55 |
| I.  | Construction – Noise and Vibration .....  | 56 |
|     | 1. Noise.....   | 56 |
|     | 2. Vibration.....   | 58 |
| J.  | Construction – Public Health.....   | 59 |
| K.  | Construction – Land Use and Neighborhood Character .....  | 59 |
|     | 1. Land Use .....   | 59 |
|     | 2. Neighborhood Character.....  | 60 |
| L.  | Modular Construction.....   | 62 |
| VI. | Consideration of Relevant Operation-Related Environmental Impacts, Facts and<br>Conclusions Disclosed in the FSEIS..... | 63 |
| A.  | Operational – Socioeconomic Conditions.....   | 63 |
|     | 1. Direct Residential Displacement .....  | 63 |
|     | 2. Direct Business and Institutional Displacement .....   | 63 |
|     | 3. Indirect Residential Displacement.....   | 64 |
|     | 4. Indirect Business and Institutional Displacement.....  | 65 |
|     | 5. Adverse Effects on Specific Industries.....  | 65 |
| B.  | Operational – Community Facilities.....   | 66 |
|     | 1. Public Schools .....   | 66 |
|     | a. Elementary Schools .....   | 67 |
|     | b. Intermediate Schools .....   | 67 |
|     | c. Elementary and Intermediate School Effects with the Proposed<br>School .....   | 68 |
|     | d. High Schools.....  | 68 |
|     | 2. Child Care Services .....  | 68 |
|     | 3. Other Community Facilities .....   | 69 |
| C.  | Operational – Open Space .....  | 70 |
|     | 1. Non-Residential (1/4-Mile) Study Area .....  | 70 |
|     | 2. Residential (1/2-Mile) Study Area .....  | 70 |
| D.  | Operational – Transportation.....   | 71 |
|     | 1. Traffic .....  | 71 |
|     | a. Travel Demand.....   | 71 |
|     | b. Impact Analyses .....  | 72 |
|     | c. Bicycles .....   | 72 |
|     | 2. Transit.....   | 72 |
|     | a. Subway .....   | 72 |
|     | b. Local Bus.....   | 73 |
|     | c. Long Island Rail Road.....   | 73 |
|     | 3. Pedestrians .....  | 74 |
|     | 4. Pedestrian and Vehicular Safety.....   | 75 |
|     | 5. Parking.....   | 75 |
|     | 6. Comparison of SEIS Findings and Previous Findings.....   | 76 |

|       |    |   |     |
|-------|----|---|-----|
|       | a. | Traffic .....   | 76  |
|       | b. | Subway .....  | 76  |
|       | c. | Local Bus .....   | 77  |
|       | d. | Long Island Rail Road .....                                 | 78  |
|       | e. | Pedestrians .....   | 78  |
|       | f. | Pedestrian and Vehicular Safety .....                       | 78  |
|       | g. | Parking .....   | 78  |
| E.    |    | Operational – Air Quality .....                             | 79  |
| F.    |    | Greenhouse Gas Emissions .....                              | 80  |
| G.    |    | Operational – Noise .....                                   | 80  |
| H.    |    | Operational – Neighborhood Character .....                  | 80  |
| VII.  |    | Summary of Mitigation Measures to be Implemented .....      | 83  |
|       | A. | Community Facilities Mitigation .....                       | 83  |
|       | B. | Open Space Mitigation .....                                 | 84  |
|       | C. | Operational Transportation Mitigation .....                 | 85  |
|       |    | 1. Traffic Mitigation .....                                 | 85  |
|       |    | 2. Transit Mitigation .....                                 | 86  |
|       |    | 3. Pedestrians Mitigation .....                             | 86  |
|       | D. | Construction Traffic Mitigation .....                       | 86  |
|       | E. | Construction Noise Mitigation .....                         | 87  |
| VIII. |    | Alternatives .....  | 87  |
|       | A. | Reduced Parking Alternative .....                           | 88  |
|       |    | 1. Operational Transportation .....                         | 89  |
|       |    | a. Traffic .....  | 89  |
|       |    | b. Transit .....  | 89  |
|       |    | c. Pedestrians .....  | 90  |
|       |    | d. Pedestrians and Vehicular Safety .....                   | 91  |
|       |    | e. Parking .....  | 92  |
|       |    | 2. Operational Air Quality .....                            | 93  |
|       |    | 3. Operational Noise .....                                  | 93  |
|       |    | 4. Operational Neighborhood Character .....                 | 94  |
|       |    | 5. Construction Transportation .....                        | 95  |
|       |    | a. Traffic .....  | 95  |
|       |    | b. Parking .....  | 95  |
|       |    | 6. Construction Air Quality .....                           | 95  |
|       |    | 7. Construction Noise and Vibration .....                   | 95  |
|       |    | 8. Construction Public Health .....                         | 96  |
|       |    | 9. Construction Neighborhood Character .....                | 96  |
|       | B. | No Unmitigated Significant Adverse Impact Alternative ..... | 96  |
|       |    | 1. Operational Community Facilities .....                   | 97  |
|       |    | 2. Operational Transportation .....                         | 98  |
|       |    | 3. Construction Traffic .....                               | 99  |
|       |    | 4. Construction Noise .....                                 | 99  |
|       | C. | Multiple Developer Alternative .....                        | 100 |
|       |    | 1. Modification of Current Project Structure .....          | 101 |
|       |    | 2. Engagement of Multiple Developers .....                  | 101 |

|      |   |     |
|------|---|-----|
| 3.   | Construction and Project Coordination .....                                   | 102 |
| IX.  | Summary of Unavoidable Significant Adverse Environmental Impacts .....        | 103 |
| A.   | Community Facilities .....  | 104 |
| B.   | Operational Transportation .....  | 104 |
| C.   | Construction Transportation .....   | 105 |
| D.   | Construction Noise .....  | 106 |
| X.   | Rationale for Selecting the Reduced Parking Alternative.....                  | 106 |
| XI.  | Summary of Evaluation of Impacts and Project Benefits.....                    | 107 |
| XII. | Conclusions and Certification of Supplemental Findings Required by SEQRA..... | 110 |

## I. Introduction

This Supplemental Statement of Findings is issued by the New York State Urban Development Corporation, doing business as Empire State Development (“ESD”), in accordance with a Decision and Order dated July 13, 2011 (the “Order”), issued by the New York State Supreme Court for New York County (the “Court”), and pursuant to the State Environmental Quality Review Act (“SEQRA”), N.Y. Env’tl. 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 supplements the Statement of Findings issued by ESD on December 8, 2006 (the “2006 Findings”), 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 dated December 8, 2006 (the “2006 MGPP”), and as analyzed in the Atlantic Yards Arena and Redevelopment Project Final Environmental Impact Statement dated November 27, 2006 (the “2006 FEIS”).

In the Order, the Court directed ESD to prepare a supplemental environmental impact statement (“SEIS”) assessing the environmental impacts of a delay in Phase II<sup>1</sup> construction of the Project; conduct further environmental review proceedings pursuant to SEQRA in connection with the SEIS; and issue further findings with respect to Phase II of the Project. According to the Order, the supplemental environmental review required by the Court is limited to a delay in Phase II because, among other things, the Project had been approved initially by ESD in 2006 “only after preparation of a [FEIS] and public hearing, the sufficiency of which was affirmed on appeal”; and the challenge before the Court to the Project modifications approved by ESD in 2009 did not “involve a claim that further environmental review is required of the essential substantive features of the Project.” The order was affirmed by the Appellate Division of New York State Supreme Court on April 12, 2012.

Accordingly, on December 19, 2012, ESD issued a Draft Scope for the Court-ordered SEIS, and held a public scoping session on the Draft Scope on February 27, 2013. Written comments were accepted from issuance of the Draft Scope through the public comment period that ended on March 14, 2013. On February 6, 2014, ESD issued a Final Scope of Work reflecting the consideration of comments made during scoping and the identification of potential changes to the Phase II program. On March 28, 2014, the ESD Directors accepted the Draft Supplemental Environmental Impact Statement (“DSEIS”). At the same meeting, the ESD Directors adopted a Modified GPP (the “2014 MGPP”) for public comment. The comment period on the DSEIS closed May 12, 2014. On June 12, 2014, the ESD Directors accepted the Final Supplemental Environmental Impact Statement (“FSEIS”) as complete.

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<sup>1</sup> For planning purposes, the Project was divided in the 2006 FEIS into two phases: Phase I and Phase II. Phase I comprises: site clearance and environmental remediation; relocation of utilities and specified transportation improvements; six new buildings (including the Barclays Center Arena) west of 6th Avenue and associated below-grade permanent parking facilities; the new subway station entrance adjacent to the Arena; a reconstructed and improved Vanderbilt Yard for the Long Island Rail Road and associated rail facilities; a new Carlton Avenue bridge spanning the rail yard; and temporary surface parking facilities. Phase II comprises: a platform over the reconstructed rail yard; eleven buildings east of 6th Avenue and associated below-grade permanent parking facilities; additional infrastructure improvements; and the creation of 8 acres of publicly accessible open space.

The DSEIS and FSEIS (collectively, the “SEIS”) assess the environmental impacts of Phase II of the Project (including two proposed modifications described below) with a 2035 Build year (collectively referred to as the “Extended Build-Out Scenario”), as compared to the 2016 build year analyzed in the 2006 FEIS. The FSEIS also examines whether the mitigation for Phase II imposed by ESD in 2006 should be adjusted in light of the conclusions of the FSEIS, and whether any additional mitigation should be imposed to account for any new or different environmental impacts from the potential for prolonged construction of Phase II.

The FSEIS also considers two proposed modifications to the project program for Phase II: (1) 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 (2) a reduction in 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.

The analyses contained in the FSEIS identify impacts resulting from Phase II of the Project under the Extended Build-Out Scenario in the same technical areas as those that were identified in the 2006 FEIS: community facilities (public school seats, the shortage of which would be reduced, but not eliminated by a public school within the Phase II site as proposed in both the 2006 FEIS and the FSEIS), construction-period open space (which would gradually be eliminated through the incremental availability of the Phase II open space), transportation (both upon completion of Phase II in the assumed Build Year of 2035 and during construction), and construction noise. To the extent practicable, mitigation has been identified for these significant adverse impacts. Since the type and nature of the impacts identified in the FSEIS are comparable to those identified in the 2006 FEIS, the measures identified to address such impacts are also comparable. As in the 2006 FEIS, with respect to public schools, operational traffic and construction traffic and construction noise, the measures that have been identified in the FSEIS only partially mitigate significant adverse impacts. In addition, practicable measures have not been identified to fully mitigate pedestrian impacts identified in the FSEIS on one sidewalk.

This statement sets forth ESD’s supplemental findings with respect to the environmental impacts of the Extended Build-Out Scenario, as analyzed in the FSEIS. This statement supplements the 2006 Findings, and does not preclude the development of the Project at a pace that is more consistent with the 10-year construction schedule set forth in the 2006 Findings as analyzed in the 2006 FEIS.

Part II of this Supplemental Findings Statement summarizes the Project background, status and description. Part III describes the SEQRA process and environmental analysis framework employed in the FSEIS. Part IV identifies the environmental impact areas that will not be affected by a delay in Phase II of the Project. Parts V and VI discuss the analyses set forth in the FSEIS, with particular emphasis on identification of significant adverse environmental impacts that will result from the construction and operation of Phase II of the Project under the Extended Build-Out Scenario. Part VII discusses mitigation measures, and Part VIII discusses alternatives considered in



connection with the Extended Build-Out Scenario. Part IX summarizes the unmitigated significant adverse impacts of the Extended Build-Out Scenario. Part X presents the rationale for selecting the Reduced Parking Alternative. Part XI presents a summary evaluation of impacts and Project benefits. Part XII presents the certification and supplemental findings required by SEQRA and the SEQRA Regulations.

### **A. Location of Action and Brief Description**

The Project is 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 occupies 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 includes 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 also includes a reconfigured and improved rail yard and a new direct entrance to the Atlantic Avenue/Pacific Street subway station complex. Section II.C below, provides the current project status.

### **B. Lead Agency**

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## **II. Project Background, Status and Description**

### **A. Introduction**

In November 2006, ESD, in cooperation with the Metropolitan Transportation Authority (“MTA”) and the City of New York (the “City”), issued the FEIS for the Project. The 2006 FEIS was prepared under SEQRA and the SEQRA Regulations, with ESD as the lead agency. At its December 2006 meeting, the ESD Directors adopted its SEQRA findings and affirmed 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 I also includes site utilities and other infrastructure in the vicinity of the site. 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 (the “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 (the “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 the Order dated July 13, 2011, the Court 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.” The Court limited its order to Phase II 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.’” In 2012, the Court Order was affirmed by the Appellate Division of State Supreme Court.

## **B. Project Background**

### **1. 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 will eliminate blighted conditions in the area by implementing development that will include a new Arena for the former 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 will 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 will 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 will provide eight acres of publicly accessible open space, and an enclosed, publicly accessible Urban Room. Both variations also assumed that community facility uses will 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 will 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 will 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.

## **2. Project Modifications Considered in the 2009 Technical Memorandum**

In June 2009, ESD approved a resolution adopting certain modifications to the 2006 MGPP in 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 2006 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.

## **3. 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, LIRR, 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 general overview of several of the more important contracts is provided below 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 the Extended Build-Out Scenario.

**a. 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.

**b. 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 those 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.

### **c. 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).

Under the Development Agreement, the project sponsors and their contractors must comply with the Amended Memorandum of Environmental Commitments (“MEC”). The MEC specifies certain environmental commitments and mitigation measures with respect to implementation of the Project.

In connection with the preparation of the FSEIS, a second amended MEC (also referred to herein, as the “MEC”) has been prepared to supplement and refine the measures imposed to avoid or mitigate the significant environmental impacts identified over the course of the environmental review process with respect to construction of the Project. It is anticipated that ESD and the project sponsors will enter into an agreement by which the second amended MEC is substituted for the MEC that was annexed as an exhibit to the Development Agreement in 2009.

#### **d. 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.

#### **e. 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.

##### *1. 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.

2. *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 ESD 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.

### 3. *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 remained unchanged.

After preparation of the DSEIS, FCRC proposed to resequence certain construction work related to the rail yard and the foundations for the platform and Phase II buildings over the rail yard, by pre-placing the foundations for the platform and Phase II buildings when constructing the permanent rail yard on Block 1120 and the southern half of Block 1121. This proposal would require that the New Yard construction completion deadline be extended to December 1, 2017. The proposal was examined in a SEQRA technical memorandum dated June 12, 2014.

### 4. *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.

### C. Project Purpose, Benefits and Current Status

The purpose and need of the Project has not changed since the publication of the 2006 FEIS and issuance of the 2006 Findings. As stated in the 2006 FEIS, 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 (completed in September 2012), necessary 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 program), a new subway entrance (completed in September 2012), and an improved rail yard. The Project's buildings would contribute to the Brooklyn skyline and the open space would connect the surrounding neighborhoods, which are currently separated by the open rail yard and a major avenue (Atlantic Avenue). With the removal of numerous blighted buildings on the project site and the completed construction of the arena and new transit entrance on the project site, the Project has begun to realize some of these goals.

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 the 2009 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. Work has continued in the rail yard since that time. The MTA is currently considering an extension of the construction completion date of the permanent yard to December 1, 2017, to allow for the construction of foundations for the buildings and platform above the yard in coordination with the permanent yard.
- **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 2015.
- **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; 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.

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 have put forward a plan to install a green roof on Barclays Center as a new sustainable feature of the Arena. The green roof would also reduce the potential for the transmission of noise from the arena. The green roof will 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. The sedum tray system will cover most of the roof and will consist of approximately 130,000 square feet of sedum, making it one of the largest green roofs in New York City. The installation of this Phase I component will commence in 2014. A SEQRA technical memorandum examining the potential environmental impacts of the installation of the green roof has been prepared and is dated June 11, 2014.

#### **D. Joint Venture with Greenland**

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.

As further described by FCE, under the joint venture Greenland acquired a 70 percent ownership interest in the Project (excluding the Arena and B2, as noted above), and agreed to co-develop the Project with FCE and its affiliates and to 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 analyzed in the FSEIS. The schedule is comparable in duration to the schedule studied in the 2006 FEIS.

On December 13, 2013, ESD issued a memorandum examining the proposed Greenland transaction and concluding that it did not raise any issues that warranted examination in an SEIS.

## **E. Proposed Modifications and Phase II Project Component Description**

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 have changed; 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 will not be altered by the modifications. At the time of the preparation of the DSEIS and FSEIS, the project sponsors had proposed 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. Subsequently, in response to public comments on the DSEIS and the proposed 2014 MGPP Modifications approved for public comment on March 28, 2014, ESD and certain FCRC affiliates have negotiated certain proposed modifications to the Project documents to impose additional phasing requirements with respect to the construction of the Project’s affordable housing units and make related adjustments to the requirements of the Project documents. These proposed modifications, which were negotiated after preparation of the FSEIS, are also described below.

### **1. Proposed Shift in 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.

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

The proposed parking plan for the project site analyzed in the SEIS would locate between 50 and 100 parking spaces below Building 3 on the Arena Block; eliminate the below-grade parking facility on the southwest corner of Block 1120; and reduce 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. The FSEIS also assesses a “Reduced Parking Alternative,” under which the overall total parking proposed on the project site would be reduced to 1,200 spaces. The Reduced Parking Alternative is described in greater detail below.

## **F. Description of Phase II Project Components**

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 analysis purposes in the FSEIS, the commercial mixed-use variation applies 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 will 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 will be the same as proposed in the 2006 FEIS.

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

As shown in Table 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.

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 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 will be in addition to the floor area indicated in the table (i.e., the proposed school will not replace any of the floor area dedicated to residential use in the Phase II building in which it could be located).

#### **a. Phase II Residential Uses**

In Phase II of the Project, residential use is planned for each building. Of these, there will 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 will 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) will be affordable units. The remainder of the affordable units will be built in Phase II (the FSEIS assumed that no affordable units would be built on Site 5). Therefore,

if FCRC were to construct Phase I so as to minimize the inclusion of affordable housing units, consistent with the Project document requirements analyzed in the SEIS, 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. In addition, the Development Agreement requires that, subject to specified contingencies, not more than 50 percent of the Phase II units are permitted to be built without completion of 50 percent of the Project affordable units. It should be noted that while the FSEIS 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.

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

| Proposed Uses  | 2006 FEIS                       |                                | FSEIS                           |                                 |
|--|---------------------------------|--------------------------------|---------------------------------|---------------------------------|
|  | Residential Mixed-Use Variation | Commercial Mixed-Use Variation | Residential Mixed-Use Variation | Commercial Mixed-Use Variation  |
| <b>Phase I<sup>1</sup>: Development of Arena Block and Site 5</b>  |                                 |                                |                                 |                                 |
| Residential <sup>3</sup>   | 2,085,000 gsf<br>(2,110 units)  | 994,000 gsf<br>(1,005 units)   | 1,890,000 gsf<br>(1,922 units)  | 1,329,000 gsf<br>(1,498 units)  |
| Hotel (180 rooms)  | 165,000 gsf                     | 0 gsf                          | 165,000 gsf                     | 0 gsf                           |
| Retail <sup>3</sup>  | 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 <sup>7</sup>   | 850,000 gsf                     | 850,000 gsf                    | 662,000 gsf                     | 662,000 gsf                     |
| Parking (spaces) <sup>8</sup>  | 2,346 spaces <sup>4</sup>       | 2,346 spaces <sup>4</sup>      | 1,161–1,211 spaces <sup>5</sup> | 1,161–1,211 spaces <sup>5</sup> |
| Private Open Space   | ±1 acres                        | ±1 acres                       | 0 acres                         | 0 acres                         |
| Publicly Accessible Open Space   | 0 acres                         | 0 acres                        | 0 acres                         | 0 acres                         |
| <b>Phase II<sup>2</sup>: Development East of 6th Avenue<sup>6</sup></b>  |                                 |                                |                                 |                                 |
| Residential <sup>3</sup>   | 4,278,000 gsf<br>(4,320 units)  | 4,278,000 gsf<br>(4,320 units) | 4,486,000 gsf<br>(4,508 units)  | 4,486,000 gsf<br>(4,932 units)  |
| Retail <sup>3</sup>  | 156,000 gsf                     | 156,000 gsf                    | 156,000 gsf                     | 156,000 gsf                     |
| Parking (spaces) <sup>8</sup>  | 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                         |
| <b>Phase I and Phase II: Full Build-Out<sup>6</sup></b>  |                                 |                                |                                 |                                 |
| Residential <sup>3</sup>   | 6,363,000 gsf<br>(6,430 units)  | 5,272,000 gsf<br>(5,327 units) | 6,376,000 gsf<br>(6,430 units)  | 5,815,155 gsf<br>(6,430 units)  |
| Hotel (180 rooms)  | 165,000 gsf                     | 0 gsf                          | 165,000 gsf                     | 0 gsf                           |
| Retail <sup>2</sup>  | 247,000 gsf                     | 247,000 gsf                    | 247,000 gsf                     | 247,000 gsf                     |
| Commercial   | 336,000 gsf                     | 1,606,000 gsf                  | 336,000 gsf                     | 1,076,000 gsf                   |
| Arena <sup>7</sup>   | 850,000 gsf                     | 850,000 gsf                    | 662,000 gsf                     | 662,000 gsf                     |
| Parking (spaces) <sup>8</sup>  | 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                         |
| <b>Notes:</b> All gross square foot numbers are rounded to the nearest thousand.   |                                 |                                |                                 |                                 |
| <sup>1</sup> In the SEIS, the Phase I program is considered as part of baseline conditions for the Future Without Phase II condition (the No Build condition).                           |                                 |                                |                                 |                                 |
| <sup>2</sup> In the SEIS, the Phase II program is considered the Extended Build-Out Scenario, for the Future With Phase II condition (the Build condition).                              |                                 |                                |                                 |                                 |
| <sup>3</sup> 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.               |                                 |                                |                                 |                                 |
| <sup>4</sup> Includes 1,596 temporary spaces.  |                                 |                                |                                 |                                 |
| <sup>5</sup> Includes 711 temporary spaces that will be eliminated through the development of Phase II.  |                                 |                                |                                 |                                 |
| <sup>6</sup> Phase II (and thus the Full Build-Out) may also contain a 100,000 gsf public school at the option of DOE.   |                                 |                                |                                 |                                 |
| <sup>7</sup> The 662,000 gsf of Arena floor area does not include the approximately 13,000 gsf of retail space in the Arena.   |                                 |                                |                                 |                                 |
| <sup>8</sup> The SEIS also examines a Reduced Parking Alternative under which the Project would include 1,200 parking spaces (290-340 spaces in Phase I and 860-910 spaces in Phase II). |                                 |                                |                                 |                                 |

As described in the 2006 FEIS, affordable units will 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 housing program will 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 will be rent stabilized, and rent for the affordable units will be targeted at 30 percent of household income. Table 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.

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

Additionally, it is a Project goal that 50 percent of the affordable units on a square foot basis will 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 housing 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 applicable agency approval.

**Table 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)**

| <b>Income Band<sup>1</sup></b> | <b>AMI Income Range</b> | <b>Number of Affordable Units</b> | <b>Minimum Income for Family of 4<sup>2</sup></b> | <b>Maximum Income for Family of 4</b> |
|--------------------------------|-------------------------|-----------------------------------|---|---------------------------------------|
| 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 median family income (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; HUD FY 2013 Income Limits; AKRF, Inc.

**b. Phase II Retail Uses**

Consistent with the assumptions of the 2006 FEIS, the Phase II program under the Extended Build-Out Scenario will 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 will also be for use as a community facility. These retail spaces will not have footprints large enough to house “big box” retail.

**c. Phase II Open Space and Community Facilities**

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

On Block 1120, the space between Pacific Street and Buildings 5, 6 and 7 will be landscaped, creating a green corridor along the Pacific Street block with the new residential buildings serving as a backdrop to the landscaped edge. The open space will 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. The open space will have a variety of active and passive spaces and planted and paved areas, and will incorporate features such as playing fields, water features, walking paths, seating areas, and extensive landscaping. 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 will extend to Atlantic Avenue. The publicly accessible open space will 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 or sunset in other months, seven days a week. This open space will be owned by a conservancy or other not-for-profit entity established by the project sponsors, which will 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.

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

A community facility element will 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 will replace a portion of the retail space. The intergenerational facility will consist of child care and youth and senior centers in one building with an atrium. The childcare center will accept Agency for Child Development (“ACD”) vouchers. Additionally, the Project will 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 MEC, the location of the proposed school will be determined by the project sponsor and DOE; however the FSEIS assumed that it will be located within the base of either Building 6 or Building 15. It is currently anticipated that the public school will be located in the base of Building 15.

#### **d. 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 under the base-case scenario analyzed in the SEIS. These would include: in Phase I, approximately 50–100 spaces in a below-grade facility beneath Building 3 with access from Dean Street and 400 spaces in a below-grade facility on Site 5 with access from Pacific Street, and in Phase II, 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.

As noted above, the FSEIS also assesses a Reduced Parking Alternative under which the overall total parking proposed on the project site would be reduced to 1,200 spaces. Under the Reduced Parking Alternative, the 1,200 spaces would be distributed as follows: in Phase I, approximately 50-100 spaces in a below-grade facility beneath Building 3 with access from Dean Street and 240 spaces in a below-grade facility on Site 5 with access from Pacific Street, and in Phase II, up to 910 below-grade spaces on Block 1129 with access from Dean Street and Carlton and Vanderbilt Avenues.

### **III. SEQRA Process and Environmental Analysis Framework**

#### **A. The SEQRA Process**

The review under SEQRA has been conducted in coordination with the review of the proposed amendment to the MGPP under the Urban Development Corporation Act (Chapter 174, Section 1, Laws of 1968; codified at N.Y. Unconsol. Laws § 6251 et seq.). The steps involved in this process are described below.

ESD issued and distributed for public review the *Draft Scope of Work for a Supplemental Environmental Impact Statement* on December 19, 2012. A public scoping session was held on February 27, 2013, in the Founders Hall of St. Francis College at 182 Remsen Street, in Brooklyn. Written comments were accepted from issuance of the Draft Scope of Work through the public comment period which ended March 14, 2013. A Final Scope of Work reflecting the consideration of comments made during scoping and the identification of potential changes to the Phase II program was issued on February 6, 2014, with a Response to Comments document. An amended Response to Comments document was made available on February 26, 2014.

The DSEIS was then prepared in accordance with the Final Scope of Work. On March 28, 2014, the ESD Directors accepted the DSEIS, and a Notice of Completion was issued. At the same meeting, the ESD Directors adopted the 2014 MGPP for public comment. Paper copies of the Executive Summary of the DSEIS, along with the Notice of Completion, and the entire DSEIS on a CD-ROM were sent to public agencies, the Mayor of the City of New York, the Brooklyn Borough President's Office, other elected officials, and the community boards in the vicinity of the project site. The entire DSEIS was made available to the public on the ESD web site, and paper copies were also made available for inspection at ESD's office, 633 Third Avenue, New York, NY 10017, and branches of the Brooklyn Public Library at: Grand Army Plaza, 496 Franklin Avenue, 25 4<sup>th</sup> Avenue, and 93 St. Edwards Street. Paper copies of the Executive Summary of the DSEIS and a CD-ROM including the entire DSEIS were made available at no charge from ESD upon request, and hard copies of the entire DSEIS were available for purchase (at a price set to cover the costs of copying the document).

A Public Hearing Notice was published on ESD's website and also in the New York *Daily News* on March 31, 2014, stating the date for and location of the public hearing on the DSEIS and the proposed 2014 MGPP, and stating that the comment period on the DSEIS would close on May 12, 2014, and the comment period on the proposed amendment to the 2009 MGPP would close on May 30, 2014. In addition, the notice was published in the *Environmental Notice Bulletin* on April 2, 2014, and was duly distributed in accordance with the SEQRA Regulations. On April 30, 2014, ESD held the public hearing on the DSEIS and 2014 MGPP at the Long Island University located at 75 DeKalb Avenue, Room HS107, Brooklyn, NY 11201, from 5:30 to 10:07 p.m. All persons

wishing to make oral comments during the public hearing were heard during this time. Approximately 68 people spoke at the April 30 public hearing.

ESD accepted comments on the DSEIS orally and in writing at the April 30 public hearing, and in writing by mail and email from the Notice of Completion on March 28, 2014, through May 12, 2014. ESD received comments orally and/or in writing from approximately 113 people and organizations.

On June 11, 2014, ESD posted the FSEIS on its web site. On June 12, 2014, the ESD Directors accepted the FSEIS. The FSEIS includes a summary of, and responses to, substantive comments submitted with respect to the DSEIS.<sup>2</sup> It also incorporates revisions to the DSEIS that were made subsequent to the issuance of the DSEIS. The revisions reflect updated analysis with additional or more accurate information, refinement of mitigation measures, and responses to public and agency comments. Immediately after acceptance of the FSEIS on June 12, 2014, a Notice of Completion was published, and the FSEIS was duly circulated and made available at the same locations as the DSEIS had been made available, including the ESD web site, plus the Clinton Hill library.

A number of State and City agencies were consulted in the supplemental environmental review process, including the Metropolitan Transportation Authority, Long Island Rail Road, MTA NYC Transit, the New York City Department of Transportation (“DOT”), the School Construction Authority (“SCA”) and the DOE. Certain of these agencies provided particular assistance to ESD in the review of those matters within the agency’s area of expertise. DOT reviewed the traffic and parking analyses and proposed traffic mitigation measures appearing in the DSEIS and FSEIS, and advised ESD that it concurs with the findings included in the FSEIS with respect to these subject areas. DOT has also advised ESD that it finds the traffic mitigation measures identified in the document to be feasible. SCA and DOE provided ESD with information used in the SEIS analysis of potential impacts to public school seats and mitigation.

Having reviewed the DSEIS, FSEIS and supporting and related documents, each of which is incorporated by reference into this supplemental statement of findings, and the comments received on the FSEIS, ESD makes the supplemental findings and conclusions set forth below based on those documents and the administrative record.

## **B. Overview of the Environmental Impact Analysis Approach in the FSEIS**

### **1. FSEIS Methodology**

The FSEIS was prepared in accordance with the procedures and requirements of SEQRA and the SEQRA Regulations. Like the 2006 FEIS for the Project, the SEIS generally follows the guidelines

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<sup>2</sup> At the public meeting of the ESD Directors to consider the FSEIS, one commenter brought to ESD’s attention that one e-mail comment was not addressed. It was subsequently determined that the comment was received by ESD’s computer system but had been quarantined by the system and therefore not received by ESD’s project team. The comment raised an issue concerning whether the SEIS should look to an Islanders hockey game, rather than a Nets basketball game, in formulating the No-Build scenario for purposes of analysis. (Because the arena has already been built, it is included in the “No-Build” scenario for the Phase II project analyzed in the SEIS.) In a memorandum dated June 18, 2014, ESD’s traffic consultant (Philip Habib & Associates) addressed this issue. In that memorandum, the consultant explained that this question has been considered in preparing the SEIS, and that it was determined that it would be more appropriate to account for a Nets game in developing No-Build conditions. Among the reasons cited were the lower attendance at hockey games and the availability of the adjoining LIRR Atlantic Terminal as a mode of transportation for Long Island hockey fans.

set forth in the *CEQR Technical Manual* published by the City of New York to assist its agencies in complying with SEQRA and its City counterpart, known as CEQR. While this guidance is not binding on ESD, it served as a general guide as to the methodologies used in evaluating potential impacts in this SEIS, where appropriate. In some technical areas, there have been material changes to the *CEQR Technical Manual* since publication of the 2006 FEIS. The analyses presented in the DSEIS were generally conducted in accordance with the guidance outlined in the 2012 *CEQR Technical Manual*. Two weeks prior to the issuance of the DSEIS, an update to the *CEQR Technical Manual* was released by the New York City Mayor's Office of Environmental Coordination. Because the DSEIS was already in production at the time of the release of the 2014 *CEQR Technical Manual*, ESD prepared a technical memorandum after issuance of the DSEIS to address the revisions to the *CEQR Technical Manual*. This technical memorandum, which is included as Appendix F to the FSEIS, considered whether one or more analyses contained in the DSEIS should be revised in light of the updated guidance set forth in the 2014 *CEQR Technical Manual*. On the basis of that technical memorandum ESD determined that, as a result of the changes to the *CEQR Technical Manual*, the FSEIS air quality analyses should examine the potential for the parking facilities to result in significantly elevated PM concentrations, and an equation used in one of the technical analyses of transit facilities (relating to the width increment threshold for subway stairways and passageways) should be updated. In accordance with the technical memorandum, ESD concluded that the other changes in the 2014 *CEQR Technical Manual* did not warrant changes to the analysis presented in the DSEIS.

## **2. FSEIS Overview**

In accordance with the Order, ESD prepared the FSEIS to examine the potential environmental impacts of a prolonged delay in the completion of Phase II of the Project, referred to as the Extended Build-Out Scenario in the FSEIS and in this supplemental findings statement. The environmental impacts that would result from a delay in Phase II construction of the Project can be categorized as being related to the construction of the Project over an extended period of time or the completion and resulting operation of the Project at a later date.

The FSEIS includes a detailed construction-period analysis for Phase II of the Project under the Extended Build-Out Scenario using three illustrative construction phasing plans (described below) that consider concentrated periods of construction as well as less concentrated but more continuous construction for an extended period of time. Phase II contains eleven buildings that may be built in a variety of different years and sequences in the Extended Build-Out Scenario. ESD has chosen the three illustrative construction phasing plans to allow the FSEIS to identify the impacts from a reasonable range of potential construction phasing schedules and sequences in the Extended Build-Out Scenario.

With respect to potential operational impacts, the FSEIS assumes a 2035 analysis year as the year Phase II of the Project would be completed (the Build Year) under the Extended Build-Out Scenario, in accordance with the Court Order. The FSEIS presents comparisons of the results of the environmental assessment using the 2035 Build Year to the conclusions of the 2006 FEIS, which assumed a 2016 Build Year as the reasonable worst-case development scenario.

For many of the technical analyses, the FSEIS includes a description of (1) existing conditions, (2) an assessment of conditions in the future without Phase II of the Project (the "Future without Phase II," or the "No Build Condition"), and (3) an assessment of conditions in the future with Phase II of



the Project in the Extended Build-Out Scenario (the “Future with Phase II,” or the “Build Condition”). Potential impacts of the Phase II Project are based on a comparison between conditions in the Future with Phase II (the Build Condition) and conditions in the Future without Phase II (the No Build Condition). In addition, where appropriate, a comparison of the results of the environmental assessment in the FSEIS is made to the conclusions of the 2006 FEIS, which assumed a 10-year build-out.

For technical areas in the FSEIS that require particular analysis periods for quantified assessments, the identification of reasonable worst-case impacts were determined following appropriate methodologies for that technical area. For example, for transportation systems, reasonable worst-case conditions are generally based on a combination of construction worker and truck traffic and expected periods with temporary lane or roadway closures. For the air quality analysis, assessments of the potential reasonable worst-case adverse impacts are determined based on the range of expected construction-related equipment, trucks, and workers over the anticipated construction period.

Because the 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, the new roadway configurations for the area and the Phase I parking plans—are assumed to be part of the background condition for the 2035 operational analysis Build Year. During the construction period, those Phase I Project elements that have already been completed and those that are anticipated to be completed by a particular construction period analysis year, are included as 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, are accounted for in the FSEIS as part of the baseline conditions for the Future Without Phase II (i.e., the No Build condition). This approach: (i) is consistent with the directive in the Order to perform a review of a delay in Phase II construction; and (ii) reflects the fact that Phase I was previously subject to a judicially validated environmental review, that ESD’s prior approval of Phase I was not disturbed by the Order, and that construction of Phase I is now well under way.

To comply with the Court Order, specifically, to evaluate the potential environmental impacts of a prolonged delay in the completion of Phase II of the Project, the Extended Build-Out Scenario assumes the completion of the various Phase I elements according to the specified timeframes outlined above, and assumes Phase II of the Project would be built over a period of approximately 18 years from 2018 to 2035, with the possibility of certain Phase I elements overlapping with construction of Phase II. As described in Chapter 3A, “Construction Overview,” of the SEIS, under the Extended Build-Out Scenario, most of the Phase I construction elements are assumed to be substantially completed before the start of Phase II construction and are incorporated in the future background baseline. Building 1 and Site 5 may be constructed anytime during the overall construction period and could occur during Phase II construction. Accordingly, for each of the various technical areas analyzed, the SEIS either takes into account the effects of the operation of Building 1 and Site 5 as background conditions or the possibility that there may be an overlap between the construction of these buildings and the Phase II construction, depending on which condition would represent the reasonable worst-case relevant to that technical area. Therefore, where appropriate the SEIS studied the concurrent construction of Phase I and Phase II buildings because Building 1 and Site 5 were assumed to coincide with the Phase II construction period.

As explained in the SEIS, the three illustrative phasing plans analyzed in the SEIS are not intended to serve as a prediction of the exact schedule and sequence of the Phase II construction, but rather have been developed to illustrate how the timing of the construction of certain Project components may vary and to provide for a reasonably conservative analysis of the range of environmental effects associated with a delayed build-out of Phase II. The three illustrative construction phasing plans serve as the basis of the construction impacts analyses because they provide a range of potential impacts within the envelope of the reasonable worst-case construction schedule under the Extended Build-Out Scenario. Based on these illustrative phasing plans, each technical analysis conservatively focuses on reasonable worst-case periods of peak construction to identify the potential for significant adverse impacts with respect to that technical area. For each technical area, the analysis accounts for intense periods of construction during which several Project elements are being constructed simultaneously, including, where relevant, significant overlap between Phase I and Phase II construction.

It is important to note that neither the 2009 MGPP nor the SEIS would preclude construction of Phase II of the Project faster than the 2035 Build Year that was used for analysis purposes in the SEIS to comply with the Court Order. The 2006 FEIS analyzed the potential impacts of the completion of both the Phase I and Phase II of the Project in a 10-year timeframe. Thus, the potential impacts from construction under this shorter, more intensive timeframe have been identified and mitigation measures to address those impacts have been included in the Project's MEC.

The recent announcement by the project sponsors of their current plans to construct Building 3 and certain Phase II buildings concurrently is an example of a schedule that could occur for Project construction that may be shorter than the 25-year schedule studied in the FSEIS pursuant to the Court Order. Because the 2006 FEIS and FSEIS together analyzed a wide range of scenarios – some condensed (with multiple Project buildings and other elements under concurrent construction) and some extended – ESD has identified impacts and devised practicable mitigation measures for Project construction scenarios falling within the wide range of schedules examined over the course of this comprehensive environmental review.

### **3. FSEIS Development Program Variations and Extended Build-Out Scenario Illustrative Construction Phasing Plans**

As described above, the Project will introduce a maximum total of 6,430 dwelling units (Phases I and II). With the proposed shift of up to approximately 208,000 gsf of floor area from the Arena Block in Phase I to Phase II parcels, the residential mixed-use variation could include up to 1,922 units in Phase I, and up to 4,508 units in Phase II, and the commercial mixed-use variation could include up to 1,498 units in Phase I and up to 4,932 units in Phase II. The total number of units built at the completion of the Project will not exceed 6,430 (the same number of residential units analyzed in the 2006 FEIS). Therefore, for the purposes of the Phase II analysis, the development under the Extended Build-Out Scenario 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.

As noted above, the FSEIS construction analyses assess the potential for significant adverse construction impacts with the prolonged construction of Phase II under three Extended Build-Out Scenario illustrative construction phasing plans. The construction phasing plans are partially guided

by certain contractual agreements between the project sponsors and ESD as well as between the project sponsors and MTA, which dictate the outside dates for starting and completing certain project buildings and components. The Extended Build-Out Scenario illustrative construction phasing plans are not intended to serve as a prediction of the exact sequence of the Phase II construction, but rather were developed to illustrate how the timing of the construction of certain project components may vary and to provide for a reasonably conservative analysis of the range of environmental effects associated with a prolonged build-out of Phase II. Although it is possible that some or all of the buildings planned for Phase II would be constructed using prefabricated, or modular, construction techniques, the FSEIS assumes that each building would be constructed using conventional construction methods, as such methods generally involve more on-site construction activity and would be the reasonable worst case scenario for the purpose of analyzing potential construction impacts. Where relevant, differences in potential impacts related to conventional and modular construction techniques are discussed qualitatively in the FSEIS. For all construction phasing plans, the FSEIS assumed that all required infrastructure and open space will be provided with or before the building being constructed, although the programming of certain open space is expected to differ during the construction period from the programming envisioned upon completion of Phase II, because certain permanent open space features cannot be feasibly constructed in sections. Moreover, the construction of an adjoining building may require use of a portion of the open space associated with a previously constructed adjoining building. The three illustrative construction phasing plans, described below, are designed to comply with all of the contractual agreements among the project sponsors, ESD and MTA.

**a. Construction Phasing Plan 1: Continuous Sequential Phasing With Block 1129 First**

Under this Extended Build-Out Scenario illustrative phasing plan, construction is assumed to begin on Block 1129 with Building 14. Construction would then generally proceed west to east, with Buildings 13, 12, and 11. Building 15 on Block 1128 would be completed before construction begins on Block 1121 on the first portion of the platform over the LIRR Vanderbilt Yard. Buildings 8, 9, and 10 would be constructed on that platform while construction begins on the platform over the western portion of Block 1120 on which Building 5 would be built. Construction on the eastern portion of the platform over Block 1120 will also begin as Buildings 9 and 10 are constructed. Buildings 5, 6, and 7 would be constructed last.

**b. Construction Phasing Plan 2: Continuous Sequential Phasing**

This Extended Build-Out Scenario illustrative construction phasing plan begins with the construction of Building 15 on Block 1128. Similar to Construction Phasing Plan 1, this phasing plan takes advantage of the fact that Block 1128 is situated on land, *i.e.*, would not require the construction of a platform before building construction can begin. The construction of the platform over the western portion on Block 1120 would begin generally at the same time, followed by Building 5 on top of the platform. Construction would continue with Building 14 on Block 1129, which is subject to a contractual agreement that construction on this block must begin by May 2020. After Building 14, construction would proceed generally clockwise: the portions of LIRR platform on Block 1120 under Buildings 6 and 7, followed by each building, respectively; and the platform over Block 1121, with Buildings 8, 9, and 10 being constructed as each portion of the platform is complete. The remainder of Block 1129 (Buildings 13, 12, and 11) would be completed last under this phasing plan.

**c. Construction Phasing Plan 3: Start and Stop Sequential Phasing with Intense Construction Activities**

The third Extended Build-Out Scenario illustrative construction phasing plan was designed to illustrate construction that would start as described in Construction Phasing Plan 1, stop for a period of time for unforeseen reasons, and then restart with concentrated construction until project completion in 2035.

Construction under this phasing plan would proceed in the same general sequence as Construction Phasing Plan 1 above. However, after the construction of Building 14 on Block 1129 to fulfill the aforementioned contractual obligation, construction is assumed to stop for several years. The remainder of the site would be completed when construction resumes; construction would end in 2035.

**IV. Areas of Environmental Impact That Would Not Be Affected By The Extended Build-Out Scenario**

**A. Construction Period Impacts That Would Not Be Affected By The Extended Build-Out Scenario**

Several of the environmental issues analyzed in the 2006 FEIS would not be affected by an extended construction period for the Phase II development. As a result, these areas did not undergo a detailed analysis in the FSEIS and the relevant discussions and conclusions set forth in the 2006 Findings remain applicable. The analyses not included for detailed construction assessment in the FSEIS, and the reasons for screening out these analysis areas are summarized below.

**1. Construction – Cultural Resources**

The construction of Phase II of the Project under the Extended Build-Out Scenario would not result in different effects to archaeological or architectural resources that were not previously identified in the 2006 FEIS. Delayed construction and modifications to the construction sequencing would not change the stipulations in the Letter of Resolution among ESD, the project sponsors and the New York State Office of Parks, Recreation and Historic Preservation (“OPRHP”). The project sponsors would continue to implement a Construction Protection Plan (“CPP”) to avoid construction-related impacts on historic resources within 90 feet of Project construction.

At the time of the publication of the 2006 FEIS, both the SN/R-listed Prospect Heights Historic District and the New York City Landmarks (“NYCL”)-eligible Prospect Heights Historic District were included in the analysis of impacts. A CPP was prepared in consultation with OPRHP to avoid adverse demolition/construction-related impacts to buildings within the Prospect Heights Historic District that were identified as being within 90 feet from the project site. Vibration monitoring at these sensitive resources commenced in 2008. Since the 2006 FEIS, the NYCL Prospect Heights Historic District has been designated by the New York City Landmarks Preservation Commission, which defined the boundaries slightly differently than those analyzed in the 2006 FEIS. As a result, the CPP has been amended to include additional historic resources within the expanded boundaries of the Prospect Heights Historic District that are within 90 feet of the project site where construction activity associated with the Atlantic Yards project has or will occur. In a letter dated May 5, 2013, the OPRHP accepted the CPP revisions and found the CPP

appropriate to protect historic resources. As per the updated CPP, future vibration monitoring would include these additional resources.

As stated in the FSEIS (Response to Comment 3J-15), the CPP will be amended to clarify that vibration monitoring is required at any historic resource within 90 feet of Project-related construction work, including utility work.

Therefore, construction of the Extended Build-Out Scenario would not have any significant adverse construction impacts on cultural resources that were not previously identified in the 2006 FEIS.

## **2. Construction – Shadows**

The construction of Phase II of the Project under the Extended Build-Out Scenario would not result in any new shadows during the construction period because the Design Guidelines approved by ESD in 2006 would not be affected by the pace of construction.

## **3. Construction – Hazardous Materials**

Construction and development of the Phase II components under the Extended Build-Out Scenario would have the same potential for exposure to hazardous materials and require the same commitments as described in the 2006 FEIS and included in the 2009 MEC. While the Extended Build-Out Scenario would affect the timing of the construction of the buildings, it would not result in changes to the footprint of the project site or commitments to implement a Construction Health and Safety Plan, community air monitoring plan during excavation, and other remediation measures; and thus, the delayed construction would not affect the analysis presented in the 2006 FEIS. The FSEIS does, however, include updated information regarding hazardous materials identified on the project site since 2006 and/or encountered during the construction of Phase I project elements. The list of site remediation and post-construction measures identified in the 2006 FEIS are also reviewed and evaluated to ensure that no significant adverse impacts would occur with respect to hazardous materials. For these reasons, the construction of Phase II of the Project under the Extended Build-Out Scenario would not affect the conclusions in the 2006 FEIS for hazardous materials impacts from construction activities or result in significant adverse impacts with respect to hazardous materials.

## **4. Construction – Infrastructure**

The construction of Phase II of the Project under the Extended Build-Out Scenario would not affect the Project's Phase II programming in a manner that would alter the infrastructure demands of the Project during construction, nor would it obviate the project sponsors' obligations for the provision of adequate infrastructure including water supply, sanitary sewerage, measures to control stormwater runoff, solid waste management, and energy during construction.

In terms of stormwater specifically, impervious surface coverage on the project site would remain the same throughout the construction period as under existing conditions and therefore stormwater flows from the project site would also remain unchanged until building construction begins on any given portion of the site. A large portion of the site as it exists now is taken up by Vanderbilt Yard which is largely unpaved and represents a pervious surface through which stormwater can percolate. As the project introduces more impervious surfaces into the project site, stormwater flow would have to become more controlled. Stormwater would be captured and detained through the

stormwater detention/retention measures outlined in the MEC; these measures would be constructed as each building goes online. Furthermore, as described in the FSEIS, the construction of each building and surrounding amenities would be conducted in accordance with a stormwater pollution prevention plan (“SWPPP”) which would include fully designed and engineered stormwater management practices to be followed during construction.

Overall sewer infrastructure demand throughout the Project’s construction would be controlled through the stormwater and sewage minimization measures outlined in the MEC (i.e. detention and retention facilities, stormwater recycling, high-efficiency/low-flow fixtures), as well as implementation of any other Best Management Practice (“BMP”) measures to minimize stormwater and sanitary flow that may be incorporated during design. These measures would be brought on line as each Phase II building is constructed to satisfy the requirements of the New York City Department of Environmental Protection (“NYCDEP”) Site Connection Proposal for each building.

A delayed construction of Phase II would not change the methods for disposing of construction-generated waste, which would be disposed of off-site at appropriate landfills by private carters. Similarly, a delay in construction of Phase II of the Project under the Extended Build-Out Scenario would not alter the requirements for energy for construction activities; energy would be provided to the construction site through grid-power and, if necessary, on-site generators.

Additionally, as noted in the FSEIS, since the publication of the 2006 FEIS, the City released its Green Infrastructure Plan, which presents an approach to improving water quality by reinforcing public and government support for green infrastructure to control stormwater runoff, in addition to building targeted traditional infrastructure. A critical goal of the Green Infrastructure Plan is to manage runoff from impervious surfaces through detention and infiltration source controls. In support of this goal, in 2012, NYCDEP released a new stormwater performance standard: new developments applying for NYCDEP site connection approvals must design stormwater controls and apply BMPs so that the rate of stormwater flowing from the site to sewers does not exceed 10 percent of the allowable flow or 0.25 cubic feet per second, whichever is less. (Allowable flow is the stormwater flow from a development that can be released into existing storm or combined sewer based on the drainage plan for the area and built sewers.) The intended result of this standard is to slow the flow of stormwater to the sewers in order to decrease the stress on the sewer infrastructure during rain events and to reduce the incidence of combined sewer overflows. The performance standard, which is applicable city-wide, is more stringent than what was analyzed in the 2006 FEIS; all buildings constructed as part of the Project would be required to conform to this standard.

For these reasons, the Extended Build-Out Scenario would not result in significant adverse impacts with respect to infrastructure.

## **5. Construction – Public Health**

The FSEIS evaluates potential air quality, noise and hazardous material impacts from the prolonged construction of Phase II of the Project under the Extended Build-Out Scenario. As described in the FSEIS, the construction of Phase II of the Project would not result in significant adverse air quality, operational noise or hazardous material impacts but, as was the case with the 10-year construction schedule analyzed in the 2006 FEIS, would result in significant adverse construction noise impacts that are only partially mitigated. Therefore, a public health analysis is presented to address the

Project's significant adverse construction noise impacts. The Extended Build-Out Scenario would not result in significant adverse public health impacts in other analysis areas.

## **B. Operational Impacts That Would Not Be Affected By The Extended Build-Out Scenario**

A number of environmental impact analysis areas would not be affected by the delayed completion of Phase II of the Project under the Extended Build-Out Scenario, or the proposed modifications to the 2009 MGPP. As a result, these areas did not undergo a detailed analysis in the FSEIS, and the relevant discussions and conclusions set forth in the 2006 Findings remain applicable. The analyses not included for detailed assessment in the FSEIS, and the reasons for screening out these analysis areas are summarized below.

### **1. Operation – Land Use, Zoning, and Public Policy**

Since the Phase II program remains substantially unchanged from that assessed in the 2006 FEIS and there are no new or proposed modifications to the previous land use, zoning, and public policy determinations, there would be no changes to the 2006 FEIS conclusion that upon completion, the Project would not result in significant adverse impacts with respect to land use, zoning, and public policy as a result of the Extended Build-Out Scenario. The proposal to shift up to approximately 208,000 gsf of floor area from the Arena Block in Phase I to Phase II parcels would increase the floor area of Phase II from approximately 4,434,000 gsf as studied in the 2006 FEIS to approximately 4,642,090 gsf (an increase of 4.7 percent), but the location, uses, size and form of the Phase II buildings as governed by the Project's Design Guidelines would not change nor would the shift introduce new land uses or zoning on the project site or increase the overall size of the Project, as a resulting increase in the floor area of the Phase II buildings would be offset by decreases in the floor area of the Phase I buildings. The Phase II buildings would continue to conform to Exhibit C of the 2009 MGPP which details the maximum permitted square footage for each of the Phase II buildings. The shift in floor area from Phase I to Phase II would not affect the analysis of land use, zoning, and public policy presented in the 2006 FEIS. Similarly, the proposed reduction in on-site parking would not affect this analysis, as the Project's parking demand would continue to be satisfied on the Project site or in nearby off-street parking facilities.

With respect to conditions in the study area, most public policy and zoning initiatives anticipated in 2006 have been implemented. The 2006 Findings found that the Project would offer the opportunity to further some of the City's policies for housing and commercial development in Brooklyn, including removing blight and eliminating negative environmental conditions; maximizing the development of appropriate land use; strengthening the tax base of the City by encouraging development and employment opportunities; providing affordable housing and market-rate housing of high quality; and providing appropriate community facilities, parks and recreational uses, retail shopping, and parking. While the completion of Phase II of the Project at a later date would delay the delivery of some of these benefits (2035 under the Extended Build-Out Scenario compared to the 2016 in the 2006 FEIS), none of the benefits related to Phase II would be achieved in the Future Without Phase II. As Phase II of the Project, even under the Extended Build-Out Scenario, would provide numerous benefits related to the public policies noted above, it would not be inconsistent with the goals and objectives of those policies.

Several additional zoning and public policy initiatives have been implemented since completion of the 2006 FEIS, including PlaNYC, contextual rezonings, historic district designations, and other changes. Contextual rezonings include the Fort Greene/Clinton Hill Rezoning (2007), the Boerum Hill Rezoning (2011) and the Crown Heights West Rezoning (2013). These contextual rezonings impose additional restrictions on development in those neighborhoods and further strengthen the conclusion in the 2006 Findings that the Project would not spur substantial changes in the firmly established neighborhoods that surround the Project site.

Phase II of the Project would also be consistent with the goals of the Inclusionary Housing Program and the City's policies to encourage the construction of affordable housing.

Other zoning changes include the Downtown Brooklyn Parking Text Amendment (2012) and the Special 4th Avenue Enhanced Commercial District (2011). The Special 4th Avenue Enhanced Commercial District would not be affected by the completion of Phase II of the Project under the Extended Build-Out Scenario. Phase II of the Project is not within the area covered by the Downtown Brooklyn Parking Text Amendment, and therefore this text amendment is not relevant to the analysis of a delay in the construction of Phase II. However, this text amendment and the rationale for the amendment are considered in the assessment of the parking demand of the Project and in the Reduced Parking Alternative.

With regard to public policy, the Project would assist in meeting many of the goals and objectives established in PlaNYC, by providing new housing (including affordable housing), providing new open spaces, developing an underused area to knit neighborhoods together, fostering transit-oriented development, providing new subway access, greening underutilized street and sidewalk space, and incorporating responsible design in terms of water utilization, stormwater management, transportation efficiency, energy demand, air quality emissions (including use of natural gas, rather than more polluting fuels), and effects on and from climate change. In addition, the Project is registered with the United States Green Building Council ("USGBC") as a Leadership in Energy and Environmental Design ("LEED") project, and has been accepted into the LEED-Neighborhood Development pilot program. The completion of Phase II of the Project at a later date would delay the delivery of some of the Project benefits that would be supportive of PlaNYC, but would not conflict with the goals of PlaNYC. In addition, none of the benefits related to Phase II would be achieved in the Future Without Phase II. Because Phase II of the Project, even in the Extended Build-Out Scenario, would provide numerous benefits related to PlaNYC, as described above, it would not be inconsistent with the goals and objectives of PlaNYC.

In addition, the Prospect Heights Historic District was established in 2006. The 2006 FEIS identified the Prospect Heights Historic District as an eligible historic resource. At the time the district was designated by the Landmarks Preservation Commission ("LPC"), the boundaries of the district were expanded slightly from the boundaries assumed in the 2006 FEIS. Accordingly, the CPP required under the Letter of Resolution with OPRHP was modified to assure the protection of the resources within such expanded area during Project construction. In light of the adjustments made to the CPP, construction for Phase II under the Extended Build-Out Scenario would not have a significant adverse impact on the expanded district.

As described above and consistent with the 2006 Findings and 2006 FEIS, upon completion of the Project under the Extended Build-Out Scenario, there would be no significant adverse impacts on land use, zoning, and public policy.



## **2. Operation – Cultural Resources**

The completion of Phase II of the Project at a later date and the proposed changes to the 2009 MGPP would not result in different effects to archaeological or architectural resources than those that were previously identified in the 2006 FEIS. Neither delayed Phase II completion nor the proposed modifications since the 2009 MGPP would change the stipulations in the Letter of Resolution among ESD, the project sponsors, and OPRHP.

For these reasons, the Extended Build-Out Scenario would not have any significant adverse impacts on cultural resources that were not previously identified in the 2006 FEIS.

## **3. Operation – Urban Design and Visual Resources**

The FSEIS contains a detailed analysis of the urban design and visual resource impacts of a prolonged construction period for Phase II. A delay in the completion of Phase II of the Project, however, would not affect the conclusions of the 2006 FEIS with respect to urban design or visual resources in the operational (*i.e.*, Project-completion) condition, because a delay in completing Phase II of the Project would not affect the bulk, uses, the type or arrangement of the Phase II buildings upon their completion at a later date. The open space layout would also remain unchanged from that assessed in the 2006 FEIS. The proposed shift of up to approximately 208,000 gsf of floor area from Phase I to Phase II of the Project would increase the floor area of Phase II from approximately 4,434,000 gsf as studied in the 2006 FEIS to 4,642,090 gsf (an increase of 4.7 percent), but the location, uses and form of the Phase II buildings would not change. The Phase II buildings would continue to conform to the Design Guideline maximum envelopes for each of the Phase II buildings approved by ESD in 2006, which formed the basis for the description of the Phase II buildings in the 2006 FEIS. Similarly, any reduction in on-site parking would reduce the size of below-grade parking facilities, and would not affect urban design or visual resources. For these reasons, the Extended Build-Out Scenario would not result in adverse environmental impacts with respect to urban design and visual resources upon completion of the Project.

## **4. Operation – Shadows**

The 2006 FEIS identified significant adverse shadow impacts on an open space resource at the Atlantic Terminal Houses and mitigation measures were developed to improve that open space. Also, incremental shadows on the Church of the Redeemer from Site 5, were determined to reduce light through its stained glass windows. The project sponsors and the Church reached an agreement to undertake measures to offset and address the shadow impacts.

As described in the 2006 FEIS, the Design Guidelines envelopes were developed to provide flexibility and allow for the final design of the individual buildings to evolve as the Project is built out. The 2006 FEIS shadows analysis was prepared using a 3D model of the Project that depicted building forms that were guided by the Design Guideline envelopes. The shift of up to approximately 208,000 gsf of floor area from the Arena Block to certain Phase II parcels would not require modification of the Design Guidelines or the maximum square footages for each building or for the overall Project as detailed in Exhibit C of the 2009 MGPP; however this shift would increase the potential for several of the Phase II buildings to be built up to the maximum floor area and bulk permitted by those Design Guidelines. Therefore, a screening assessment examining the effects of additional bulk that would maximize the build-out of certain Phase II building forms as per the

Design Guideline envelopes was prepared, and concluded that even with the proposed shift in floor area from Phase I to Phase II the Extended Build-Out Scenario would not change the conclusions of the 2006 FEIS with respect to potential shadows impacts. Moreover, an assessment of the area within the shadow sweep of the Phase II buildings and examination of the list of No Build projects in this area establish that no new sun-sensitive resources have been identified in this area since preparation of the 2006 FEIS. The stipulations in the MEC with respect to the Atlantic Terminal Houses open space and the Church of Redeemer would not be affected by a delay completion date for Phase II or the proposed changes to the 2009 MGPP.

## **5. Operation – Hazardous Materials**

The completion of Phase II of the Project at a later date would not affect the conclusions in the 2006 FEIS for hazardous materials; however, the FSEIS provides an update of conditions with respect to hazardous materials on the Project site since the 2006 FEIS. Construction and development of the Phase II components would have the same potential for exposure and require the same commitments as described in the 2006 FEIS and MEC. Moreover, the MEC has been amended to clarify requirements with respect to vapor intrusion in light of the proposed changes to the configuration of the parking garages at the site. In particular, residential and community facility uses are required (i) to be located above ventilated underground parking or other facilities or above the platform over the ventilated rail yard and/or (ii) to incorporate equivalently effective engineering controls, such as a vapor barrier and/or sub-slab depressurization system. The project sponsors are required to submit engineering plans demonstrating compliance with these requirements to ESD (or, if applicable, the Mayor's Office of Environmental Remediation) with respect to each of the Project buildings prior to the commencement of the construction thereof.

## **6. Operation – Infrastructure**

Neither a delay in the completion of Phase II of the Project nor the proposed modifications to the 2009 MGPP described above would affect the Project's Phase II programming in a manner that would alter the water and sewer infrastructure demands of the Project. Many of the water and sewer infrastructure improvements required for the completion of the Project have 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.

While the Extended Build-Out Scenario would delay the construction of the remaining off-site infrastructure improvements and infrastructure on the site itself (such as new site-sewer connections and stormwater controls), it would also result in a delay in additional demand for water and sewer service. Additionally, the delay in completing Phase II of the Project under the Extended Build-Out Scenario would not result in increased stormwater runoff and associated sewer system impacts since the existing conditions on the site would remain unchanged.

While continued development within the Red Hook Pollution Control Plant drainage area where the project site is located may add demand for sewer infrastructure capacity, ongoing NYCDEP infrastructure improvements and recently enacted NYCDEP regulations would ensure that this continued development, in combination with the Project's infrastructure demand, would not overload sewer infrastructure.

NYCDEP is continuing work to upgrade sewer infrastructure in the area around the project, including upgrades to the Gowanus Canal Pump Station, which pumps sanitary and stormwater flows to the Red Hook Water Pollution Control Plant. Additionally, since the publication of the 2006 FEIS, the City released its Green Infrastructure Plan (discussed above), strengthening its performance standards and reducing the potential for the Project to result in stormwater impacts. A critical goal of the Green Infrastructure Plan is to manage runoff from impervious surfaces through detention and infiltration source controls. In support of this goal, in 2012 NYCDEP released a new stormwater performance standard: new developments applying for NYCDEP site connection approvals must design stormwater controls and apply BMPs so that the rate of stormwater flowing from the site to sewers must not exceed 10 percent of the allowable flow or 0.25 cubic feet per second, whichever is less. The intended result of this standard is to slow the flow of stormwater to the sewers in order to decrease the stress on the sewer infrastructure during rain events and to reduce the incidence of combined sewer overflows. The performance standard, which is applicable city-wide, is more stringent than what was analyzed in the 2006 FEIS; all buildings constructed as part of the Project would be required to conform to this standard.

Going forward, in the 20 years from the release of the 2010 Green Infrastructure Plan, NYCDEP is planning for \$2.4 billion in public and private funding for targeted green infrastructure installations, as well as \$2.9 billion in cost-effective gray infrastructure upgrades to reduce combined sewer overflows (“CSOs”) in the city overall. The City estimates that approximately 1.5 billion gallons of CSO flows would be removed annually by 2030 through the application of green infrastructure alone.

In terms of the Project, specifically, the completion of Phase II of the Project at a later date would not obviate the project sponsors’ obligations for the provision of adequate infrastructure on and around the site, including water supply and sewer infrastructure and measures to control stormwater runoff. The stormwater and sewage minimization measures outlined in the MEC would be constructed as previously agreed upon, and the required stormwater controls and BMPs to minimize stormwater and sanitary flow would be brought on line as each Phase II building is constructed to satisfy the requirements of the aforementioned NYCDEP Site Connection Proposal for each building.

Neither a delay in the completion of Phase II of the Project nor the proposed modifications to the 2009 MGPP would affect the Project’s Phase II programming in a manner that would alter the solid waste and energy demands of the Project. The solid waste generated by development associated with Phase II of the Project would be accommodated by The New York City Department of Sanitation (“DSNY”) solid waste collection services (for solid waste generated from residential uses) and private contractors (for solid waste generated by commercial users) at the completion of the Project. Similarly, a delay in the completion of Phase II of the Project would not obviate the need for localized upgrades in electrical and gas transmission lines; these would be completed at the appropriate time to support Phase II development.

## **7. Operation – Public Health**

The FSEIS evaluates potential air quality, noise and hazardous material impacts from a delay in the completion of Phase II of the Project under the Extended Build-Out Scenario. As described in the FSEIS, Phase II of the Project would not result in significant adverse air quality, noise or hazardous

material impacts in the operational (*i.e.*, Project completion) condition and therefore would not result in any significant adverse public health impacts upon completion of the Project.

## **V. Consideration of Relevant Construction-Related Environmental Impacts, Facts and Conclusions Analyzed in the FSEIS**

The FSEIS includes a detailed analysis of the construction of Phase II of the Project under the Extended Build-Out Scenario using the three illustrative construction phasing plans to evaluate the impacts of prolonged Phase II construction.

An issue that was the subject of particularly close scrutiny in preparation of the SEIS was the degree to which the project sponsors have adhered to prior commitments, imposed in connection with the 2006 FEIS, to adhere to construction practices that would minimize or mitigate the potential for significant adverse construction-related impacts. The SEIS indicated that the project sponsors have generally been in compliance with these requirements, notwithstanding specific instances identified in which the project sponsors' contractors failed to comply with a particular requirement. Nevertheless, the following compliance program improvements were developed in connection with the preparation of the SEIS, and these have been incorporated into the MEC requirements for the Project:

- *Six-Month Look-Ahead Reports.*
  - The project sponsors will provide ESD and its environmental monitor (presently, Henningson, Durham & Richardson Architecture and Engineering, P.C. (“HDR”)) with six month look-ahead reports at regular intervals that will describe, in general terms, the activities anticipated on the project site for the next six months (including major milestones for areas of new construction activity, excavation, construction, MPT, soil and groundwater remediation work, and soil characterization). Among other things each look-ahead will include an assessment of the level of on-site environmental monitor (“OEM”) staffing that should be deployed during the relevant period to properly monitor compliance with the MEC. That assessment will provide a basis for discussion regarding the level of staffing for the relevant period among ESD, HDR, and the project sponsors.
- *Contractor Training.*
  - The project sponsors will target their PowerPoint presentation so that it provides specific instructions to contractors on the requirements of the MEC. The project sponsors may tailor the presentation so that it focuses on MEC requirements that relate specifically to a particular project component. ESD and HDR will be provided with the opportunity to comment on the PowerPoints prior to their use in contractor training.
  - PowerPoint presentations will be presented by the OEM to all foremen, project managers, field managers, and similar key personnel of all subcontractors upon mobilization, and every 90 days thereafter, with sign-in sheets to track attendance.
- *Contracts.*
  - The project sponsors will include in their construction contracts, and require their contractors to include in all subcontracts, an exhibit incorporating an excerpt from the MEC that sets forth all construction-related requirements contained in that document. The project sponsors' construction contracts will expressly require each contractor to comply with all the terms of the MEC that apply to its construction activity, and to require its subcontractors to do the same.

- The project sponsors will add to their standard MEC-related contractual terms a provision that reiterates the project sponsors' remedies for a contractor's non-compliance with the MEC, including the rights to withhold payment or terminate the contract; such provision, however, will be in addition to other remedies available to the project sponsors to address any contractor's noncompliance with an MEC requirement. FCRC is required to cause its contractors to address any substantive non-compliance within 7 days of written notice thereof by ESD (or if compliance within such 7-day period is not practicable) as soon as is practicable under the circumstances.
- *Staffing and Off-Hour Work.*
  - Each six month look-ahead report will include a reassessment of staffing levels, and OEM staff will be adjusted as appropriate in light of any changes anticipated to the level of construction activity during future reporting periods.
  - The OEM will provide an update on upcoming after-hour and/or weekend construction work at each weekly meeting with HDR, during which it will be agreed upon by ESD and the project sponsors whether such work requires the presence of an ME. The OEM is ultimately responsible for ensuring that a proper level of monitoring coverage is maintained, even where after-hours or weekend work is performed on short notice from the contractor.
- *Traffic.*
  - Sufficient staff will be available to patrol the project site regularly to check for non-compliance with the truck protocol requirements concerning idling and/or queuing. The staff devoted to monitoring compliance with the truck protocol will be adjusted based upon the level of construction activity at the site. Staffing for overseeing compliance with truck protocol requirements will be assessed in the six month look-ahead reports, and discussed at weekly meetings with HDR.
  - Staff assigned to oversee compliance with the truck protocol will be properly trained in the truck protocol and will direct drivers to comply with MEC requirements.
  - A system will be instituted to facilitate the reporting of truck protocol violations to the project sponsors. Material violations of the truck protocol will be reported by staff to the project sponsors' management representatives, and the project sponsors will keep a record of such reported incidents.
  - The project sponsors will advise HDR at the weekly meetings of any circumstance where a contractor or driver has been found to be a repeat violator of the truck protocols. The project sponsors and ESD will agree, on a case-by-case basis, on the steps to be taken to deal with the repeat violator. Those measures may include, without limitation, providing warnings, invoking contract sanctions and/or banning from the site such companies and/or drivers in the event that violations continue after reasonable warning has been given.
  - The project sponsors will ensure that contractor logistics plans maximize the utilization of the Pacific Street queuing area between Carlton Avenue and Vanderbilt Avenue or other designated location for truck marshalling and queuing to the extent practicable and appropriate, so long as such areas are available. The project sponsors will provide HDR and ESD with copies of the logistics plans for review and comment.
  - Maps that identify acceptable truck routes to and from the project site will be provided to all contractors as part of the MEC training program. The project sponsors or its contractors will take measures to ensure that the trucks follow such routes. Among other things, contractors will be directed to provide those maps to their trucking subcontractors, and require that the maps be distributed to drivers and kept available for reference in the cabs at all times. The Pacific Street queue area (if part of the then currently effective logistics plan) will be incorporated into these truck routing maps so long as that area is available.

- *Air Quality.*
  - The project sponsors and its contractors will assign sufficient staff to allow for careful monitoring of contractor compliance with MEC dust control measures, and staffing will be keyed to the level of dust-generating construction activities at the site. Staffing levels will be assessed in the six month look-ahead reports and discussed at the weekly meetings with HDR.
  - As one element of the MEC training program, contractors will be instructed on how to complete and submit documentation needed to confirm compliance with the diesel particulate filter (“DPF”) requirement of the MEC. Such instruction will be provided at a level of detail commensurate with the training needs of the contractors on the site.
  - Where practicable, all equipment subject to the DPF requirement (or equivalent controls) will be prominently labeled with a label prepared by the project sponsors that indicates that the equipment has a DPF (or equivalent controls) that complies with the MEC emission control requirement. Information on how to label compliant equipment will be provided as part of contractor training. Additional labels are not required for equipment with USEPA labels indicating that the emission controls on such equipment satisfy requirements that are at least as stringent as those required by the MEC.
- *CAQM Compliance Plan.*
  - In 2014, the CAQM Compliance Plan was updated to reference the contractors and personnel working at the project site and to reflect current protocols and procedures. Exhibits to the CAQM Compliance Plan were updated to improve the effectiveness of the CAQM Compliance Plan.
- *Dust Suppression and Wheel Washing.*
  - Prior to the commencement of construction activities for each major work phase, the project sponsors or its contractor(s) will prepare a fugitive Dust Management Plan that identifies: the location of the fixtures to be used in controlling dust at the site (including without limitation hydrants or other points of water supply), any wheel washing stations, gravel placement locations, hoses, dust suppression agents and any other equipment and material to be used in complying with the dust suppression requirements of the MEC. The project sponsors will require its contractors to adhere to such plans, and HDR will refer to such plans in assessing the project sponsors' compliance with the dust suppression requirements of the MEC. ESD and HDR will be provided with the opportunity to comment on the plans prior to their implementation in the field.
  - Gravel cover will be applied to unpaved surfaces which are regularly traveled. Unless gravel cover is applied, unpaved haul roads and excavation surfaces will be adequately watered by watering trucks or misting, so that surfaces remain damp when in use during construction. If watering activities are not practicable due to below-freezing conditions or other safety considerations, alternate dust suppression techniques may be utilized such as broom sweeping of truck tires and the use of other dust suppression agents. The Dust Management Plan will address such alternate dust suppression techniques.
  - A wheel washing station will be constructed at each truck exit, whereby truck wheels will be washed, and the water will be contained and recycled to avoid tracking mud out of the site. If construction of a wheel washing station is not practicable at a construction site exit due to site conditions, the circumstances giving rise to any claim of impracticability will be set forth in the relevant Dust Management Plan, and in such circumstances, the Dust Management Plan prepared by the project sponsors or its contractor will include a substitute program for wheel cleaning that will achieve equivalent results, taking into account weather conditions space availability, site pitch, catch basin location and other relevant factors.

- *Soil Stockpiling.*
  - In order to avoid excessive dust conditions, the MEC requires that any soil stockpiled on site be adequately moistened or covered by a tarp, dust suppression agent or other effective means. This requirement will be specifically incorporated into the training materials for the relevant contractors. Stockpiles of contaminated material will continue to be managed in accordance with the HASP approved by the NYSDEC.
- *Air Monitoring.*
  - The project sponsors have procured five new particulate monitors, four of which have been deployed on a daily basis at the site to monitor particulate levels associated with construction activities as required by the MEC. OEM personnel will follow the manufacturer's recommendations for operation and maintenance of this monitoring equipment, and routine inspections of the dust monitoring equipment will be conducted by the OEM to ensure functionality. OEM personnel will follow the best management practices previously developed by HDR in operating this equipment, or equally effective procedures.
- *Noise.*
  - A written protocol has been developed to confirm that certain "noisier" equipment complies with the noise levels set forth in Table 17c-3 of the 2006 FEIS.
  - The OEM staff will check applicable equipment for compliance with the MEC noise requirements when the equipment is first mobilized. They will do so pursuant to the protocol described above. The OEM staff also will regularly check equipment in use on-site against the Construction Noise Mitigation Plan or the Alternative Construction Noise Mitigation Plan (as applicable) posted for the site to confirm that there are no discrepancies, or revise such plans as necessary.
  - The project sponsors will assure that perimeter fencing meets both the requirements of the MEC and the New York City Noise Code, which requires that perimeter fencing meet the STC rating of 30 or greater.
  - The project sponsors will erect and maintain a minimum 8 foot high perimeter barrier (constructed of 3/4" thick plywood), with a 16 foot high barrier (of 3/4" thick plywood) adjacent to sensitive locations where practicable and feasible.
  - Where 16-foot barriers are not practicable and feasible adjacent to sensitive receptors, the project sponsors will install the best feasible and practicable additional noise path controls, which may include noise curtains or other barriers within the site between the noise sources and sensitive receptors, angled/cantilevered fences, and/or other practicable pathway controls.
  - Delivery trucks will be operated behind the noise barriers where practicable.
  - In an effort to avoid delays occasioned by Con Edison scheduling constraints, the project sponsors will continue to submit electrification requests as early in the construction sequence as practicable, and follow up with Con Edison on a regular basis until electrification has been timely accomplished, subject to scheduling restraints of other entities not under the project sponsors' control.
  - Construction staging areas that are located within 200 feet of a sensitive receptor and are used in connection with nighttime work will be shielded (by noise mitigating fencing and/or blanketing) on the side facing those sensitive receptors by New York City Noise Code and MEC-compliant noise mitigating fencing and/or blanketing, unless ESD determines that shielding is not required because of the level of anticipated activities and/or duration of such activities.

- Where practicable, quiet construction procedures and equipment will be used, including where practicable the use of a bed liner made of thick rubber, spray-on liner, plywood, sand or gravel on dump trucks to mitigate the noise of the first load being dropped into the dump truck.
- Where practicable and feasible, sound-mitigated backup alarms will be used such as backup alarms that lower backup alarm noise in response to more quiet ambient conditions (such as night-time work) or backup alarms that use white noise or other mitigating technologies for trucks and equipment expected to operate at or make deliveries to the Project site during any phase of extended night-time work or night-time module deliveries.
- *General Compliance.*
  - The project sponsors have agreed to pursue the services of a qualified outside engineering firm or construction management firm to serve as the OEM for the Project pursuant to a scope to be reviewed by ESD and that thereafter, the project sponsors will not engage a different engineering firm as the OEM, or move the OEM function in-house, without the prior reasonable approval of ESD. In the event the project sponsors propose to change the OEM, it will submit the following information to ESD: (i) the qualifications of the proposed staff establishing that it would consist of one or more engineers with substantial construction management experience in New York City; (ii) a description of what job duties, if any, such staff members would have apart from serving as the OEM for the Atlantic Yards Project; and (iii) the proposed reporting and documentation procedures to be put into place for the OEM work.
  - The project sponsors will make arrangements for the engineering firm to assign one or more engineers with substantial construction management experience in New York City to monitor compliance with the construction-related requirements of the MEC (the “OEM Engineers”). The OEM Engineers may be assisted by qualified staff members (Monitoring Engineers, or “ME’s”). During periods of active construction activity, an OEM Engineer will be assigned to work primarily from a construction trailer or other on-site location to facilitate daily monitoring of the contractors’ compliance with MEC requirements.
  - During periods of active construction work, the project sponsors will submit to ESD a report summarizing its contractors’ compliance with the requirements of the MEC during the previous three months, non-compliance issues that have been identified, steps taken to address any instances of non-compliance and plans to prevent the reoccurrence of any such instances of non-compliance. The quarterly report is to be submitted to ESD within 45 days of the end of the 3-month period to which it relates.

The SEIS conclusions with respect to the environmental impacts of Phase II construction under the Extended Build-Out Scenario are summarized below.

#### **A. Construction – Zoning and Public Policy**

Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse impacts with respect to Zoning and Public Policy.

The 2006 FEIS analyzed the consistency of the Project with zoning and public policy and found that, upon completion, the Project would not result in any significant adverse impacts associated with those categories. The 2006 FEIS found that the Project would offer the opportunity to further some of the City’s policies for housing and commercial development in Brooklyn, including removing blight and eliminating negative environmental conditions; maximizing the development of appropriate land use; strengthening the tax base of the City by encouraging development and



employment opportunities; providing affordable housing and market-rate housing of high quality; and providing appropriate community facilities, parks and recreational uses, retail shopping, and parking. The completion of Phase II of the Project at a later date would delay the delivery of some of the aforementioned Project benefits. Under the Extended Build-Out Scenario, Phase II would be completed by 2035, compared with the 2016 completion date assumed in the 2006 FEIS. However, none of the benefits related to Phase II would be achieved in the No Build condition (*i.e.*, the Future Without Phase II). As Phase II of the Project, even under the Extended Build-Out Scenario, would provide numerous benefits related to public policies analyzed in the 2006 FEIS, it would not be inconsistent with the goals and objectives of those policies. In addition, as described below, construction of Phase II of the Project under the Extended Build-Out Scenario would not result in any conflicts with zoning or other public policy changes that have been implemented in the ¾-mile study area since the completion of the 2006 FEIS.

## **1. Zoning**

Since the 2006 FEIS, three contextual rezonings within the study area have been approved: the Fort Greene/Clinton Hill Rezoning, the Boerum Hill Rezoning, and the Crown Heights West Rezoning. These contextual rezonings impose additional restrictions on development, as their objectives are to prevent out of scale development in those neighborhoods, match new zoning to existing built character and land uses, and incentivize the development of modest amounts of new affordable housing. Therefore, these rezonings would further strengthen the 2006 FEIS conclusion that the Project would not be expected to spur substantial changes in the firmly established neighborhoods that surround the project site. The completion of Phase II of the Project at a later date would not alter these conclusions of the 2006 FEIS.

As Phase II is incrementally constructed, it would also provide a higher proportion of affordable units than would the Inclusionary Housing Program in the designated areas under the Fort Greene/Clinton Hill Rezoning and Crown Heights West Rezoning. The affordable housing provided by Phase II would be targeted to a greater range of incomes than the Inclusionary Housing Program (which is targeted to households earning up to 80 percent AMI), because the affordable housing in Phase II, based on currently available programs, would be targeted towards five income bands (*see* Table 2, above). Construction of Phase II of the Project would be supportive of the City's goal to create new units of affordable housing.

In 2012, the Downtown Brooklyn Parking Text Amendment was approved, which reduces parking requirements in Downtown Brooklyn, including portions of the Phase I project site. The text amendment is expected to result in the provision of parking supply that better reflects actual parking demand in Downtown Brooklyn, which—like the project site—features some of the best transit access in the city, including numerous subway and bus lines. Phase II of the Project is not within the area covered by the Downtown Brooklyn Parking Text Amendment, and therefore this text amendment is not relevant to the analysis of a delay in the construction of Phase II. However, since the project site exhibits many of the characteristics of Downtown Brooklyn, that text amendment is discussed in the consideration of the Reduced Parking Alternative.

## **2. Public Policy**

At the time of the publication of the 2006 FEIS, both the State and National Register (“SN/R”)-listed Prospect Heights Historic District and the NYCL-eligible Prospect Heights Historic District

were included in the analysis of impacts. Since the 2006 FEIS, the NYCL Prospect Heights Historic District has been designated by the LPC, and the boundaries have been defined slightly differently than those analyzed in the 2006 FEIS. Accordingly, the CPP required under the Letter of Resolution with OPRHP was modified to include new historic resources within the expanded boundaries of the Prospect Heights Historic District that are within 90 feet of future construction activity associated with the Project. In light of the adjustments made to the CPP, construction of Phase II under the Extended Build-Out Scenario would not have a significant adverse construction impact on the expanded district.

PlaNYC was established in 2007, and provides a policy framework for sustainable planning in New York City. Even with a prolonged period of construction, the Project would assist in meeting many of the goals and objectives established in PlaNYC, such as by providing new affordable and market-rate housing to meet the needs of current and future residents at a transit-accessible location, providing new open spaces, and utilizing public land to facilitate development that would eliminate blighted conditions. The completion of Phase II of the Project at a later date would delay the delivery of some of the Project benefits that would be supportive of PlaNYC, but would not conflict with the goals of PlaNYC. Under the Extended Build-Out Scenario, Phase II is assumed to be completed in 2035, compared with the 2016 completion date assumed in the 2006 FEIS. Thus, the full achievement of the Project's benefits related to PlaNYC would be delayed under the Extended Build-Out Scenario. However, none of the benefits related to Phase II would be achieved in the No Build condition (*i.e.*, the Future Without Phase II). Because Phase II of the Project, even in the Extended Build-Out Scenario, would provide benefits related to PlaNYC, it would not be inconsistent with the goals and objectives of PlaNYC.

## **B. Construction – Socioeconomic Conditions**

Construction activities of Phase II under the Extended Build-Out Scenario would not result in any significant adverse socioeconomic impacts. Construction would not impede access to businesses surrounding the project site or reduce the visibility of their signage, and curbside deliveries to surrounding businesses would not be significantly affected. It is possible that some limited reduction in pedestrian flow could occur along Vanderbilt Avenue at times during the construction period if some pedestrians choose alternate routes to avoid walking past the Phase II project site. However, any such reduction in pedestrian flow would be countered by the presence of construction workers and by new residential population as the Phase II buildings are completed, and would not substantially affect the vast majority of businesses or lead to business failures that could in turn affect neighborhood character.

While the use of *CEQR Technical Manual* criteria indicates that there is no potential for significant adverse socioeconomic impacts, a more detailed analysis was conducted in the FSEIS in response to public concerns raised with respect to the effects of prolonged construction of Phase II of the Project on socioeconomic conditions in the area. This additional analysis of socioeconomic conditions surrounding the Atlantic Yards project site indicates that Project development to date has not led to business or residential disinvestment in the ¼-Mile Study Area around the project site. Residential trends in the ¼-Mile Study Area have generally followed trends in the surrounding neighborhoods, with average sales prices and rents increasing.

Retail corridors closest to the Arena site have experienced increased investment since the announcement of the Project. While retail vacancy has increased, based on discussions with brokers

these vacancies are the result of renovation of storefronts for new tenants rather than retail disinvestment. Increases in both retail employment and total employment in the 1/4-Mile Study Area outpaced those in the 3/4-Mile Control Area over the analysis period. Overall, demographic trends, real estate and employment data, and discussions with brokers in the area indicate that ongoing construction on the project site has not resulted in any substantial negative effect on neighborhood conditions or property values in the 1/4-Mile Study Area as compared with the 3/4-Mile Control Area.

Findings from case studies of other development sites in New York City that have experienced prolonged construction and/or periods of construction delay, including Riverside South, First Avenue Properties, Battery Park City, and Metro Tech, are consistent with findings on the effects of the Atlantic Yards Project to date. The case studies indicate that prolonged construction—in some cases construction that lasted for decades and is still ongoing—has not led to decreased property values or other signs of disinvestment in the 1/4-Mile Study Area compared with the 3/4-Mile Control Area for each of the case studies. Across all case studies, demographic and housing trends indicate that population and income growth and residential property values in the 1/4-Mile Study Area kept pace with or exceeded growth in the 3/4-Mile Control Areas over the course of the analysis period. Trends in commercial office and retail rents and sale values also indicate that prolonged construction or periods of delay for case study developments did not have any detrimental effect on commercial property values in the 1/4-Mile Study Areas compared with the 3/4-Mile Control Areas.

The FSEIS estimates certain of the economic benefits of Phase II of the Project assuming conventional construction techniques and also assuming use of the modular construction technique. Under either technique, construction of the Phase II development would generate substantial economic and fiscal benefits for the city and the state. Investment for construction of Phase II of the Project is estimated at approximately \$2.43 billion in 2013 dollars (\$2.15 billion, for modular construction), exclusive of financing, insurance, land value, and other costs that are not directly part of the expenditures for construction. Direct employment generated by construction of Phase II is estimated at 9,148 person-years of employment (9,051 person-years for modular construction). Total employment, including jobs in business establishments providing goods and services to the contractors and jobs resulting from spending of construction wages, is estimated at 16,765 person-years of employment in New York State, of which 13,909 person-years would be in New York City (16,589 person-years and 13,762 person-years, respectively, for modular construction). Construction activity would generate an estimated \$173.41 million in tax revenues for New York City, the MTA, and New York State (\$153.41 million for modular construction). In addition, New York City would receive revenue from the mortgage recording fees and real property transfer tax from the condominium units.

## **C. Construction – Community Facilities**

### **1. Indirect Effects**

#### **a. Public Schools**

Like the Project analyzed in the 2006 FEIS, a delay in Phase II of the Project with the Extended Build-Out Scenario would have a significant adverse indirect impact on elementary and intermediate schools. The significant adverse indirect impact on study area elementary schools would occur with the completion of the first Phase II building, under any of the three construction phasing plans. With regard to intermediate schools, a significant adverse impact would first occur beginning with

the completion of the second Phase II building under both Construction Phasing Plan 1 and Construction Phasing Plan 3, and upon completion of the first Phase II building under Construction Phasing Plan 2. However, the delayed completion of Phase II of the Project would not itself create additional demand on schools, and the magnitude of the significant adverse impact identified in the FSEIS reflects conservative methodology that does not account for long-term projections for increasing study area school capacity, possible future shifts in Community School District (“CSD”) boundaries or sub-district boundaries, or construction of additional school facilities. The impact to public school capacity would gradually increase over time until Phase II is completed, as additional students are introduced to the study area by additional Phase II buildings. The elementary and intermediate school seat shortfalls would be partially mitigated by the construction of a new public school on the Phase II project site, at the election of DOE. There would not be a shortfall of high school seats in Brooklyn under any of the construction phasing plans.

#### **b. Child Care**

The construction of Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse indirect impacts with respect to child care facilities. Utilization of publicly funded child care services would steadily increase until such time as the 100 slots that the project sponsors are obligated to provide, as per the MEC, become operational. Consistent with *CEQR Technical Manual* methodology, a significant adverse impact on child care facilities may result if, in the Future With Phase II, there would be a 5 percent increase in utilization, compared with the Future Without Phase II, and overall utilization is above 100 percent. Prior to the completion of the new child care facility, utilization could increase by up to 5.98 percent, in 2032 under Construction Phasing Plan 1 and 2033 under Construction Phasing Plan 3. (The methodology for the analysis, however, does not take into account the likelihood of new day care centers opening up in the area to meet rising demand.) Once the child care facility is provided, however, any increase in utilization would diminish. Upon completion of Phase II in 2035, the increase in child care utilization attributable to the Phase II would be 1.56 percent, well below the 5 percent significance threshold. During the construction of Phase II under the Extended Build-Out Scenario, there could be a temporary condition where the increase in child care utilization attributable to Phase II would exceed the *CEQR Technical Manual* threshold for a significant adverse impact of 5 percent, but due to the short duration of this shortfall (approximately two years, in the Extended Build-Out Scenario) and the 100 new child care slots that would be provided by the project sponsors, this temporary condition would not be considered a significant adverse impact. In addition, the project sponsors have committed to monitoring child care enrollment and capacity in the study area as the project progresses, and to the extent necessary to avoid a significant adverse impact, make arrangements with one or more duly licensed day care providers for the long-term operation of a duly licensed child care center (or centers) to provide up to approximately 250 additional child care slots, either on or in the vicinity of the project site.

#### **2. Direct Effects**

With respect to direct effects on community facilities, the construction of Phase II under the Extended Build-Out scenario would not displace any existing community facilities. In addition, no significant adverse impacts to air quality would result from construction of Phase II under the Extended Build-Out Scenario of the Project at any sensitive receptor locations, including community facilities.

The proposed on-site school and intergenerational community center would be constructed with adequate noise attenuation, and therefore would not experience significant construction noise impacts under the Extended Build-Out Scenario.

One existing public school (P.S. 753, located at 510 Clermont Avenue) would experience significant adverse noise impacts during the construction of certain Phase II buildings. Under Construction Phasing Plan 1, one or more floors along the south and west facades of the school building would experience exterior noise level increments exceeding *CEQR Technical Manual* impact criteria for up to nine years. Under Construction Phasing Plan 2, one or more floors along the east, south and west facades of the school building would experience exterior noise level increments exceeding *CEQR Technical Manual* impact criteria for up to seven years. Under Construction Phasing Plan 3, one or more floors along the south and west facades of the school building *CEQR Technical Manual* would experience exterior noise level increments exceeding *CEQR Technical Manual* impact criteria for up to eleven years. P.S. 753 already has double-glazed windows and an alternate means of ventilation. In light of the noise levels predicted on the exterior of the school facades, and the typical noise attenuation provided by double-glazed windows and alternate ventilation, the resulting interior noise levels in the public school would be below 45 dBA L10(1) (the *CEQR Technical Manual's* acceptable interior noise level criteria for schools), except during an approximately one year period under Construction Phasing Plans 1 and 3 or an approximately two year period under Construction Phasing Plan 2, when noise levels are predicted to slightly exceed this threshold. Because interior noise levels would be acceptable except during limited periods when the acceptable threshold are expected to be slightly exceeded, the temporary construction noise impacts on P.S. 753 would not impair the operation of the school, and therefore are not considered a significant adverse community facilities impact.

Construction of Phase II under the Extended Build-Out Scenario would not result in the temporary or permanent closure or displacement of any community facilities. During the construction of Phase II, construction activities would not adversely affect any libraries, police or fire stations, publicly funded day care facilities, or health facilities, as none are located in close proximity to the Phase II construction sites.

#### **D. Construction – Open Space**

##### **1. Analysis of Extended Duration of the Temporary Significant Adverse Impact on Passive Open Space Resources in the Non-Residential Study Area Identified in the 2006 FEIS**

Under the Extended Build-Out Scenario, the temporary significant adverse impact on the ratio of acres of passive open space per 1,000 workers (the “passive worker ratio”) in the non-residential study area associated with Phase I of the Project would be eliminated during construction of Phase II by 2029 or 2031 (depending on the illustrative construction phasing plan), when approximately 3.36 to 3.41 acres of new publicly accessible passive open space would be provided by the Phase II development. Therefore, compared with the Phase II schedule analyzed in the 2006 FEIS, the Extended Build-Out Scenario would prolong the temporary significant adverse impact on the passive worker ratio in the non-residential study area that was identified in the FEIS. The extended duration of this adverse impact would be partially mitigated by improvements to Times Plaza (discussed further below).

## **2. Analysis of Adequacy of Open Space Resources During the Phase II Construction Period Under the Extended Build Out Scenario**

There would be no significant adverse indirect or direct open space impacts arising as a result of Phase II construction under the Extended Build-Out Scenario.

### **a. Indirect Effects Within the 1/4-Mile Non-Residential Study Area**

Under all three Extended Build-Out Scenario construction phasing plans, the passive worker ratio would gradually increase as Phase II buildings come online and add new passive open space resources to the 1/4-mile non-residential study area. Overall, Phase II of the Project would improve the passive worker ratio, and at no point during the build out of Phase II would the percentage change in the passive worker ratio from the Future Without Phase II to the Future With Phase II be negative. Therefore, there would be no significant adverse indirect impacts in the non-residential open space study area under the Extended Build-Out Scenario.

### **b. Indirect Effects Within the 1/2-Mile Residential Study Area**

In the 1/2-mile residential study area, the ratio of total acres of open space (i.e., combined passive and active publicly accessible open space) in the residential study area per 1,000 residents (the “total residential ratio”) and the ratio of acres of passive open space in the residential study area per 1,000 residents (the “passive residential ratio”) would each gradually increase over time. By contrast, the ratio of acres of active open space in the residential study area per 1,000 residents (the “active residential ratio”) would gradually decrease with time.

At no point during the build out of Phase II under the Extended Build-Out Scenario would the percentage change in the total residential ratio from the Future Without Phase II to the Future With Phase II be negative, under Construction Phasing Plan 1 and 3. Under Construction Phasing Plan 2, there would be a 0.3 percent decrease in the total residential ratio after the completion of the first Phase II building (Building 15, which would provide 0.13 acres of open space) in 2021, after which the ratio would steadily increase. This temporary decrease of less than 1 percent in the total residential ratio would not be considered a significant adverse impact, due to the small size of the decrease, the relatively short duration of this condition, the new open space resources that would be provided as Phase II buildings are constructed, and the availability of open space resources not included in the quantitative analysis, including Prospect Park and Fort Greene Park.

The passive residential ratio would increase over the construction period of Phase II under the Extended Build-Out Scenario. Compared with the Future Without Phase II, at no point during the build out of Phase II would the percentage change in the passive residential ratio from the Future Without Phase II to the Future With Phase II be negative, under all three Construction Phasing Plans. Upon the completion of Phase II in 2035, the overall increase in the passive residential ratio would be 36 percent.

The active residential ratio would gradually decrease over the Phase II construction period under the Extended Build-Out Scenario, with a maximum decrease of approximately 6.9 percent under Construction Phasing Plans 1 and 3 (occurring after the completion of Building 9, the seventh Phase II building to be completed), and with a maximum decrease of approximately 10.4 percent under Construction Phasing Plan 2 (occurring after the completion of Building 12, the second to last Phase

II building). However, as additional active features come online, the active residential ratio would improve slightly, and under all three construction phasing plans, at the completion of Phase II in 2035, would decrease by approximately 5.6 percent.

Residents would continue to have access to resources that are not included in the quantitative analysis, including two destination open space resources (Fort Greene Park and Prospect Park) that are within walking distance of the Phase II project site, but are not within the ½-mile study area.

The overall effect of Phase II of the Project would be to improve the availability of publicly accessible open space in the study area. Due to the new open space resources that would be provided by Phase II, and the availability of open space resources not included in the quantitative analysis (in particular, Prospect Park and Fort Greene Park, two destination parks within walking distance of the Project site), the decreases in the active residential ratio would not be considered a significant adverse impact. Overall, there would be no significant adverse indirect open space impacts associated with Phase II of the Project under the Extended Build-Out Scenario, under any of the three construction phasing plans.

### **c. Direct Effects**

Phase II would not result in any direct displacement of existing open space resources under the Extended Build-Out Scenario. There would be no significant adverse impacts on existing open spaces due to air emissions, noise, or vibration during the construction of Phase II. Therefore, there would not be any significant adverse impacts due to direct effects on study area open spaces during the Extended Build-Out Scenario under any of the illustrative construction phasing plans.

Noise levels in areas where new Project open spaces would be developed would exceed *CEQR Technical Manual* guidelines due to existing traffic noise from nearby roadways, with or without Phase II construction activities, but the Phase II construction activities under any of the three analyzed illustrative construction phasing plans would result in noise level increases at Project open space locations during certain time periods. Open space areas with a line of sight to active construction activities would experience more elevated noise levels during those activities. While these noise levels are not desirable, there is no effective practical mitigation that can be implemented to avoid these levels during construction. Noise levels in many of the city's parks and open space areas that are located near heavily trafficked roadways and/or near construction sites experience comparable and sometimes higher noise levels.

### **E. Construction – Urban Design and Visual Resources**

Construction activities of Phase II under the Extended Build-Out Scenario would not result in any significant adverse impacts on urban design and visual resources. However, to improve visual conditions in the area during the period of construction, where feasible and practicable, for construction sites east of 6th Avenue, construction fencing facing Vanderbilt Avenue, Dean Street, Carlton Avenue, Pacific Street or 6th Avenue will be visually enhanced with temporary art displays curated by Artbridge or a similar organization if such fencing is to remain in place for more than one year. This requirement has been incorporated into the amended MEC. It does not apply to the landscaped screening currently in place around the temporary parking lot on Block 1129.

The Phase II project site does not include any visual resources. Construction of the Phase II buildings would not obstruct views to any identified visual resources in the area. Therefore the construction of Phase II of the Project would not result in significant adverse impacts to visual resources under the *CEQR Technical Manual* criteria.

The delayed completion of Phase II under the Extended Build-Out Scenario would prolong interim site conditions that were identified in the 2006 FEIS, including a surface parking lot on Block 1129 and the presence of the open rail yard. The surface parking spaces would be provided in a temporary condition until they are located below-grade in conjunction with the build-out of the Project buildings (Buildings 11, 12, 13 and 14) on Block 1129. Views to surface parking areas are common in mixed-use neighborhoods in New York City. As per the MEC, the interim surface parking lot and construction staging area on Block 1129 would continue to be screened and landscaped around its perimeter under the Extended Build-Out Scenario, similar to its appearance in existing conditions. The design of the fence along with the landscaping would continue to provide a visual buffer for pedestrians and residents of the adjacent neighborhood. The approximately 10-foot tall metal fence is set back approximately four feet from the property line to establish a landscaping zone. The fence allows for some pedestrian visibility into the parking facility from the sidewalk. Blooming shrubs and evergreens are also located in the landscape buffer to provide a soft edge and layers of screening. The existing directional lighting would continue to minimize off-site light intrusion into the surrounding neighborhood. Moreover, views of the parking lot would be limited to immediately proximate areas. Due to these factors, the prolonged presence of the interim parking use on Block 1129 under the Extended Build-Out Scenario would not result in significant adverse urban design impacts.

The Extended Build-Out Scenario would prolong the time period in which views to Blocks 1120 and 1121 would include the open rail yard that exists under current conditions. Therefore, a portion of – or the entire rail yard – on Blocks 1120 and 1121 would be visible for a longer period of time. Since the rail yard is located below-grade, existing views are limited to immediately proximate areas. In addition, views to the open rail yard exist currently and would continue in the Future Without Phase II, and the elimination of these views is considered a benefit of the Project. Therefore, the delayed completion of the Phase II development on these blocks is not a significant adverse urban design impact.

At any stage of construction during construction of Phase II under the Extended Build-Out Scenario, irrespective of the construction phasing plan, views of the Phase II project site would depend on the pedestrian's viewpoint. The Urban Design analysis in the FSEIS considers the appearance of the project site from multiple pedestrian vantage points during an extended construction period.

From a pedestrian's perspective, the appearance of areas of the Phase II project site under active construction would be similar to other construction sites in the city. Portions of adjacent streets and sidewalks would be used for staging activities; active construction sites would be surrounded by protective fencing; and for periods of time, large pieces of construction equipment would be seen beyond the protective fencing, followed by building superstructures. Throughout the construction period, access to surrounding residences, businesses, and institutions in the study area would be maintained, and thus there would continue to be pedestrian activity around the Phase II project site. To the extent practicable, measures outlined in the MPT Plans would be designed so that vehicle lane and sidewalk closures are kept to a minimum and that adequate pedestrian access is provided



subject to NYCDOT approval. Phase II sites would be maintained in their existing conditions until right before demolition. Further, the project sponsors are obligated under the 2009 MGPP and MEC to maintain the sites in a clean and secure manner.

Open space on the Phase II project site would be iteratively created as each proposed building is completed. Street trees would be provided along the perimeter of the site consistent with New York City Department of Parks and Recreation (“DPR”) requirements and regulations. The new Project open spaces in interim and permanent conditions and the replacement street trees would incrementally enhance the pedestrian experience.

### **1. Views Analysis from One Block Away From the Project Site**

Other than from Atlantic Avenue east of the Phase II project site, street-level views to the Phase II project site from one city block away are highly constrained. Most eye-level views are limited to a narrow portion of the project site. Views of the project site along Atlantic Avenue from one block east encompass the Phase II building sites along Atlantic Avenue, which would be viewed in the context of the intensely urban and heavily trafficked character of Atlantic Avenue. Skyward views from the pedestrian perspective could include construction cranes and the superstructures of Phase II buildings under construction and/or completed Phase II buildings, depending on the vantage point, the point in time, and the construction phasing plan. However, skyward views of these construction conditions would not adversely affect the pedestrian experience on these blocks as the changed views would not significantly affect the streetscape at the pedestrian level. Skyward views of cranes and construction would be temporary and would change as construction proceeds. While the duration of these views would be extended under the Extended Build-Out Scenario, such views would be typical of skyward-facing views of construction sites for tall buildings in New York City, and would be similar in nature to views currently available, when looking up, of numerous construction sites in the downtown Brooklyn area. In addition, pedestrian views of the Phase II buildings under construction and associated construction equipment would not obstruct views of any visual resources in the area.

### **2. Views Analysis from 100 Feet of the Project Site**

From many vantage points 100 feet from the project site, pedestrian views of Phase II construction activities would be highly constrained. These would include views from the south along 6<sup>th</sup>, Carlton and Vanderbilt Avenues and views from the north along South Portland and South Oxford Streets and Vanderbilt Avenue and views from the east and west along Dean Street. More expansive views of the project site are available from the east and west along Atlantic Avenue as well as views to the south from 100 feet north of Atlantic Avenue along Carlton and Clermont Avenues. At any point these views are likely to include interim site conditions and a larger amount of construction activity than views from the narrower streets with more limited viewsheds. The more expansive views would include large portions of the Phase II project site, which could include conditions similar to existing conditions (including interim conditions), active construction, and completed buildings. Pedestrian-level views to the site would be mainly of completed buildings or sites remaining as in the Future Without Phase II, rather than active construction sites because active construction would take place at only a limited number of buildings sites at any one time under the Extended Build-Out Scenario. While views from locations along the Atlantic Avenue corridor, and some locations 100 feet north of Atlantic Avenue would include Phase II construction activity for a prolonged time period under the Extended Build-Out Scenario, these views are already intensely urban in character

and are already heavily influenced by high volumes of traffic and activity. In addition, as Project buildings are completed, views to the project site would include those completed buildings, which would partially obscure construction activities and interim conditions located behind them.

### **3. Views Analysis from Adjacent Sidewalk Locations to the Project Site**

Pedestrian views from sidewalks on streets adjacent to active construction would consist of conditions that would be typical of any construction site in the City. Those views would include construction workers, equipment and activities taking place above the construction fence, truck traffic entering and leaving the project site, large pieces of equipment such as cranes, and the MPT elements including barriers and fences and sidewalk bridges. Prior to the start of construction activities, adjacent sidewalks would provide views to certain portions of the project site, depending on a pedestrian's vantage point. Construction fencing would be installed at the perimeter of the site under construction and would limit views into certain areas of the project site, while views to areas of the site not under construction would remain available. Once project site buildings are complete, views from adjacent sidewalks would include the nearest completed building, along with other more distant completed buildings, on-going construction activities elsewhere on the project site, and longer views that would include the surrounding streetscapes.

Under the Extended Build-Out Scenario, construction activities would be concentrated on some blocks and would be visible from certain adjacent viewpoints for an extended period of time. Views of the interim parking use would be screened by landscaping and fencing, until such time as the surface parking lot would be incrementally replaced with below-grade parking facilities. From sidewalks on the streets adjacent to the project site prior to the beginning of construction activities, a pedestrian would have expansive views of the project site, including of the open rail yard, which would extend to intervening buildings and the buildings adjacent to (or across the street from) the Phase II project site boundaries. These wide views would gradually be changed by construction activities (including, eventually, platforms over the rail yard) and then new Phase II buildings. As Phase II buildings are constructed, they would partially obscure views to other buildings under construction and other construction staging activities. Phase II construction activities, and new Phase II buildings, would also incrementally obscure or partially obscure views to buildings beyond the project site boundaries. Therefore, the existing wide views that are available from project site-adjacent locations would be reduced over time, as new construction activities and buildings are incrementally introduced to the Phase II project site.

Compared with views 100 feet from the project site, Phase II construction activities would have a substantial effect on views from locations adjacent to the project site, due to the close proximity and focused character of these views. Due to the localized nature of these views, a relatively low number of pedestrians would be affected by these changes. No unique views, or views of any important visual resources, would be impacted.

### **4. Summary of Effects of Prolonged Phase II Construction on Views**

Views of the project site from more than one block away are extremely limited and would not be significantly affected by prolonged construction activities under the Extended Build-Out Scenario. Views from 100 feet of the project site are generally constrained except along the Atlantic Avenue corridor and in certain locations from north of Atlantic Avenue. Views from these vantage points would be experienced in the context of the urban character of Atlantic Avenue. Construction

activities would be visually prominent from sidewalk locations on streets adjacent to the project site. Although construction activities on individual building sites would be typical of those on numerous other construction sites throughout the City, the Phase II construction activity would occur at multiple building sites and would be visible for a prolonged duration from many nearby vantage points under the Extended Build-Out Scenario. However, as Project buildings are completed, views to the project site would include those completed buildings, which would partially obscure construction activities and interim conditions located behind them. No unique views, or views of any important visual resources, would be impacted, and the Phase II construction would incrementally replace views of the below-grade rail yard, interim surface parking lot and existing warehouse buildings and other structures as construction proceeds. Therefore, Phase II construction under the Extended Build-Out Scenario would affect views from areas with a limited geographic scope and would not adversely affect a large number of people. For these reasons, construction of Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse impacts to Urban Design. However, the visual effects of construction activities at sidewalks on streets adjacent to the project site would contribute to the localized significant adverse neighborhood character impacts (discussed below).

## **F. Construction – Hazardous Materials**

The 2006 FEIS concluded that the Project would not result in significant adverse impacts with respect to hazardous materials. Construction activities on the project site since the 2006 FEIS have been substantially consistent with the procedures set forth in the 2006 FEIS and MEC. In general, demolition and construction conducted at the project site to date have encountered (and addressed) the same types of contamination anticipated and discussed in the 2006 FEIS. The same procedures for assessing and managing contamination, and measures to avoid impacts, would be implemented during the Phase II work (with certain adjustments to improve the compliance program as discussed in the introduction to Section V.), and the longer construction period assumed for the Extended Build-Out Scenario would not result in additional impacts with respect to hazardous materials. Therefore, no significant adverse impacts would occur for Phase II of the Project under the Extended Build-Out scenario.

## **G. Construction – Transportation**

### **1. Traffic**

During peak construction under all three Extended Build-Out Scenario illustrative construction phasing plans, the project-generated trips would generally be fewer than the project-generated trips that would be expected upon the full build-out of Phase II of the Project. An exception would be during the peak construction periods for Construction Phasing Plan 3, when multiple buildings and certain railroad yard platform segments would be under concurrent construction at the project site and a number of the Phase II buildings would also be in operation. The detailed construction traffic analysis of two peak construction periods for Construction Phasing Plan 3, which represent the reasonable worst case periods for construction traffic impacts, shows that significant adverse traffic impacts would occur at numerous locations. While these analyses considered specific points in time during Phase II construction under Construction Phasing Plan 3 (primary worst-case in 2032 and secondary worst-case in 2027), the impact findings and determination of mitigation requirements would be applicable to other construction periods during which comparable activities would occur. Overall, significant adverse traffic impacts were identified at 36 intersections during the 1st quarter

of 2032 (when Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the project site) and at 14 intersections during the 4th quarter of 2027 (when Buildings 11, 12, 13, and 15 are assumed to be under concurrent construction at the project site) under the illustrative construction schedule for Construction Phasing Plan 3. The proposed operational traffic mitigation measures (described in Section VII) would mitigate many of the construction impacts during these peak periods. In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate certain impacts during construction. Similar to the operational traffic impact analysis and findings from the 2006 FEIS, there would be locations where impacts could not be mitigated or could only be partially mitigated. It should be noted that subsequent to the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the Project's traffic mitigation plan. The mitigation measures outlined in the DSEIS included a variety of signal timing changes, lane re-striping and changes to curbside parking regulations. Subsequent to the issuance of the DSEIS, NYCDOT determined that some of the parking regulation and lane re-striping measures should not be implemented. As a result, the traffic mitigation analysis in the FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. For the primary worst-case in 2032, no practicable mitigation measures would be available to fully mitigate the impacts at 17 intersections, and for the secondary worst-case in 2027, unmitigated impacts were identified for two intersections.

## **2. Parking**

In the Extended Build-Out Scenario, peak parking demand for construction workers is assumed to occur during the peak construction period under the illustrative construction schedule for Construction Phasing Plan 3 when, on average, 314 construction worker vehicles are projected to arrive at the project site during the 6 to 7 AM morning peak hour. Since this volume represents 80 percent of the total projected day shift vehicle trips for construction workers, the total peak parking demand would be 392 vehicles. As the 300 on-site parking spaces available to accommodate Arena demand would generally be available to construction workers, most of the projected peak construction worker parking demand could be accommodated by these 300 on-site parking spaces. Based on the off-street and on-street parking utilization in the ¼ mile study area of the Project, should fewer on-site parking spaces be provided for construction workers, the construction peak parking demand could be accommodated by the available off-street parking facilities in the ¼ mile study area of the Project. Since all projected construction worker parking demand would be met, no parking shortfall is anticipated during Phase II construction of the Project under the Extended Build-Out Scenario. These findings are generally consistent with those of the 2006 FEIS.

## **3. Transit and Pedestrians**

Construction workers who do not travel via auto would be distributed among the various subway and bus routes, station entrances, and bus stops near the project site. These trips would also occur predominantly during construction peak hours that are outside of the typical commuter peak periods. Furthermore, appropriate measures for maintaining temporary sidewalks and overhead protections would be provided throughout Phase II construction of the Project. However, during construction on Blocks 1120 and 1121, due to the anticipated staging areas and MPT plans, there may be times when pedestrian access along the south side of Atlantic Avenue east of 6th Avenue would be restricted to facilitate construction activity. Consultation with NYCDOT's OCMC would

be undertaken to determine the feasibility of closing pedestrian access for the affected segments during periods of Phase II construction when Blocks 1120 and 1121 are under construction. Diverting pedestrian flow to other sidewalks in the area is not expected to result in a substantial increase in pedestrian traffic at those locations. At other sidewalks bordering the project site, more limited closures are anticipated and, where necessary, temporary sidewalks would be provided to maintain pedestrian flow. MPT plans would be prepared and approved by NYCDOT to provide adequate sidewalk sheds to protect pedestrians, including arena patrons, during Phase II construction. Therefore, no significant adverse construction-related transit or pedestrian impacts are expected to occur during Phase II construction of the Project under the Extended Build-Out Scenario. These findings are generally consistent with those of the 2006 FEIS.

## **H. Construction – Air Quality**

Consistent with the conclusions of the 2006 FEIS, no significant adverse impacts on air quality are predicted during Phase II construction with the Extended Build-Out Scenario. Measures would be taken to reduce pollutant emissions during construction in accordance with applicable laws, regulations, and building codes, including dust suppression measures and the idling restriction for on-road vehicles. In addition, the project sponsors have committed to a robust emissions reduction program, including early electrification, the use of ultra-low sulfur diesel (“ULSD”) fuel, and the use of diesel particulate filters on diesel equipment in excess of 50 hp. Most of these measures are described in further detail in the 2006 SEQRA Findings Statement, and therefore are not described in detail in this Supplemental Findings Statement. In connection with the preparation of the FSEIS, however, the project sponsors committed to several additional measures to reduce the potential for construction-related impacts to air quality, including: (i) the preparation of a Dust Management Plan, prior to the commencement of construction activities for each major work phase, that identifies the location of the fixtures to be used in controlling dust at the site, any wheel washing stations, gravel placement locations, hoses, dust suppression agents and any other equipment and material to be used in complying with dust suppression requirements; (ii) a commitment that the project sponsors assign sufficient staff to allow for careful monitoring of contractor compliance with the required dust control measures with staffing keyed to the level of dust-generating construction activities at the site; (iii) the commitment that the project sponsors’ on-site environmental monitoring staff will follow the manufacturer’s recommendations for operation and maintenance of the air monitoring equipment (and the best management practices previously recommended by ESD’s Environmental Monitoring Firm or equally effective procedures), and routine inspections of the equipment will be performed to ensure functionality; (iv) a commitment to adequately moisten or cover by a tarp, dust suppression agent or other effective means any soil stockpiled on site; (v) a commitment that (excluding construction activities relating to Building 2, Building 3 or the rail yard and except in narrowly specified circumstances) non-road construction equipment with a power rating of 50 hp or greater must meet at least the USEPA Tier 3 emission standard and that all non-road diesel engines rated less than 50 hp must meet at least the USEPA Tier 2 emission standard; (vi) a commitment that (except in narrowly specified circumstances) non-road construction equipment with a power rating of 50 hp or greater must meet the Tier 4 emissions standard beginning in 2022; and (vii) a commitment to label equipment to facilitate monitoring of DPF and emission control requirements.

With the implementation of these emission reduction measures, and those specified in the 2006 FEIS, the analysis of construction-related air emissions in the FSEIS determined that PM<sub>2.5</sub>, PM<sub>10</sub>, annual-average NO<sub>2</sub>, and CO concentrations would be below their corresponding de minimis thresholds or National Ambient Air Quality Standards (“NAAQS”) respectively. Therefore, the

construction of Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse air quality impacts due to construction sources.

## **I. Construction – Noise and Vibration**

### **1. Noise**

Consistent with the findings of the 2006 FEIS, construction of Phase II of the Project under the Extended Build-Out Scenario would have the potential to result in significant adverse impacts with respect to construction noise. This conclusion is based on an analysis of each of the three illustrative construction phasing plans, using a modeling analysis that conservatively predicts noise levels by assuming that peak hourly noise levels represent the entire day of construction and peak monthly levels represent the entire year in most years. Since the results of this analysis reflect peak hourly noise levels during peak months of construction, the noise levels predicted by this analysis would not occur constantly throughout the predicted duration of impact.

Construction on the proposed building sites would include noise control measures beyond those required by the New York City Noise Control Code, including both path and source controls. Most of these measures are described in the 2006 SEQRA Findings Statement, and therefore are not described in this Supplemental Findings Statement. In connection with the preparation of the FSEIS, however, the project sponsors committed to several additional measures to reduce construction noise, including: (i) a commitment to develop a written protocol for confirming that noisier equipment meets the noise levels set forth in the New York City Noise Code or Table 3J-1 of the FSEIS, whichever is lower; (ii) a commitment for the OEM to check applicable equipment for compliance with the MEC Noise Requirements when the equipment is first mobilized; and (iii) a commitment, where practicable and feasible, to use sound-mitigated backup alarms such as backup alarms that lower backup alarm noise in response to more quiet ambient conditions (such as night-time work) or backup alarms that use white noise or other mitigating technologies for trucks and equipment expected to operate at or make deliveries to the Project site during any phase of extended night-time work or night-time module deliveries. In addition, the MEC has been modified to require the project sponsors to provide one air conditioner per bedroom or main living room with a window along a significantly impacted façade, and to replace broken air conditioners as and to the extent required to mitigate continued construction-related significant impacts.

The results of the detailed construction noise analysis indicates that of the 489 buildings in the study area, elevated noise levels are predicted to occur at one or more floors of approximately 124 buildings under Construction Phasing Plan 1, at one or more floors of approximately 160 buildings under Construction Phasing Plan 2, and at one or more floors of approximately 134 buildings under Construction Phasing Plan 3. The 2006 FEIS identified significant adverse noise impacts from the construction of Phase II at approximately 176 buildings, but the SEIS identified impacts at a number of locations on buildings not identified in the 2006 FEIS as locations that would experience significant adverse noise impacts from the construction of Phase II.

The Extended Build-Out Scenario would result in construction occurring over a longer overall period of time, and result in noise level increases occurring over a longer duration. In addition to resulting in significant adverse construction noise impacts at some locations not predicted to experience significant adverse construction noise impacts in the 2006 FEIS, this also would result in longer durations of impact at some locations that were predicted to experience significant adverse

construction noise impacts in the 2006 FEIS. At locations with line of sight to several Phase II buildings the increased duration of construction at those building sites would extend the overall duration of construction noise level increases.

The elevated noise levels resulting from construction would be reduced at a receptor location as construction activities move out of the line of sight of that receptor location. The construction noise impacts would not be expected to occur over the entire duration of Project construction at any noise receptor, because while construction activities are occurring at buildings to which a receptor does not have a direct line of sight, the receptor would tend not to experience the elevated noise levels due to construction. Furthermore, many of the loudest pieces of construction equipment, including excavators, asphalt paving equipment, concrete trowels, concrete trucks, portable cement mixers, etc., are mobile, and move about the site throughout the days and months of construction, resulting in a range of construction noise levels at a particular receptor location.

Affected locations include residential and institutional areas adjacent or with a line of sight to the proposed development sites. However, most affected buildings have receptor noise control measures (i.e., double-glazed windows and air-conditioning) or have previously been offered receptor control noise measures by the project sponsors (in accordance with the mitigation requirements stipulated in the 2006 FEIS and MEC). Buildings with double-glazed windows and air conditioners would be expected to experience interior  $L_{10(t)}$  values less than 45 dBA during most of the construction period, which is considered an acceptable level according to *CEQR Technical Manual* criteria. Receptor controls that could be used to partially mitigate these impacts are discussed below in Section VII.

Additionally, there is one recently constructed residential building with outdoor balconies predicted to experience significant adverse noise impacts as a result of construction of Phase II of the Project under Construction Phasing Plan 1. At this location, there are no feasible or practicable mitigation to mitigate the construction noise impacts on the balconies.

The refinement of the analysis methodology for the FSEIS, specifically using a greater number of receptor locations (and thereby fine-tuning the methodology used in the 2006 FEIS of representing many buildings on one block by one receptor location) more precisely indicates which buildings and building façades would experience significant adverse construction noise impacts. Additionally, the refined analysis methodology more precisely calculated background (i.e., non-construction) noise levels at each noise receptor, particularly at the rear façades and upper elevations of buildings. This tended to indicate lower background noise levels at these locations, resulting in higher construction noise level increments at these receptor locations.

During certain Phase II construction activities, P.S. 753 (located at 510 Clermont Avenue), which was not predicted to experience a significant adverse construction noise impact in the 2006 FEIS analysis, is expected to experience significant adverse noise impacts at one or more floors on the west and south façades under Construction Phasing Plans 1 and 3, and the west, south, and east façades under Construction Phasing Plan 2. The maximum impact duration at the school would be expected to be nine years under Construction Phasing Plan 1, seven years under Construction Phasing Plan 2, and eleven years under Construction Phasing Plan 3.

The school building has receptor control measures including double glazed windows and air conditioners. With these receptor control measures, interior  $L_{10}$  noise levels in rooms with windows

along the east, south, and west façades of the school would be expected to be below the *CEQR Technical Manual* 45 dBA  $L_{10}$  recommended level during most periods of time (including most of the years in which the FSEIS modeling analysis identifies significant adverse impacts on exterior facades). However, during some limited time periods, the school would experience exterior noise levels up to 77.7 dBA at certain floors. This would result in interior noise levels in the high 40s dBA, which would be expected to be above the 45 dBA  $L_{10(1)}$  noise level recommended by the *CEQR Technical Manual* for schools. The school is predicted to experience exterior noise levels greater than 75 dBA for no more than two years under Construction Phasing Plan 2 and no more than one year under Construction Phasing Plans 1 and 3.

Construction of the proposed project would not result in any significant adverse noise impacts at existing open spaces within the study area. The combination of background noise levels in the area and on-site construction activities under any of the three analyzed illustrative construction phasing plans would produce  $L_{10(1)}$  noise levels at certain new Project open space areas up to approximately the low 80s dBA during certain periods of construction. These noise levels would exceed those recommended by the *CEQR Technical Manual* for passive open spaces (55 dBA  $L_{10}$ ). (Noise levels in these areas exceed the recommended values for existing and Future Without Phase II conditions.) Noise levels in many of the city's parks and open space areas that are located near heavily trafficked roadways and/or near construction sites experience comparable and sometimes higher noise levels.

Generally, throughout the study area, the absolute noise levels during construction predicted in the FSEIS construction noise analysis are comparable to those predicted in the 2006 FEIS. Absolute noise levels predicted to occur at the analyzed noise receptor locations in the study area would generally be in the mid 50s to 70s dBA. These noise levels are comparable to noise levels throughout residential areas of New York City. At the upper levels of certain buildings immediately adjacent to the construction of one or more Project buildings, during the one or two years of the peak construction activity adjacent to these receptors, noise levels in the low 80s dBA are expected. These noise levels are comparable to those that occur at receptors adjacent to heavily trafficked multi-lane avenues or roadways in New York City.

## 2. Vibration

The buildings of most concern with regard to the potential for structural or architectural damage due to vibration are the Swedish Baptist Church and nearby row houses along Dean Street, which are immediately adjacent to the site of Building 15. The 2006 FEIS vibration analysis determined that there would be no potential for significant adverse vibration impacts at these locations, but that a vibration monitoring program should be implemented to ensure that no architectural or structural damage would occur from construction activities. As per the MEC, the vibration monitoring program would continue to be implemented for Phase II of the Project under the Extended Build-Out Scenario.

For limited periods of time due to certain infrequently occurring construction activities, vibration levels would be perceptible in the vicinity of the construction site but would not rise to the level that would have the potential to result in structural or architectural damage and are not be considered significant adverse impacts.



## **J. Construction – Public Health**

Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse impacts with respect to air quality (during construction or operation of Phase II) or with respect to operational noise. Prolonged construction of Phase II of the Project would result in significant adverse construction noise impacts, as defined by the thresholds recommended in the *CEQR Technical Manual*. However, the predicted magnitude and duration of absolute noise levels (*i.e.*, the sum of construction noise levels with ambient background noise levels) would not be at a level that significantly affects public health at any receptor location. Therefore, Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse public health impacts.

## **K. Construction – Land Use and Neighborhood Character**

### **1. Land Use**

Consistent with the 2006 FEIS, the FSEIS finds that construction of Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse land use impacts. Construction of Phase II would affect land uses on the project site and in immediately adjacent areas, which would be affected during the construction period by intermittent sidewalk closures, travel lane closures, and relocation of bus stops in the vicinity of the Phase II project site. To facilitate pedestrian flow through these areas, temporary sidewalks or sidewalk bridges adjoining the project site would be maintained to the extent practicable. Sidewalk and travel lane closures and bus stop relocations would be intermittent and temporary and are not expected to result in any significant adverse impacts to the land uses surrounding the Phase II project site.

During the construction of Phase II, sites not under active construction would be maintained as under existing conditions (for example, the open rail yard would continue to exist until platformed over) or would have interim uses, such as construction staging areas and surface parking, for a prolonged period. The presence of these interim uses for an extended period of time would not be considered a significant adverse land use impact because these uses are not incompatible with surrounding land uses, and, in the case of the interim surface parking lot and open rail yard, would also be present in the Future Without Phase II condition. However, the Extended Build-Out Scenario would extend the duration of the surface parking lot and open rail yard compared with the construction schedule analyzed in the 2006 FEIS. The surface parking use that would be on Block 1129 for an extended period is a non-residential use, but the underlying manufacturing zoning that covers most of the block and most of the block immediately to the south allows a range of commercial and manufacturing uses. The surface parking use is also consistent with the mix of industrial, commercial and residential uses that are located on the block to the south. The perimeter of the surface parking lot facing Carlton Avenue, Dean Street and Vanderbilt Avenue would be fenced with a landscaped border, providing a visual buffer for pedestrians and residents.

Areas closest to the Phase II project site lack the cohesive character of the cores of their neighborhoods, indicative of the transitional character of these areas. As Phase II building are completed over the course of the Extended Build-Out Scenario, the existing uses on the Phase II project site (construction staging areas, interim parking areas, interim storage uses, and the open rail yard) would be replaced incrementally with permanent residential, commercial, community facility, open space, and below-grade parking uses. These new uses would over time integrate with adjacent

neighborhoods, which include a mix of residential, commercial, community facility, open space, and parking uses, as well as some light industrial uses in certain areas.

Although Phase II under the Extended Build-Out scenario anticipates a prolonged construction schedule compared with the 2006 FEIS, the level of construction activity would vary and move throughout the Phase II project site, and no area would experience the immediate effects of the Project's construction activities for the full project construction duration. Since, overall, construction would not significantly change or affect land use or land use trends in the surrounding area, there would be no significant adverse impacts to land use.

## **2. Neighborhood Character**

As described in Chapter 3L of the FSEIS, the effects of Phase II construction activity (on socioeconomic conditions, open space, urban design and visual resources, traffic and noise) would be concentrated in areas closest to the project site. During construction, the immediately surrounding area would be subject to added traffic from construction trucks and worker vehicles and partial sidewalk and lane closures. In addition, staging activities, temporary sidewalks, construction fencing, construction equipment and building superstructure would be visible to pedestrians in the immediate vicinity of the Phase II project site. These impacts would combine to result in a significant adverse localized neighborhood character impacts centered mostly on Dean Street, Pacific Street and Carlton Avenue surrounding the Phase II project site.

This localized significant adverse neighborhood character impact would occur for a longer period of time than what was contemplated in the 2006 FEIS, as the duration of construction activities for Phase II under the Extended Build-Out Scenario would be 18 years, compared with six years in the 2006 FEIS. As noted above, the impacts would be confined largely to Dean Street, Pacific Street, and Carlton Avenue, and no immediate area would experience the effects of the Project's construction activities for the full Project construction duration. Measures to control noise, vibration, and dust on construction sites, including the erection of construction fencing, would reduce views of construction sites and buffer noise emitted from construction activities, and sound barriers would be used to reduce noise from particularly noisy activities where practicable. However, these measures would not be sufficient to avoid a significant neighborhood character impact in the areas immediately adjacent to the Phase II project site for a prolonged period under the Extended Build-Out Scenario.

The localized significant neighborhood character impact arising from prolonged Phase II construction would not extend out into the wider neighborhoods surrounding the Project. As described above, construction noise impacts will affect buildings in close proximity to the Phase II site. Views of the project site from more than one block away are limited and would not be significantly affected by extended construction activities. Project development to date has not led to disinvestment in the ¼-Mile Area, and case studies of other major multi-building development sites in New York City that have experienced prolonged construction and/or periods of construction delay indicate that such projects have not led to decreased property values or other signs of disinvestment in surrounding neighborhoods. The ¼-Mile Primary Study Area contains a number of principal arterials that carry heavy volumes of through traffic. Additional traffic volumes during Phase II construction, and associated significant adverse traffic impacts, would not result in significant adverse neighborhood character impacts in that study area. Moreover, with early implementation of operational mitigation measures, all but ten of the impacted intersections in the

1/4-Mile Primary Study Area could be fully mitigated. In this regard, it is noted that in considering the FSEIS ESD staff identified inconsistencies between the description of the traffic impacts at certain intersections as reported in the construction traffic chapter of the FSEIS (Chapter 3H, “Construction Transportation,” which disclosed that there would be 10 unmitigated intersections) and the more summary description of these traffic impacts in the construction neighborhood character section of the FSEIS (Chapter 3L, “Construction Land Use and Neighborhood Character,” which indicated that 5 intersections would remain unmitigated). The detailed description of traffic impacts in Chapter 3H is correct and reflects comments received on the DSEIS from NYCDOT, and those descriptions should have been carried over into the summary description of traffic impacts in Chapter 3L. With the construction transportation-related updates identified in Chapter 3H, the five additional unmitigated locations are: Lafayette Avenue/Schermerhorn Avenue (unmitigated); Atlantic Avenue and 4th Avenue (unmitigated); Dean Street and 5th Avenue (unmitigated); Bergen Street and Flatbush Avenue (unmitigated); and Fulton Street and Vanderbilt Avenue (unmitigated). Additionally, Chapter 3H discloses that the significant adverse traffic impacts at Atlantic Avenue and Carlton Avenue and Atlantic Avenue and Vanderbilt Avenue – which are identified in FSEIS Chapter 3L as partially mitigated – would be unmitigated rather than partially mitigated. These intersections generally serve heavily trafficked corridors, and, as noted above, the areas around them would not be materially affected by construction-related noise, visual impacts, socioeconomic effects or other non-traffic factors adversely affecting neighborhood character during construction.

As detailed in Chapter 3H, “Construction Transportation,” of the FSEIS, Phase II construction would result in significant adverse traffic impacts at several intersections beyond the 1/4-Mile Primary Study Area. In the 3/4-Mile Secondary Study Area, Chapter 3L of the FSEIS notes that two intersections (Tillary Street and Adams Street/Brooklyn Bridge and Fulton Street and Flatbush Avenue/Flatbush Avenue Extension) would remain unmitigated (although the intersection of Tillary Street and Adams Street/Brooklyn Bridge lies outside the 3/4-mile study area). With the construction transportation-related updates identified in the FSEIS, Chapter 3H identifies additional locations in the 3/4-Mile Second Study Area that would be unmitigated during peak construction activities as follows: DeKalb Avenue and Vanderbilt Avenue; Schermerhorn Street and Boerum Place; Atlantic Avenue and Boerum Place; Atlantic Avenue and Smith Street; and Eastern Parkway and Washington Avenue. However, most of these impacts would occur along streets that are already characterized by heavy volumes of traffic, and are located in areas of the surrounding neighborhoods that would not be significantly affected by the visual, noise or other non-traffic impacts of construction activities at the project site. Therefore, notwithstanding the fact that significant construction-related traffic impacts will remain unmitigated at 10 intersections in the 1/4-mile study area and an additional 6 intersections in the 3/4-mile study area, the FSEIS correctly concludes significant construction-related neighborhood character impacts will be confined to the immediate vicinity of the project site.

Because the intersections with unmitigated traffic impacts discussed above would also be unmitigated in the Phase II operational traffic condition under the Extended Build-Out Scenario, further discussion of the effects of the unmitigated traffic impacts on neighborhood character is set forth below in the operational neighborhood character discussion.

## **L. Modular Construction**

The technical areas where differences in conventional and modular construction methods could result in different potential environmental impacts include socioeconomic conditions, transportation, air quality, and noise.

On-site building activities using modular techniques are expected to have shorter construction durations and fewer daily on-site workers and truck trips as compared with the use of conventional construction techniques, and would therefore be less disruptive overall. The MPT requirements for modular construction would be similar to the MPT requirements for conventional construction methods, although MPT areas for modular construction may be wider and longer than those for conventional construction methods in order to accommodate wide-load deliveries of modules. With respect to parking, transit, and pedestrians, no significant adverse impacts attributable to construction were identified for Phase II construction using conventional construction methods. Similarly, modular construction would not result in any significant adverse impacts in these areas. At intersections where Phase II of the Project is predicted to result in significant adverse construction traffic impacts, these impacts are expected to be less for construction under modular construction methods as compared with construction under conventional construction methods.

Demolition, excavation, and foundation activities under modular construction methods would be the same as those under conventional construction methods. Therefore, since the construction air quality analyses were conducted for the representative worst-case short-term and annual periods where demolition, excavation, and foundation activities would be the dominant activities at the project site, the maximum predicted air pollutant concentrations resulting from Phase II construction of the Project using modular construction methods would be similar to the results shown in the air quality analyses for conventional construction methods. Since no significant adverse construction-related air quality impacts were identified for conventional construction methods, no significant adverse construction-related air quality impacts are expected if Phase II of the Project is constructed using modular construction methods.

The construction tasks with the greatest potential to result in increased noise levels at most nearby noise receptors are the excavation and foundation tasks, which would occur in the same manner and over the same duration with either conventional or modular construction. With modular construction, less equipment would be used on-site and fewer trucks would travel to and from each building site during the superstructure, exterior façade, and interior finishing tasks. Therefore, noise levels with modular construction during these construction tasks would be somewhat lower than those predicted for conventional construction. Consequently, the calculated noise levels and resultant predicted construction noise impacts shown in the analysis of conventional construction are conservatively representative of the noise conditions that would be expected with modular construction. As the project sponsors gain experience with modular construction, it is expected that construction using that method would result in a shorter overall duration of construction for each building. If one or more buildings included in Phase II were constructed using modular construction rather than conventional construction, elevated noise levels resulting from construction activities for that building would be expected to last for a shorter duration. The SEIS examined, in particular, the effects of night-time delivery of modules, and found that these deliveries would not be expected to result in a perceptible increase in noise levels (as measured by Leq(1h)). Operation of the trucks used for night-time module deliveries in close proximity to noise receptors would result in increases in noise level for short periods of time. Such increases in noise level would occur

only when the trucks operate adjacent to the noise receptor and would be comparable in magnitude and duration to that which would result from operation of any heavy truck on the roadway adjacent to the receptor. Consequently, these short-term increases in noise level during night-time module deliveries would not constitute a significant adverse noise impact. Overall, it is not expected that the use of modular construction for the Phase II buildings would result in significant adverse noise impacts beyond those identified for conventional construction.

In summary, it is not expected that the use of modular construction for the Phase II buildings would result in significant adverse impacts in the relevant technical areas beyond those identified for conventional construction.

## **VI. Consideration of Relevant Operation-Related Environmental Impacts, Facts and Conclusions Disclosed in the FSEIS**

As noted in Section IV.B above, a number of environmental impact analysis areas would not be affected by the operation of Phase II of the Project under the Extended Build-Out Scenario, as compared with the earlier completion date assumed in the 2006 FEIS. The analyses screened out on this basis and therefore not included for detailed assessment of the operational condition in the FSEIS are land use, zoning, and public policy; cultural resources; urban design and visual resources; shadows; hazardous materials; and infrastructure.

The following is a summary of the operation-related environmental impact areas that were analyzed in further detail in the SEIS:

### **A. Operational – Socioeconomic Conditions**

This analysis finds that the completion of Phase II by 2035 under the Extended Build-Out Scenario would not result in any new or different significant adverse socioeconomic impacts as compared with completion of Phase II by 2016, as assumed in the 2006 FEIS. The following summarizes the conclusions drawn from the analysis.

#### **1. Direct Residential Displacement**

The 2006 FEIS analyzed the direct displacement of 171 residential units housing an estimated 410 residents. Of these 171 residential units, 137 were located on the Phase I project site, and 34 were located on the Phase II project site. The 2006 FEIS assumed that all of the direct residential displacement would occur during Phase I of the Project. Of the 171 residential units analyzed in the 2006 FEIS, four units remain, and all four are located on the Phase II project site. These units are located on Block 1128, Lots 85, 86, and 87, and house approximately 10 residents. Residents of these units would be directly displaced from the project site at a later date than assumed in the 2006 FEIS. These residents would still be offered relocation assistance in connection with the acquisition of the properties for Phase II of the Project. Their displacement during Phase II under the Extended Build-Out Scenario would not significantly alter the socioeconomic conditions in the study area and would not result in any significant adverse socioeconomic impacts.

#### **2. Direct Business and Institutional Displacement**

The 2006 FEIS analyzed the direct displacement of 29 businesses and institutions, all of which was assumed to occur during Phase I of the Project. Of these 29 businesses and institutions, 13

businesses and one institution were located on the Phase II project site; currently 2 businesses remain on Site 5 of the Phase I project site, no businesses remain on the Arena Block of the Phase I project site, and two businesses remain on Block 1120 of the Phase II project site, on Lots 19 and 28. These two businesses are believed to be currently using the buildings on these lots for storage. In addition, a building located on Lot 4 of Block 1128 of the Phase II project site is privately owned and is believed to be used for storage; though none of the business activities that were analyzed in the 2006 FEIS remain on the lot, the ownership of the building has not changed since the 2006 FEIS.

Under the Extended Build-Out Scenario these three businesses could be directly displaced at a later date than assumed in the 2006 FEIS, but the timing of their displacement would not significantly alter the socioeconomic conditions in the area. The business owners would still be offered relocation assistance in connection with the acquisition of the properties for Phase II of the Project. Their displacement would not significantly alter the socioeconomic conditions in the area and would not result in any significant adverse impacts due to direct business and institutional displacement.

### **3. Indirect Residential Displacement**

Similar to the conclusions in the 2006 FEIS, the FSEIS analysis finds that the Extended Build-Out Scenario would not result in significant adverse impacts due to indirect residential displacement. The 2006 FEIS conclusions (in italics, below), and their applicability to the Extended Build-Out Scenario, are as follows:

- *The 2006 FEIS stated that the number of at-risk households in the study area had been decreasing and would probably continue to do so without the Project, concluding that it was probable that the number of at-risk households in the study area in 2010 and 2016 would be substantially lower.* Based on the FSEIS analysis of income, housing, and recent development, it is evident that this trend has continued since the 2006 FEIS, and it is reasonable to assume that the number of at-risk households in the study area has decreased, and would continue to decrease, in the future independent of the development of Phase II under the Extended Build-Out Scenario.
- *In 2006, similarities between the Project housing mix and the housing mix present in the 3/4-mile study area indicated that the Project would not substantially change the socioeconomic profile of the study area.* While background income conditions have changed since the 2006 FEIS, and would be different in 2035 as compared with 2016, the FSEIS analysis indicates that the housing stock introduced by the Extended Build-Out Scenario would continue to be similar in tenure to the housing stock in the broader 3/4-mile study area. Phase II under the Extended Build-Out Scenario would add a higher proportion of affordable units than would be expected to be added to the study area in the Future Without Phase II. The anticipated income distribution of households introduced by Phase II of the Project would not shift the distribution of households across income brackets such that the overall socioeconomic character of the study area would change significantly. Further, in the Future Without Phase II, no affordable units would be added to the Phase II project site.
- *The 2006 FEIS stated that the substantial number of housing units to be added by the Project could serve to relieve market pressure in the study area by absorbing housing demand that might otherwise be expressed through increases in rents.* The delay in the completion of Phase II housing under the Extended Build-Out Scenario would not, in the shorter term, provide a supply of housing that could serve to relieve this market pressure. However, this delay would not have short- or long-term significant adverse

impacts on future housing market conditions in the study area. Additional housing supply not anticipated in the 2006 FEIS but reflecting residential market trends would reduce any adverse effects of the delay in completion of Phase II housing units, and the residential units added by the development of Phase II under the Extended Build-Out Scenario could still serve to relieve upward rent pressure in the study area. Moreover, a delay in Phase II would also delay the extent to which the occupancy of the Phase II units could contribute to indirect residential development.

- *The 2006 FEIS stated that most identified at-risk households were more than 1/2 mile from the project site, and separated from the project site by intervening established residential communities with upward trends in property values and incomes and active commercial corridors.* Current household income data suggest that incomes have increased throughout the study area since the 2006 FEIS; that there are fewer at-risk households in the study area; and that remaining at-risk households are still concentrated in the same census tracts identified in the 2006 FEIS. Trends indicate that intervening established neighborhood and commercial corridors cited in the 2006 FEIS have become even more established and would continue to limit the potential for the proposed residential development in Phase II of the Project to affect rental rates in tracts containing potentially vulnerable populations. The FSEIS analysis indicates that many of the remaining at-risk households are still more than 1/2 mile from the project site and separated by more established residential neighborhoods and commercial trends.

#### **4. Indirect Business and Institutional Displacement**

The Extended Build-Out Scenario would not alter the conclusions of the 2006 FEIS with regard to indirect business and institutional displacement. As predicted in the 2006 FEIS, increases in commercial property values have already led to some indirect business and institutional displacement along retail corridors closest to the project site. The retail turnover that has occurred since the 2006 FEIS is in part attributable to well-established residential development trends in the study area, as well as indirect displacement pressures in the 1/4-mile study area, that were predicted as a result of Phase I of the Project.

The development of Phase II under the Extended Build-Out Scenario has the potential to result in indirect business and institutional displacement along certain corridors within 1/4 mile of the project site. This displacement could be limited to an even smaller number of vulnerable businesses and institutions than described in the 2006 FEIS, and would primarily consist of neighborhood services stores, light industrial or auto-related uses, and a small number of institutions located on Vanderbilt Avenue, Flatbush Avenue, and 4th Avenue. The delay in the completion of Phase II under the Extended Build-Out Scenario would not add any additional upward pressure on commercial rents beyond what was analyzed in the 2006 FEIS. The completion of Phase II over a longer time period would distribute its effects, potentially reducing the project-induced upward pressure on rents at any given point in time. Therefore, any indirect business and institutional displacement that may occur as a result of the development of Phase II under the Extended Build-Out Scenario would not result in adverse indirect business and institutional displacement effects beyond those disclosed in the 2006 FEIS.

#### **5. Adverse Effects on Specific Industries**

The development of Phase II under the Extended Build-Out Scenario would not result in significant adverse impacts on any specific industries. As noted above, it is believed that the three businesses currently operating on the Phase II site are in the storage business, which is not an industry specific

or unique to the Phase II site. The development of Phase II under the Extended Build-Out Scenario would not result in any additional direct business displacement beyond what was analyzed in the 2006 FEIS, and would therefore not alter the conclusion of the 2006 FEIS regarding adverse effects on specific industries.

## **B. Operational – Community Facilities**

### **1. Public Schools**

The 2006 FEIS found that there would be a shortfall of seats at elementary and intermediate schools in the 2016 future with the Project, and that these shortfalls would constitute a significant adverse impact on elementary and intermediate schools within the ½-mile study area. To partially mitigate the significant adverse impact on public schools, the project sponsors committed to provide 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. The 2006 FEIS stated that additional mitigation measures, such as shifting the boundaries of school catchment areas within the CSDs, creating new satellite facilities in less crowded schools, or building new school facilities off-site would be required to fully mitigate the significant adverse impacts on public schools identified in the 2006 FEIS.

Subsequent to completion of the 2006 FEIS, the methodology recommended by the *CEQR Technical Manual* was revised to analyze capacity at a smaller, sub-district level, which provides a more localized level of analysis and considers far fewer schools compared with the CSD level or ½-mile study area used in the 2006 FEIS. The multipliers provided in the *CEQR Technical Manual* to estimate students generated by new housing units were also changed such that the Project would be assumed to introduce a greater number of students using the current *CEQR Technical Manual* guidance than the number of students assumed in the 2006 FEIS analysis, which was prepared in conformance with the 2001 version of the *CEQR Technical Manual*. With regard to background conditions, current existing utilization data and enrollment projection data forecast a deficit of seats in the Future Without Phase II, unlike the 2006 FEIS (although the study areas considered differ, as noted above).

*CEQR Technical Manual* methodology also requires utilizing enrollment projections prepared by the SCA for DOE. The most recently prepared projections estimate enrollment only up to 2021, and therefore have been used in this analysis to represent student enrollment in 2035. The school seat capacity assumptions are based only on DOE's 2015-2019 Proposed Five-Year Capital Plan, February 2014. The analysis for the capital plan includes a multi-dimensional review and analysis of localized capacity and enrollment patterns within each CSD. This process results in a set of recommendations for each CSD that takes into account the needs within each area of the CSD. These recommendations are reviewed annually based on updated enrollment projections, capacity changes and housing information. Currently, DOE's 2015-2019 proposed capital plan is the most up to date document that has been reviewed to determine future capacity in CSD 13/Sub-District 1. In keeping with DOE's mandate to respond to local needs and provide new capacity where warranted, it is likely that new capacity would be created by 2035 to meet additional student demand that exceeds the 2019-based capacity assumptions used in this analysis. Each year, capital plan amendments are prepared, which allow DOE to reassess priorities, to take into account shifts in enrollments, variations in housing growth, changes in building conditions, new educational initiatives, and adjustments in the construction marketplace, and incorporate any impact from



financial changes implemented by the City or State. In addition, DOE and SCA annually undertake a comprehensive assessment of conditions in order to determine the need for realignment strategies, such as increasing the utilization of existing facilities, changing grade configurations of schools, and adjustments to local school zones. The analysis does not account for future actions that could be taken by SCA and DOE to address capacity needs in the sub-district, such as possible future shifts in CSD boundaries or sub-district boundaries, or the construction of additional school facilities serving the sub-district through any of the four five-year capital plans that would be issued between the present day and the 2035 build year.

The Phase II project site is located in Sub-District 1 of CSD 13. Phase II of the Project would be expected to introduce approximately 2,712 students to the project site, comprising 1,430 elementary school students, 592 intermediate school students, and 690 high school students. Phase II of the Project would be expected to result in significant adverse impacts to elementary school and intermediate school capacities within Sub-District 1 of CSD 13. The Project would also create, at the election of DOE, a 100,000 gsf elementary and middle school public school on the project site that would be expected to accommodate a number of students equivalent to approximately one third of Phase II-generated demand, based on current projections.

**a. Elementary Schools**

Currently, CSD 13/Sub-District 1 contains two elementary schools with a combined capacity of 1,290 seats, which would increase by 326 seats to 1,616 seats in the Future Without Phase II. Based on current *CEQR Technical Manual* methodology, Phase II would introduce 1,430 elementary school students by 2035, increasing the elementary school utilization rate in CSD 13/Sub-District 1 by 88 percentage points, and bringing total utilization to 220 percent (assuming no new school capacity would be created between 2019 and 2035). Therefore, Phase II would exceed the *CEQR Technical Manual* threshold for a significant adverse impact on elementary schools. The 2006 FEIS also disclosed significant adverse impacts on elementary schools upon completion of the Project.

While the finding of a significant adverse school impact is consistent, the utilization and deficit of elementary school seats (which form the basis of the findings) are higher than was identified in the 2006 FEIS. These changes are due to changed *CEQR Technical Manual* methodology (e.g., the reduction in the size of the study area and changed multipliers for estimating school children), changed background conditions (which project a shortage of seats in the Future Without Phase II condition), and a shift of approximately 208,000 gsf of floor area from Phase I to Phase II of the Project. The delayed completion of Phase II of the Project would not itself create additional demand on elementary schools in the sub-district.

**b. Intermediate Schools**

Currently, CSD 13/Sub-District 1 contains three intermediate schools with a combined capacity of 850 seats, which is not assumed to change in the Future Without Phase II. Based on current *CEQR Technical Manual* methodology, Phase II would introduce 592 intermediate school students by 2035, increasing the intermediate school utilization rate in CSD 13/Sub-District 1 by 69 percentage points, and bringing total utilization to 160 percent (assuming no new school capacity would be created between 2019 and 2035). Therefore, Phase II would exceed the *CEQR Technical Manual* threshold for a significant adverse impact on intermediate schools. The 2006 FEIS also disclosed a significant adverse impact on intermediate schools.

While the finding of a significant adverse school impact is consistent, the utilization and deficit of intermediate school seats (which form the basis of the findings) are higher than was identified in the 2006 FEIS. These changes are due to changed *CEQR Technical Manual* methodology (e.g., the reduction in the size of the study area and changed multipliers for estimating school children), changed background conditions (which project a shortage of seats in the Future without Phase II condition), and a shift of approximately 208,000 gsf of floor area from Phase I to Phase II of the Project. The delayed completion of Phase II of the Project would not itself create additional demand on intermediate schools in the sub-district.

**c. Elementary and Intermediate School Effects with the Proposed School**

The Project would include the provision, at the election of DOE, of an approximately 100,000 gsf elementary and intermediate public school to partially mitigate the significant adverse impacts on elementary and intermediate school capacity in the study area. DOE's 2015-2019 proposed Capital Plan allocates funds towards the development of this new public school on the Phase II project site. Although the grade-level mix has not yet been determined, the capital plan assumes that 757 seats would be created through the opening of this new school. Thus, the proposed school would be expected to accommodate a number of students equivalent to over one third of Phase II-generated demand for elementary and intermediate school seats, based on current projections and assumptions. These new school seats have not been included in the quantitative assessment of future school utilization provided above.

**d. High Schools**

In the Future With Phase II, Brooklyn high schools would operate with surplus capacity. As Phase II would not result in a collective utilization rate equal to or greater than 100 percent at the borough level, Phase II would not result in any significant adverse impacts on high schools. The 2006 FEIS also found no significant adverse high school impacts.

**2. Child Care Services**

At the time of the 2006 FEIS, a 100-seat child care facility was planned as part of the Project. The 2006 FEIS did not identify any significant adverse child care impacts. However, the analysis of publicly funded child care facilities in the 2009 Technical Memorandum found that the updated background conditions and updated methodologies (i.e., new *CEQR Technical Manual* generation rates for child care eligible children) would result in additional demand for publicly funded child care facilities in the study area, which could result in a shortfall of child care slots in the 2019 future with the Project. Therefore, in addition to the 100-seat facility that was planned as part of the Project and included in the 2006 FEIS, the project sponsors are obligated to assess child care enrollment and capacity in the study area as the Project progresses and, if necessary, work with 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.

The FSEIS considers whether changed background conditions or changed methodologies since the 2006 FEIS and 2009 Technical Memorandum would result in any new or changed significant adverse impacts resulting from construction of Phase II of the Project under the Extended Build-Out Scenario. The prolonged build-out of the Project to 2035 would not create additional demand on public child care services upon completion of the Project, compared with the construction

duration assumed in the previous environmental analyses, as the delayed completion of Phase II would not increase the number of children eligible for public child care services introduced by the Project. Changed background conditions include new enrollment data and updated enrollment projections. With regard to methodology, the *CEQR Technical Manual* calls for an analysis for a 1.5 mile study area, whereas the 2006 FEIS and 2009 Technical Memorandum analyzed child care facilities within a 1-mile study area. The current multiplier for calculating demand for child care slots has also been changed. As a result of this change, the number of eligible children that would be introduced by Phase I and Phase II of the Project is lower than the number projected in the 2006 FEIS and the 2009 Technical Memorandum.

The FSEIS analysis indicates that under the revised methodology, Phase II would introduce 160 children under the age of 6 who are eligible for public child care services. The addition of these children is projected to increase in the utilization rate by 1.58 percentage points over the Future Without Phase II condition. *CEQR Technical Manual* guidelines indicate that a demand for slots greater than the remaining capacity of child care facilities and an increase in demand of 5 percent of the study area capacity could result in a significant adverse impact. Thus, the increase in the utilization rate attributable to Phase II of the Project would not exceed the *CEQR Technical Manual's* 5 percent threshold for a significant adverse impact.

Moreover, *CEQR Technical Manual* methodology does not provide a basis for estimating new child care capacity in the Future Without Phase II. It is likely that new capacity would be created by 2035 to meet additional child care demand, although no new capacity is assumed in the FSEIS analysis.

As noted above, the project sponsors are required to monitor child care enrollment and capacity in the study area as the Project progresses, and to the extent necessary to avoid a significant adverse impact, make arrangements with one or more duly licensed day care providers for the long-term operation of a duly licensed child care center (or centers) that accommodates approximately 250 additional children, either on or in the vicinity of the project site. In light of the small, less than two percent increase in child care utilization attributable to Phase II identified in the FSEIS, and the project sponsors' commitment to monitor and, if necessary, provide approximately 250 additional child care slots, there would be no new significant adverse impacts on publicly funded day care facilities in the study area.

### **3. Other Community Facilities**

The 2006 FEIS found that the Project would not result in any significant adverse impacts with respect to police/fire protection services, health care facilities and libraries.

Although the construction of Phase II of the Project would be prolonged under the Extended Build-Out Scenario, and a shift of 208,000 gsf of residential space has been proposed from Phase I to Phase II, no changes to the Project have been proposed that would have the potential to affect police/fire protection services and health care facilities. Furthermore, background conditions have not changed such that they would materially affect the 2006 FEIS conclusions with respect to police/fire protection services and health care facilities; the same police/fire protection and health care facilities are expected to continue to serve the project site. Therefore, Phase II under the Extended Build Out Scenario would not result in any significant adverse impacts to police and fire protection services and health care facilities.

With respect to libraries, while there may be changes in the locations of libraries in the study area by 2035, none have been proposed at this time, and background population growth in the study area would not be expected to adversely affect library resources in the study area. Therefore, Phase II under the Extended Build Out Scenario would not result in any significant adverse impacts to libraries.

### **C. Operational – Open Space**

Consistent with the 2006 FEIS, the FSEIS finds that Phase II of the Project would not result in significant adverse impacts related to open space upon the Project's completion in 2035 under the Extended Build-Out Scenario.

Phase II of the Project would not result in direct impacts on open space resources, because there are no existing open space resources on the Phase II site. With respect to indirect impacts, while Phase II would introduce large new residential and non-residential (worker) populations, upon completion it would also provide eight acres of new publicly-accessible open space.

#### **1. Non-Residential (¼-Mile) Study Area**

Upon completion of Phase II under the Extended Build-Out Scenario, the passive open space ratio would increase by 181.4 percent as compared with the Future Without Phase II, from 0.237 acres to 0.667 acres per 1,000 workers. Therefore, Phase II of the Project would not result in any significant adverse impacts to open space resources in the non-residential study area upon completion of Phase II with the Extended Build-Out Scenario. The passive open space ratio would continue to exceed the City's recommended guideline minimum of 0.15 acres of passive open space per 1,000 workers.

#### **2. Residential (½-Mile) Study Area**

Upon completion of Phase II under the Extended Build-Out Scenario, the total open space ratio would increase by 17.5 percent as compared with the Future Without Phase II, from 0.308 acres to 0.362 acres per 1,000 residents. The active open space ratio would decrease by 5.6 percent as compared with the Future Without Phase II, from 0.144 to 0.136 acres per 1,000 residents. The passive open space ratio would increase by 37.7 percent as compared with the Future Without Phase II, from 0.164 to 0.226 acres per 1,000 residents.

Although the total open space ratio would remain below the City's recommended guideline of 2.5 acres per 1,000 residents, this ratio would increase as a result of Phase II of the Project, due to the eight acres of new publicly-accessible open space that would be created. Likewise, although the passive open space ratio would remain below the City's recommended guideline of 0.5 acres per 1,000 residents, Phase II of the Project would have a beneficial impact on this ratio by providing new publicly-accessible open space. With regard to active open space, Phase II of the Project would result in a decrease of 5.6 percent, compared with the Future Without Phase II, and the active open space ratio would remain below the City's guideline. As noted in the *CEQR Technical Manual*, the City guidelines are seldom achieved in densely built portions of New York City, and therefore do not constitute impact thresholds. While the total, passive, and active open space ratios would be below City guidelines in the Future With Phase II, the overall effect of Phase II of the Project on the availability of open space resources in the study area would be beneficial. Therefore, Phase II of the

Project under the Extended Build-Out Scenario would not result in any significant adverse open space impacts in the ½-mile study area upon completion of Phase II.

In addition, numerous open space resources that have not been included in the quantitative analysis would be expected to provide additional opportunities for active and passive recreation in the Future With Phase II. Such resources include community gardens, school yards that are not consistently open to the public, resources associated with private developments that could offset demand on public open space resources, and Prospect and Fort Greene Parks (totaling over 615 acres of active and passive open space), which are located just outside the open space study area boundary. Prospect Park and Fort Greene Park are flagship resources that draw residents from the study area, despite being located outside of the study area.

## **D. Operational – Transportation**

### **1. Traffic**

The traffic analysis in the 2006 FEIS analyzed conditions at a total of 93 intersections along local streets proximate to the project site or that would be affected by Project-related changes to the street network, as well as along arterials that would provide access to and from the site. Intersections analyzed in the 2006 FEIS were selected for analysis in the FSEIS if they were locations where development of Phase II is expected to result in the addition of 50 or more peak hour vehicle trips based on the 2006 FEIS, or they were identified in the FEIS as being significantly adversely impacted by project-generated traffic in one or more of the peak hours included for analysis in the FSEIS. Based on these criteria, a total of 71 of the 93 intersections analyzed in the 2006 FEIS were selected for detailed analysis.

The peak hours selected for analysis in the FSEIS include the weekday 8-9 AM and 5-6 PM commuter periods, as well as the weekday 12-1 PM midday (lunch time) period. Although the substantial amount of travel demand generated by the Arena itself is reflected in the Future Without Phase II condition, an analysis of the weekday 7-8 PM and Saturday 1-2 PM pregame peak hours is included to assess the potential effects of Phase II residential and retail demand during periods of peak Arena activity. To be conservative, the traffic analysis for the Saturday pregame peak hour assesses conditions resulting from Phase II with an afternoon Nets game at the Arena, even though other types of events with lower attendance than a Nets game are typically scheduled on a Saturday afternoon and Nets games rarely occur at that time. All of these peak hours are consistent with those analyzed in the 2006 FEIS. The weekday and Saturday post-game peak hours for Arena demand that were analyzed in the 2006 FEIS are not included, since Project demand during these periods is primarily Arena-related and they are not typically considered peak travel periods for the residential, retail and public school uses that comprise Phase II of the Project.

#### **a. Travel Demand**

Vehicle trips generated by Phase II development would total approximately 519, 338, 446, 281 and 689 during the analyzed weekday AM, midday, PM and pregame and Saturday pregame peak hours, respectively. Auto trips during these periods would range from 200 (in the weekday midday peak hour) to 609 (in the Saturday pregame peak hour), while taxi trips would range from 18 (in the weekday pregame peak hour) to 102 (in the weekday midday peak hour). Truck trips would range from none (in the weekday pregame PM peak hour) to 42 (in the weekday AM peak hour).

## **b. Impact Analyses**

Of the 71 intersections analyzed, a total of 56 intersections would have significant adverse impacts in one or more peak hours in the Future With Phase II under the Extended Build-Out Scenario. A total of 37 intersections would have significant adverse impacts in the weekday AM peak, 20 in the midday, 38 in the PM, 27 in the 7-8 PM pregame peak hour, and 47 in the Saturday 1-2 PM pregame peak hour. With the implementation of the Project's traffic mitigation plan, unmitigated impacts would remain in one or more peak hours at a total of 29 intersections in the Future With Phase II With Mitigation. There would be 18 intersections with unmitigated significant adverse impacts in the weekday 8-9 AM peak hour, three in the midday, 17 in the 5-6 PM, five in the weekday 7-8 PM pregame peak hour, and 19 in the Saturday pregame peak hour.

## **c. Bicycles**

In the Future With Phase II under the Extended Build-Out Scenario, it is anticipated that the residential, retail and public school uses that would be built on the project site would likely generate some new trips by bicycle in the weekday peak commuter periods, as well as recreational and discretionary trips during other weekday periods and on weekends. Phase II of the Project would also generate new vehicular traffic along many study area roadways, including those used by bicyclists. In addition, it is anticipated that a bicycle path would be provided through portions of the Project's open space under Phase II to improve connections between existing and planned north-south and east-west bike lanes.

## **2. Transit**

### **a. Subway**

The analysis of subway station conditions in the FSEIS focuses on the Atlantic Avenue – Barclays Center station as well as the Bergen Street station, with conditions at these stations analyzed for the weekday 8-9 AM, 5-6 PM and 7-8 PM (pregame) peak hours, consistent with the subway station analysis in the 2006 FEIS. The analysis assesses conditions at those station elements (stairways, escalators, ramps, and fare arrays) analyzed in the 2006 FEIS. The Fulton Street and Lafayette Avenue subway stations analyzed in the 2006 FEIS are not included in the FSEIS analysis as Phase II demand at these stations is not expected to total 200 or more trips (the *CEQR Technical Manual* threshold for detailed analysis) in any analyzed peak hour. The analysis of the potential for crowding on the platforms at the Atlantic Avenue – Barclays Center subway station during the weekday 10-11 PM and Saturday 4-5 PM peak hours following a Nets game or other major event at the Arena that was provided in the 2006 FEIS is also not included as these are not considered peak periods for Phase II residential, retail and public school demand.

The findings of the FSEIS analysis of Future With Phase II conditions under the Extended Build-Out Scenario are that all analyzed stairways, escalators, ramps and fare arrays at the Atlantic Avenue – Barclays Center and Bergen Street subway stations would operate at acceptable levels of service and would not be considered significantly adversely impacted by Phase II demand with the exception of escalator ES359X at the Barclays Center entrance to the Atlantic Avenue – Barclays Center subway station. This up escalator is expected to operate at a v/c ratio of 1.13 (level of service, or LOS D) in the 7-8 PM pregame peak hour, compared with a v/c ratio of 0.79 (LOS C) in the Future Without Phase II, and would therefore be considered significantly impacted under *CEQR*

*Technical Manual* criteria. This impact would be fully mitigated by operating adjoining escalator ES358X in the up direction during the pregame period when there is a Nets game or other major event at the Arena. (Escalator ES358X currently operates in the down direction in all periods.)

It should be noted that much of the pregame peak hour demand on escalator ES359X is the result of trips exiting the subway en route to a basketball game or other event at the Arena. The analysis results reflect the fact that most pedestrians would elect to use the escalator for convenience (as they do now), resulting in capacity conditions on the escalator during periods of peak demand even with uncongested LOS A conditions on adjacent 24-foot-wide stair S1. It is therefore expected that, as queuing at this escalator increased, pedestrian demand would increasingly shift to uncongested stair S1. As the two escalators and stair S1 at this entrance operate as a combined system, and as stair S1 is projected to have substantial available capacity in the pregame peak hour in the Future with Phase II, the projected LOS D condition at up escalator ES359X is not necessarily considered an unacceptable condition for a special event condition such as the pregame peak hour prior to a Nets basketball game. (This was also acknowledged in the 2006 FEIS which projected LOS E conditions on this escalator during the weekday pregame peak hour.)

With respect to subway line haul conditions, all subway routes through Downtown Brooklyn are expected to continue to operate below their practical capacity in the peak direction in each peak hour in the Future With Phase II, and the Project would not generate more than an average of 3.7 new subway riders per car on any one route, less than the *CEQR Technical Manual* impact threshold of five new trips per car per hour. Development of Phase II under the Extended Build-Out Scenario is therefore not expected to result in significant adverse impacts to subway line haul conditions in Downtown Brooklyn under *CEQR Technical Manual* guidelines.

#### **b. Local Bus**

The FSEIS analyzes conditions on the 11 MTA New York City Transit (“NYCT”) local bus routes operating within ¼-mile of Phase II developments sites. The analysis focuses on the weekday 8-9 AM and 5-6 PM commuter peak hours under the Project’s commercial mixed-use variation, consistent with the analysis in the 2006 FEIS. Development of Phase II of the Project under the Extended Build-Out Scenario would add up to 11 peak direction passengers to each analyzed bus route in the AM peak hour, and up to 12 additional passengers in the PM peak hour. With this added demand, all analyzed local bus routes would continue to operate with available capacity at their peak load points in both the weekday AM and PM peak hours in 2035, and therefore, development of Phase II under the Extended Build-Out Scenario is not expected to result in any significant adverse impacts to local bus conditions.

#### **c. Long Island Rail Road**

In the Future With Phase II under the Extended Build-Out Scenario, the proposed residential buildings located on Blocks 1120 and 1121 would be constructed on a platform that would be built over the below-grade LIRR yard on these blocks. Operation of this yard would otherwise remain unchanged from conditions in the Future Without Phase II. Development associated with Phase II of the Project is expected to generate an estimated 43 new trips on the LIRR in the AM peak hour, 17 trips in the midday, 36 trips in the PM peak hour, 26 trips in the weekday pregame peak hour and 30 trips in the Saturday pregame peak hour. Most if not all of these Phase II LIRR trips are expected to utilize existing entrances to the LIRR’s Atlantic Terminal located on the north side of

Atlantic Avenue as there is no direct access to the LIRR platforms (without paying a subway fare) from the new on-site entrance to the Atlantic Avenue – Barclays Center subway station. The relatively small numbers of new LIRR trips that would be generated by development of Phase II are not expected to adversely affect LIRR line haul conditions.

### 3. Pedestrians

Pedestrian trips generated by Phase II under the Extended Build-Out Scenario are expected to be most concentrated on those sidewalks, corner areas and crosswalks located immediately adjacent to the Phase II development sites as well as along pathways between these sites and the new entrance to the Atlantic Avenue – Barclays Center subway station. The pedestrian analysis in the FSEIS therefore focuses on sidewalks, corner areas and crosswalks adjacent to Blocks 1120, 1121, 1128 and 1129, as well as those adjacent to the Arena Block that would be used by the majority of Phase II subway trips. Pedestrian facilities adjacent to Site 5 and along 6th Avenue on the Arena Block that were analyzed in the 2006 FEIS are not analyzed in the FSEIS, as Phase II pedestrian trips are not expected to be as concentrated along these facilities. Sidewalks along 6th Avenue between Dean Street and Flatbush Avenue were also included in the 2006 FEIS to assess the effects of a proposed narrowing under the Project in order to better accommodate two-way traffic flow along the adjacent roadway. As NYCDOT subsequently decided not to implement this widening, these sidewalks are also not analyzed in the FSEIS.

The peak hours selected for analysis include the weekday 8-9 AM and 5-6 PM commuter periods. Although the substantial amount of travel demand generated by the Arena itself is reflected in the Future Without Phase II condition, an analysis of the weekday 7-8 PM and Saturday 1-2 PM pregame peak hours is also included to assess the potential effects of Phase II residential and retail demand during periods of peak Arena activity. To be conservative, the pedestrian analysis for the Saturday pregame peak hour assesses conditions resulting from Phase II with an afternoon Nets game at the Arena, even though other types of events with lower attendance than a Nets game are typically scheduled on a Saturday afternoon, and Nets games rarely occur at that time. All of these peak hours are consistent with those analyzed in the 2006 FEIS.

The findings of the FSEIS analysis are that Phase II demand under the Extended Build-Out Scenario would significantly adversely impact four crosswalks in one or more peak hours under *CEQR Technical Manual* impact criteria for a CBD area, and that two sidewalks and one additional crosswalk would be considered impacted if non-CBD criteria were used. Impacted pedestrian facilities would include:

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



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

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

#### **4. Pedestrian and Vehicular Safety**

Development of Phase II under the Extended Build-Out Scenario would increase vehicular, pedestrian, and bicycle traffic in the vicinity of the project site. The combination of new pedestrian trips on crosswalks and new vehicular and bicycle traffic may increase the potential for conflicts between these modes at intersections in proximity to the project site, and thereby potentially increase vehicular and pedestrian exposure to accidents.

The Project incorporates a number of design features that enhance overall safety, many of which have already been implemented as part of Phase I. These have included the elimination of several roadway segments through the project site; a major new on-site entrance to the Atlantic Avenue – Barclays Center subway station to eliminate the need for subway riders en route to and from the south to cross Atlantic Avenue; a major restructuring of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection designed to improve traffic flow and reduce the potential for vehicle/pedestrian conflicts; a new traffic signal and crosswalk on Flatbush Avenue at Pacific Street; and new high visibility crosswalks at key intersections in the vicinity of the project site. A new off-street bike route segment through the project site would be implemented under Phase II to more safely connect existing and planned on-street bike routes. Additional measures would likely be implemented in consultation with NYCDOT-School Safety to enhance safety in the vicinity of the public school proposed as part of Phase II, such as the installation of designated school crossings with high visibility crosswalks and additional school crossing pavement markings and signage.

#### **5. Parking**

Under the base-case scenario analyzed in the SEIS, a total of approximately 2,896 parking spaces would be located on the project site to accommodate the parking demand from the residential and commercial uses developed under Phase I, New York City Police Department (“NYPD”) demand

from the nearby 78th Precinct station house (24 spaces), the parking demand from the residential, retail, and public school uses that would be developed under Phase II, and a portion of the demand generated by the Arena. This would include a 400-space parking garage beneath Site 5 and a parking garage with 50 to 100 spaces beneath Building 3 on the Arena block (both to be provided in Phase I), along with a 450-space below-grade garage on Block 1120, a 150-space below-grade garage beneath Building 15 on Block 1128, and a 1,846-space below-grade garage on Block 1129 (to be provided in Phase II).

The FSEIS analysis concludes that locating 2,896 parking spaces on-site at full build-out of the Project would be sufficient to accommodate all of the demand generated by the Project's residential, commercial and public school uses plus NYPD parking under both the residential mixed-use and commercial mixed-use variations of the Project. In addition, the projected amount of parking capacity available at off-street public parking facilities within ½-mile of the Barclays Center Arena in 2035 is expected to be sufficient to accommodate all of the demand generated by a Nets game at the Arena irrespective of the amount of parking provided for Arena patrons on the project site. Therefore, no significant adverse parking impacts would occur in the Future With Phase II under the Extended Build-Out Scenario.

## **6. Comparison of SEIS Findings and Previous Findings**

### **a. Traffic**

Thirty-seven of the 71 intersections analyzed for the FSEIS would experience one or more significant adverse impacts in the AM peak hour with development of Phase II under the Extended Build-Out Scenario. By contrast, the 2006 FEIS disclosed a total of 46 impacted intersections in the AM peak hour with full build-out of the project in 2016 out of the 70 intersections common to both the FSEIS and the 2006 FEIS analyses. There would be 20 impacted intersections in the midday peak hour (27 in the FEIS), 38 in the PM peak hour (44 in the FEIS), 27 in the weekday pregame peak hour (39 in the FEIS) and 47 in the Saturday pregame peak hour (41 in the FEIS).

The results of the analysis of traffic conditions and potential significant impacts in the FSEIS are not directly comparable to the findings of the 2006 FEIS as the FSEIS examines only the incremental effects of Phase II of the Project under the Extended Build-Out Scenario, with Phase I of the Project reflected in the background condition. By contrast, the 2006 FEIS assessed the incremental effects of Phase I and Phase II combined. In addition to the proposed shift in residential floor area and proposed reduction in parking spaces, the traffic analyses also differ with respect to travel demand factors, background conditions and growth rates, impact criteria and the Project development program. The differences between the findings of the FSEIS and previous environmental reviews with respect to traffic conditions are generally related to these variables and are not directly attributable to the delay in the Project under the Extended Build-Out Scenario. It should also be noted that the amount of traffic generated by the Project (Phase I and Phase II) is not dependent upon the year of completion of the Project.

### **b. Subway**

The conditions projected in the FSEIS at the Atlantic Avenue – Barclays Center and Bergen Street subway stations for the Future With Phase II under the Extended Build-Out Scenario are generally consistent with those projected in the previous environmental reviews. They reflect acceptable

levels of service at all analyzed elements with the exception of congestion on up escalator ES359X at the Atlantic Avenue – Barclays Center subway station during the pregame peak hour. Although identified in the FSEIS as a significant adverse impact under *CEQR Technical Manual* guidelines, this impact would not be the result of any delay in constructing Phase II of the Project. This escalator was built as part of Phase I of the Project, and consequently the LOS E condition projected in the 2006 FEIS for the pregame peak hour with full build-out of the Project was not considered a significant adverse impact. The FSEIS analysis actually projects a better level of service (LOS D) at escalator ES359X during the pregame period than was projected in the 2006 FEIS (LOS E). Both the FSEIS and the 2006 FEIS also show adjacent stair S1 operating at an uncongested LOS B or better in the pregame peak hour, reflecting the fact that substantial additional capacity would be available on this stair to relieve any future queuing at escalator ES359X.

The FSEIS analysis of subway line haul conditions shows that full build-out of the Project would not result in significant adverse impacts in the peak direction in the AM and PM peak hours on any subway route serving Downtown Brooklyn. These findings are also consistent with those disclosed in the 2006 FEIS.

The results of the analyses of subway station and line haul conditions and potential significant impacts in the FSEIS are not directly comparable to the findings of previous environmental reviews as the FSEIS examines only the incremental effects of Phase II of the Project under the Extended Build-Out Scenario, with Phase I of the Project reflected in the background condition. By contrast, previous reviews assessed the incremental effects of Phase I and Phase II combined. In addition to the proposed shift in residential floor area and proposed reduction in parking spaces, the subway analyses also differ with respect to travel demand factors, analysis methodologies, background conditions and growth rates, and the Project development program.

### **c. Local Bus**

The analysis of local bus conditions in the 2006 FEIS identified a significant adverse impact to westbound B38 buses in the AM peak hour. The findings of the FSEIS analysis – that development of Phase II under the Extended Build-Out Scenario would not result in any significant adverse local bus impacts – are, however, generally consistent with those of the 2006 FEIS. The one route projected to be impacted in the 2006 FEIS as a result of full build-out of the Project – the westbound B38 – is not expected to experience appreciable numbers of new trips in either the AM or PM peak hours as a result of Phase II demand under the Extended Build-Out Scenario.

The findings of the FSEIS with respect to local bus conditions and potential significant impacts are not directly comparable to those of the 2006 FEIS as the FSEIS examines only the incremental effects of Phase II of the Project under the Extended Build-Out Scenario, with Phase I of the Project reflected in the background condition. By contrast, the 2006 FEIS assessed the incremental effects of Phase I and Phase II combined. In addition to the proposed shift in residential floor area and proposed reduction in parking spaces, the local bus analyses also differ with respect to travel demand factors, analysis methodologies, background conditions (including changes in bus routes and service levels since 2006), background growth rates, and changes to the Project development program.

**d. Long Island Rail Road**

Under the Extended Build-Out Scenario, the relatively small numbers of new LIRR trips generated by Phase II of the Project (17 to 43 in any one peak hour) are not expected to adversely affect LIRR line haul conditions, and the development of Phase II is not expected to adversely affect operations at the upgraded Vanderbilt Yard. These findings are generally consistent with those of the 2006 FEIS.

**e. Pedestrians**

The analysis of pedestrian conditions in the 2006 FEIS identified significant adverse impacts to two crosswalks – on 6th Avenue at Dean Street and on Carlton Avenue at Dean Street – in the weekday and/or Saturday pregame peak hours with full build-out of the Project. Widening these crosswalks by one foot and four feet, respectively, was recommended in the 2006 FEIS to fully mitigate these impacts.

The findings of the FSEIS analysis are that Phase II demand under the Extended Build-Out Scenario would significantly adversely impact four crosswalks in one or more peak hours under *CEQR Technical Manual* impact criteria for a CBD area, and that two sidewalks and one additional crosswalk would be considered impacted if non-CBD criteria are used. However, these findings are not directly comparable to those of the previous environmental reviews as the FSEIS examines only the incremental effects of Phase II of the Project under the Extended Build-Out Scenario with Phase I of the Project reflected in the background condition. By contrast, the 2006 FEIS assessed the incremental effects of Phase I and Phase II combined. In addition to the proposed shift in residential floor area and proposed reduction in parking spaces, the pedestrian analyses also differ with respect to analysis methodologies, impact criteria, the Project development program, travel demand factors, background conditions and annual growth rates. (These include substantially lower impact thresholds for the FSEIS analysis than were required under the *CEQR Technical Manual* guidelines used for the 2006 FEIS). The differences between the findings of the FSEIS and the previous environmental reviews with respect to pedestrian conditions are generally related to these variables and are not directly attributable to the delay in the Project under the Extended Build-Out Scenario.

**f. Pedestrian and Vehicular Safety**

In general, the findings of the FSEIS with regard to pedestrian and vehicular safety are comparable to those of the 2006 FEIS, in that both assessments disclosed the potential for increased conflicts between motorists, cyclists and pedestrians at high crash locations in proximity to the project site as a result of increased travel demands associated with full build-out of the Project. The delay in Phase II of the Project under the Extended Build-Out Scenario is not expected to result in a substantially greater number of vehicle, pedestrian and bicycle trips through high crash locations. The FSEIS recommends additional potential pedestrian safety measures (i.e., installation of designated school crossings) that were not recommended in the 2006 FEIS.

**g. Parking**

The 2006 FEIS assessed future parking conditions with a total of 3,670 parking spaces on the project site and concluded that sufficient off-street parking capacity would be available both on-site

and at existing public off-street facilities within 1/2-mile of the Arena to fully accommodate peak demand from full build-out of either of the Project's two variations (residential mixed-use and commercial mixed-use), and that no significant adverse impacts to off-street or on-street parking conditions would result from the Project.

Compared with the 2006 FEIS, the FSEIS analysis reflects a proposed reduction (to 2,896 spaces, in the base-case scenario analyzed in the SEIS) in the amount of on-site parking capacity that would be provided with full build-out of the Project. In addition, the FSEIS analysis differs from the 2006 FEIS analysis with respect to travel demand factors, analysis methodologies, impact criteria, background conditions, background growth rates, and the Project development program. For example, the forecasts of residential parking demand in the 2006 FEIS assumed an overnight rate of 0.4 spaces per dwelling unit whereas the FSEIS analysis assumes an overnight rate of 0.2 spaces per dwelling unit, consistent with recent survey data which indicate lower levels of residential parking demand in Downtown Brooklyn.

The results of the analysis in the FSEIS are that the on-site parking capacity now proposed with full build-out of the Project would be sufficient to accommodate all non-Arena Project demand in the Future With Phase II, and that the projected amount of parking capacity available at off-street public parking facilities under the Extended Build-Out Scenario would be sufficient to accommodate parking demand from a Nets game at the Arena irrespective of the amount of on-site parking provided for Arena patrons. Therefore, no significant adverse parking impacts would occur in the Future With Phase II under the Extended Build-Out Scenario, consistent with the findings of the 2006 FEIS.

## **E. Operational – Air Quality**

As discussed below, the maximum predicted pollutant concentrations and concentration increments from mobile sources under the Extended Build-Out Scenario would be below the corresponding ambient air quality standards and guidance thresholds. The Extended Build-Out Scenario's parking facilities would also not result in any significant adverse air quality impacts. Therefore, Phase II of the Project would not have significant adverse impacts from mobile source emissions.

Delayed completion of Phase II of the Project would not increase air emissions from any of the Project buildings. Based on a quantitative air dispersion modeling analysis, the 2006 FEIS analysis of air quality impacts concluded that because of the low emissions from Phase II of the Project, which has committed to the use of natural gas as its boiler fuel and the use of burners with low emissions of nitrogen oxides ("NO<sub>x</sub>"), the impacts of emissions of particulate matter less than 2.5 microns in diameter ("PM<sub>2.5</sub>"), carbon monoxide ("CO"), annual average nitrogen dioxide ("NO<sub>2</sub>") and sulfur dioxide ("SO<sub>2</sub>") would be insignificant. In the Extended Build-Out Scenario, the proposed gas-fired Phase II boilers would each be smaller in capacity than the boiler capacities modeled in the 2006 FEIS, even after accounting for the proposed shift in floor area from Phase I to Phase II. In addition, the 100,000 gsf elementary and middle school public school that would be created on the project site at DOE's election, will be served solely by electric Heating, Ventilation and Air Conditioning ("HVAC") equipment, with no fossil fuel-fired boilers, unless an air dispersion analysis demonstrates that a fossil fuel-fired boiler would not cause a significant adverse air quality impact. Therefore no additional quantitative air dispersion modeling analysis of these pollutants was performed in the FSEIS. A new quantitative air dispersion modeling analysis of the emissions and dispersion of 1-hour average NO<sub>2</sub> from the Project's stationary sources indicate that such emissions

would not result in violation of the 1-hour average NO<sub>2</sub> NAAQS that was promulgated after the publication of the 2006 FEIS. Therefore, no significant adverse air quality impacts would result from the stationary sources from Phase II of the Project under the Extended Build-Out Scenario.

#### **F. Greenhouse Gas Emissions**

Phase II of the Project upon completion under the Extended Build-Out Scenario would result in annual GHG emissions of approximately 82,163 metric tons of CO<sub>2</sub> equivalent (“CO<sub>2</sub>e”) from the operation of the buildings. Of that amount, approximately 72,840 metric tons of CO<sub>2</sub>e would be emitted as a result of grid electricity use and natural gas consumption on-site, while the remainder would be emitted as a result of Project-generated vehicle trips. During the construction period and as a result of off-site production of construction materials for Phase II of the Project an estimated 195,785 metric tons of CO<sub>2</sub>e would be emitted.

As per the MEC, all Phase II buildings would obtain the USGBC LEED certification for new construction with the goal of achieving at least a Silver rating for each proposed building. Specific sustainable measures would be incorporated into the design and construction of the Project, which would decrease the potential GHG emissions. Based on the sustainable measures that would be included, Phase II of the Project would be consistent with the City’s emissions reduction goal, as defined in the *CEQR Technical Manual*. In addition, as discussed in the 2006 FEIS, the project site is located at one of the largest transportation hubs in the City and construction of this high density transit-oriented development at this location would encourage use of mass transit, thereby reducing GHG emissions from automobile travel. The Project would also promote non-motorized modes of transportation, including cycling and walking. As a result, Phase II of the Project with the Extended Build-Out Scenario would be consistent with the City’s GHG emission reduction goal.

#### **G. Operational – Noise**

The analysis concludes that traffic generated by Phase II of the Project upon completion under the Extended Build-Out Scenario would not be expected to result in any significant increases in noise levels. Furthermore, the building attenuation specified in the 2006 FEIS for the Phase II buildings would continue to be adequate. Consistent with the findings of the 2006 FEIS, noise levels in the newly created open spaces would be greater than the 55 dBA L<sub>10(t)</sub> prescribed by *CEQR Technical Manual* criteria, but would be comparable to many parks around New York City, and would not constitute a significant impact.

#### **H. Operational – Neighborhood Character**

Consistent with the 2006 FEIS and 2009 Technical Memorandum, the FSEIS analysis finds that while Phase II of the Project would result in localized adverse neighborhood character impacts along Dean Street due to increased activity and significant adverse traffic and pedestrian condition impacts, and along Bergen Street due to significant adverse traffic impacts, these impacts would be highly localized and would not result in significant adverse neighborhood character impacts. While a delay in construction of Phase II of the Project under the Extended Build-Out Scenario would defer temporarily the benefits of Phase II, the benefits would nevertheless improve the character of the neighborhood when construction is completed. Overall, Phase II of the Project under the Extended Build-Out Scenario would have a beneficial effect on neighborhood character, creating a vibrant

mixed use area, improving the streetscape in and around the project site and knitting together the neighborhoods north and south of the rail yard.

The FSEIS notes in Chapter 4H, “Operational Neighborhood Character,” that unmitigated traffic impacts would occur along Atlantic Avenue at the intersections with Boerum Place, 4th Avenue, Flatbush Avenue, 6th Avenue/S. Portland Avenue, Carlton Avenue, and Vanderbilt Avenue, and additional locations at Flatbush Avenue Extension and Willoughby Street, 6th Avenue and Dean Street; Adams Street and Tillary Street, and Boerum Place and Livingston Street. It is noted that in considering the FSEIS, ESD staff noted inconsistencies between the description of the traffic impacts at certain intersections as reported in the operational transportation chapter of the FSEIS (Chapter 4D, “Operational Transportation” which disclosed that there would be 29 unmitigated intersections) and the more summary description of these traffic impacts in the operational neighborhood character section of the FSEIS (Chapter 4H, “Operational Neighborhood Character,” which indicated that 10 intersections would remain unmitigated). (In comparison, the 2006 FEIS concluded that there would be 35 intersections where predicted significant adverse traffic impacts could not be fully mitigated.) The detailed description of traffic impacts in Chapter 4D is correct and reflect comments received on the DSEIS from NYCDOT, and those descriptions should have been carried over into the summary description of traffic impacts in Chapter 4H. With the operational transportation-related updates reflected in Chapter 4D, “Operational Transportation” of the FSEIS, unmitigated traffic impacts would remain at 29 significantly impacted intersections, located primarily along the Atlantic Avenue, Flatbush Avenue, Vanderbilt Avenue, and Adams Street/Boerum Place corridors, as well as including the intersections of 5th Avenue and Dean Street; 6th Avenue and Dean Street; Fulton Street and Carlton Avenue; and Eastern Parkway and Washington Avenue. Additional volumes would not significantly affect the character of these thoroughfares or result in a significant adverse impact on the character of the neighborhoods in which unmitigated traffic impacts are anticipated. Phase II operational traffic would result in only modest increases in the number of lane groups with congested conditions, as illustrated by comparing the level of service at area intersections in the Future With Phase II condition to the Future Without Phase II condition. As noted in the FSEIS (at page 5-20), the number of lane groups operating at level of service E or F (indicating congested conditions) – of the approximately 305 analyzed – would generally be comparable to the number under Future Without Phase II conditions (differing by only one lane group in the weekday AM and pregame peak hours, three in the midday and Saturday pregame peak hours, and no difference in the weekday PM peak hour). Thus, Phase II operational traffic would result in only modest increases in the number of lane groups reflecting congested conditions, of the 305 lane groups analyzed.

It is also noteworthy that the unmitigated significant adverse impacts would not occur at the 29 intersections in each of the peak periods analyzed. There would be 18 intersections with unmitigated traffic impacts in the weekday AM peak hour, 3 intersections with unmitigated traffic impacts in the weekday midday peak hour, 17 intersections with unmitigated traffic impacts in the weekday PM peak hour, 5 intersections with unmitigated traffic impacts in the weekday pregame peak hour, and 19 intersections with unmitigated traffic impacts in the Saturday pregame peak hour.

The FSEIS also notes that significant adverse traffic impacts along Dean Street would contribute to the change in character of this street segment adjacent to the Phase II development site from a nondescript, but relatively quiet mixed-use (i.e., industrial, commercial, and residential) street, to an urban corridor with higher traffic volumes. With the operational transportation updates, there would be significant adverse traffic impacts at eight intersections along Dean Street, with

unmitigated traffic impacts remaining at four of these locations. However, the FSEIS concludes that because the Phase II development overall would improve the character of the Dean Street corridor, and these changes would not adversely affect the historic residential areas of Prospect Heights, the change would not be considered a significant adverse neighborhood character impact. The operational transportation-related updates would not change this conclusion. The unmitigated traffic impacts along Dean Street would be considered an element of the localized adverse neighborhood character impact near the project site discussed in the 2006 FEIS and FSEIS but would not constitute a significant adverse impact to the character of the larger neighborhoods surrounding the project site.

Additionally, as described in the FSEIS, Bergen Street would experience similar changes in vehicular traffic conditions; all six of the analyzed intersections along the street would be significantly adversely impacted in one or more peak hours. With the operational transportation-related updates, unmitigated impacts would remain at two of the six intersections with implementation of the Project's traffic mitigation plan. Since these unmitigated impacts would occur at only two locations along the Bergen Street corridor, and since Bergen Street would otherwise not be adversely affected by Phase II operational impacts affecting neighborhood character (such as operational noise, air emissions or socioeconomic effects), this is considered a localized adverse neighborhood character impact.

Overall, the completion of the Phase II development at a later date under the Extended Build-Out Scenario would not have a significant adverse impact on neighborhood character. The operational transportation-related updates would not change this conclusion.

These conclusions are consistent with the 2006 FEIS, which disclosed unmitigated significant traffic impacts at numerous intersections in the study area. The 2006 FEIS disclosed that there were 19 intersections within the ¼-Mile Primary Study Area where predicted significant adverse impacts could not be fully mitigated and 16 intersections outside of this ¼-Mile Primary Study Area, for a total of 35 unmitigated traffic intersections. Traffic impacts would vary somewhat from those identified in the 2006 FEIS due to a number of factors such as changes in transportation planning factors, travel characteristics of Arena patrons, and updated No Build projects and baseline traffic count. As noted in Chapter 4H of the FSEIS, the general location and magnitude of impacts identified in the FSEIS and 2006 FEIS are comparable as they relate to the character of neighborhoods surrounding the project site. Unmitigated traffic impacts associated with Phase II development under the Extended Build-Out Scenario, coupled with increases in pedestrian activity, would result in localized neighborhood character impacts along Dean Street and Bergen Street, the one-way east-west couplet on the southern boundary of the project site, but these localized impacts would not result in significant adverse neighborhood character impacts in the Prospect Heights neighborhood. On the contrary, neighborhood character benefits would result upon completion of Phase II of the Project under the Extended Build-Out Scenario, in that it would transform the site into a vibrant mixed use neighborhood with eight acres of open space, improve the streetscape and connect the neighborhoods to the north and south of the rail yard. While a delay in construction would defer these benefits temporarily, the benefits would nevertheless improve the character of the neighborhood when construction is completed. These FSEIS findings are consistent with those presented in the 2006 FEIS for neighborhood character.



## **VII. Summary of Mitigation Measures to be Implemented**

The FSEIS identifies significant adverse impacts under the Extended Build-Out Scenario in the areas of community facilities (public schools), construction-period open space, transportation (operational and during construction) and construction noise. The introduction to Section V above summarizes many of the new Project commitments that will be imposed to minimize the environmental impacts of Project construction. The discussion below describes additional specific mitigation measure requirements.

### **A. Community Facilities Mitigation**

Phase II of the Project under the Extended Build-Out Scenario would result in a significant adverse impact on elementary and intermediate schools upon the completion of the first or second Phase II building. More rapid construction of the Phase II buildings would result in the significant adverse impact occurring earlier.

Mitigation for the projected shortfall in school seats for elementary and intermediate schools in CSD 13/Sub-District 1 could consist of one or a combination of the following measures:

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

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

The FSEIS specifies the timing requirements for the public school. The project sponsors are required – if requested by DOE or SCA prior to the date that is 18-months prior to the anticipated commencement of construction of the first Phase II residential building constructed after completion or substantial completion of each of the Phase I residential buildings (or such other date agreed to in writing by the project sponsors, DOE and ESD) – to convey or lease to DOE space within a development 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 is to be located on the ground floor of the building. As soon as practicable after receipt of the request from DOE or SCA, the project sponsors are required to consult and cooperate with SCA in its public review process for site selection, thereafter cooperate with DOE and SCA in their design process in accordance with SCA/DOE practice, and construct the building containing the school as soon as practicable after SCA approves its design, completes its public review process, and authorizes commencement of construction of the core and shell of the school and the financing of the school. The project sponsors are also required to provide to DOE, by lease, easement or other conveyance acceptable to DOE, access to suitable outdoor space for use as a playground for the

School's students. Because it is likely that the school will be located in the lower floors of Building 15, the project sponsors are required to provide notice to DOE, SCA and ESD that it intends to begin architectural design of Building 15 prior to the commencement of such design. In the event that an alternative location is selected, the school site must be one of the other residential parcels located east of 6<sup>th</sup> Avenue as determined by the project sponsors and DOE. If leased to DOE, such lease is to be on a triple net basis and with a rent of \$1.00, and if conveyed, is to be conveyed for consideration of \$1.00. DOE is to be responsible for all costs of constructing, fitting out, and operating the School (excluding the cost of land, infrastructure, site remediation and if applicable the platform over the rail yard), and the project sponsors must undertake the construction of the School on DOE's behalf and at DOE's expense. In the event that DOE elects to locate the School on the Project site, DOE and the project sponsors are to enter into appropriate arrangements providing for the construction and operation of the school, which agreements must among other things provide the project sponsors with the right to locate residential units and other compatible uses within the same building as the school, and to coordinate the construction of the school with the construction of the remainder of the building in which the school is to be located. The school must be designed so as 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<sub>10</sub>.

If built at the election of DOE, the new school facility on the Phase II project site will partially mitigate the projected shortfall in school seats for elementary and intermediate schools located within CSD 13/Sub-District 1. While the final school program and capacity will be developed at a later date, based on DOE's 2015-2019 Proposed Capital Plan, it is anticipated that this school will provide approximately 757 seats for elementary and/or intermediate students.

The other potential mitigation measures identified above—shifting the boundaries of school catchment areas within the CSDs; creating new satellite facilities in less crowded schools; and building new school facilities off-site—could be implemented at the discretion of DOE. If not implemented, the significant adverse impacts on elementary schools within CSD 13/Sub-District 1 would remain.

## **B. Open Space Mitigation**

Phase II of the Project under the Extended Build-Out Scenario would not result in significant adverse impacts related to open space upon the Project's completion. However, the 2006 FEIS identified a temporary significant adverse impact on passive open space resources in the non-residential (1/4-mile) study area during Phase II construction. This impact would continue until a portion of the Phase II open space is phased in. The Extended Build-Out Scenario would prolong the temporary significant adverse impact on the passive worker ratio in the non-residential study area that was identified in the 2006 FEIS by between approximately 7 and 9 years, compared with the Phase II schedule analyzed in the 2006 FEIS.

At the time of the DSEIS, one of the following plaza or open space areas was under consideration to be improved as a mitigation measure to address a prolonged construction period open space impact:

- Times Plaza: currently an approximately 0.17-acre triangle formed by Flatbush Avenue, Atlantic Avenue, and 4th Avenue is occupied by a paved sidewalk area, bike racks, and the Times

Plaza Control House (an MTA structure, built in 1908 as a subway entrance, which today functions as a skylight for the Atlantic Avenue-Barclays Center subway station).

- Lowry Triangle: this 0.11-acre New York City Department of Parks and Recreation (DPR) open space is bounded by Atlantic Avenue, Underhill Avenue, Washington Avenue, and Pacific Street. It contains passive open space features such as seating and plantings.
- Cuyler Gore Park: this 1.16-acre DPR open space is bounded by Fulton Street, Carlton Avenue, and Greene Avenue. It contains passive open space features such as seating and plantings.

Since the issuance of the DSEIS, ESD has identified Times Plaza as the site to be improved in order to address the prolonged impact on the passive worker ratio in the non-residential study area because of the proximity of Times Plaza to the Phase I non-residential passive open space users. Subject to the review and approval of NYCDOT and, if applicable, the New York City Public Design Commission (“PDC”), the project sponsors have committed to promptly plan, design, implement and fully fund improvements at Times Plaza, which will consist of the addition of seating, plantings and other open space amenities approved by NYCDOT and, if applicable, PDC. If practicable, the project sponsors will implement these improvements in coordination with restoration of the adjoining segment of Atlantic Avenue affected by the construction of the portal between the LIRR rail yard and Atlantic Terminal.

In addition, if a Phase II building construction site were to remain undeveloped for an extended period of time, if practicable, the project sponsors will arrange for its utilization as temporary open space, until such time as construction is ready to resume, in accordance with the MEC.

## **C. Operational Transportation Mitigation**

### **1. Traffic Mitigation**

With development of Phase II under the Extended Build-Out Scenario, a total of 56 intersections are expected to have one or more movements that would experience significant adverse impacts in one or more of the five peak hours analyzed. A range of operational changes to the surrounding street network are recommended to mitigate the significant adverse traffic impacts. These measures typically include signal phasing and timing modifications, parking regulation modifications, and changes to lane striping and pavement markings. It should be noted that subsequent to the issuance of the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the Project’s traffic mitigation plan. The mitigation measures outlined in the DSEIS included a variety of signal timing changes, lane re-striping and changes to curbside parking regulations. Subsequent to the issuance of the DSEIS, NYCDOT determined that some of the parking regulation and lane re-striping measures should not be implemented. As a result, the traffic mitigation analysis in the FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. The traffic mitigation measures that have been identified, subject to NYCDOT approval, are set forth in Table 5-1 and the accompanying text of the FSEIS.

Significant adverse operational traffic impacts would remain unmitigated at 18 of the 37 intersections impacted in the weekday AM peak hour, three of the 20 intersections impacted in the midday, 17 of the 38 intersections impacts in the PM peak hour, five of the 27 intersections

impacted in the weekday pregame peak hour, and 19 of the 47 intersections impacted in the Saturday pregame peak hour.

As requested by the letter from NYCDOT to ESD dated May 30, 2014 (included as Appendix G to the FSEIS), promptly after the issuance of certificates of occupancy for 1,500 Project dwelling units, the project sponsors have committed to undertaking a traffic monitoring study pursuant to a scope to be approved by NYCDOT to (i) refine the signal timing and other traffic mitigation measures described in the 2006 FEIS and the FSEIS as necessary to reflect then existing traffic conditions and City policies; (ii) provide further information as to the implementation date for the signal timing and other traffic mitigation measures specified in the 2006 FEIS and FSEIS; and (iii) identify potential additional measures to address unmitigated significant adverse impacts identified in the 2006 FEIS and FSEIS based on then existing traffic conditions. As requested by the same letter from NYCDOT, the project sponsors have committed to undertaking a second traffic monitoring study with the same objectives following substantial completion of Project construction.

## **2. Transit Mitigation**

Phase II of the Project under the Extended Build-Out Scenario would result in a significant adverse impact with respect to up escalator ES359X at the Barclays Center entrance of the Atlantic Avenue—Barclays Center Subway Station. The impact would be fully mitigated by operating adjoining escalator ES358X in the up direction during the pregame period when there is a Nets game or other major event at the Arena.

## **3. Pedestrians Mitigation**

Phase II demand under the Extended Build-Out Scenario would significantly adversely impact four crosswalks in one or more peak hours under *CEQR Technical Manual* impact criteria for a CBD area, and one additional sidewalk (along Dean Street) if non-CBD criteria were used. (Sidewalks and crosswalks along the Atlantic Avenue corridor that would be impacted only under the non-CBD criteria are not considered significantly adversely impacted, as Atlantic Avenue is a major retail and commercial corridor where the CBD criteria should be considered applicable.) The mitigation measures to address these significant adverse impacts, to be implemented by NYCDOT or the project sponsors at the direction of NYCDOT, include widening crosswalks and changes to traffic signal timings. That mitigation is set forth in Table 5-7 and the accompanying text of the FSEIS.

With the recommended mitigation measures, all significant adverse impacts under the CBD criteria would be fully mitigated, while the significant adverse sidewalk impacts along Dean Street (in the PM and Saturday pregame peak hours) under the non-CBD criteria would remain unmitigated.

## **D. Construction Traffic Mitigation**

The recommended operational traffic mitigation measures would serve to mitigate most construction impacts at the 36 intersection at which significant adverse traffic impacts were identified during peak construction periods under the Extended Build-Out Scenario. The traffic mitigation measures that have been identified, subject to NYCDOT approval, are set forth in Table 5-9 and the accompanying text of the FSEIS. In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate certain impacts during construction. These mitigation measures identified in the FSEIS shall be implemented at the

direction of NYCDOT. However, there would be seventeen intersections—five during the 6-7 AM and fifteen during the 3-4 PM construction traffic analysis peak hours—where impacts could not be mitigated or could only be partially mitigated.

### **E. Construction Noise Mitigation**

The project sponsors are required to make available double-glazed or storm windows and alternative ventilation (e.g., air conditioning, through the provision of one air conditioner per bedroom or main living room with a window along a façade predicted to experience significant adverse construction noise impacts) for those residential locations where the 2006 FEIS or FSEIS identified significant noise impacts and such windows and air conditioning are not currently installed, subject to the consent of the owners and tenants of such residences, and subject to applicable laws, rules and regulations. All such windows and alternative ventilation are to be provided without charge and with free installation. In the event that an air conditioning unit required to be provided pursuant to this paragraph requires replacement, the project sponsors must replace the unit if Project-related construction activities in the vicinity of such residential location have not yet been completed such that the location would be subject to continued construction-related significant adverse noise impacts.

There is one recently constructed residential building with outdoor balconies predicted to experience significant adverse noise impacts as a result of construction of Phase II of the Project under Construction Phasing Plan 1. At this location, there are no feasible or practicable mitigation to mitigate the construction noise impacts.

## **VIII. Alternatives**

The following Project alternatives are assessed in the FSEIS and summarized below:

- **Reduced Parking Alternative**—This alternative considers modified parking requirements that would reduce the amount of accessory parking provided for the Project’s residential uses. The SEIS analyzes, as its base-case scenario, a proposed reduction in the parking requirements for the Project from the 3,670 spaces analyzed in the 2006 FEIS to 2,896 parking spaces. The “Reduced Parking Alternative” would be an alternative that would further reduce on-site parking to reflect the recent zoning changes for Downtown Brooklyn, which eliminated accessory parking requirements for affordable housing units and reduced accessory parking requirements for market-rate housing. The Reduced Parking Alternative would reduce the number of parking spaces on the Project site to 1,200 spaces.
- **A No Unmitigated Significant Adverse Impact Alternative**—This alternative considers development that would not result in any identified unmitigated significant adverse impacts.
- **A Multiple Developer Alternative**—The feasibility and effectiveness of this alternative as a means of speeding Project construction was assessed in response to public comments on the Draft Scope for the SEIS.

In addition, the 2006 FEIS analyzed two reduced density alternatives: the Reduced Density—No Arena Alternative and the Reduced Density—Arena Alternative. These alternatives were developed in response to public comment and consider lower density development designed to achieve the Project’s goals either without or with the arena. The 2006 FEIS concluded that the Reduced

Density—No Arena Alternative would not provide the economic, entertainment, and cultural benefits of an arena, and would therefore fail to meet many of the Project’s goals. Since that time the arena has been constructed and is now operational; therefore this alternative is no longer viable. Similarly, the 2006 FEIS also concluded that the Reduced Density—Arena Alternative would not provide the same level of benefits as the Project, would result in very similar significant adverse environmental impacts and would not meet the Project’s goals as effectively as the Project. The Project’s goals have not changed since the 2006 FEIS, and continue to include providing much needed affordable and market-rate housing at a transit accessible location. Furthermore, a potential delay in Phase II construction as analyzed in the FSEIS would not undermine the importance of achieving these goals, or the other goals for the Project. As noted in the 2006 FEIS, reducing the density of the Project would diminish the number of new residential units and reduce the affordable housing provided by the Project. Moreover, reducing the number of market-rate units is not expected to induce a faster pace of construction by the project sponsors. For further information and discussion about these alternatives, please refer to the 2006 FEIS and 2006 Findings.

#### **A. Reduced Parking Alternative**

Under the Reduced Parking Alternative, the 1,200 spaces would be distributed as follows: in Phase I, approximately 50-100 spaces in a below-grade facility beneath Building 3 with access from Dean Street and 240 spaces in a below-grade facility on Site 5 with access from Pacific Street, and in Phase II, up to 910 below-grade spaces on Block 1129 with access from Dean Street and Carlton and Vanderbilt Avenues. As explained below, ESD is selecting the Reduced Parking Alternative as preferable to the base-case scenario (2,896 parking spaces) analyzed in the SEIS.

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

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

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

## **1. Operational Transportation**

### **a. Traffic**

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

With development of Phase II under the Project under the base-case parking scenario analyzed in the SEIS, 37 of the 71 analyzed intersections would have significant adverse impacts in the weekday AM peak hour, 20 in the midday, 38 in the PM, 27 in the weekday pregame peak hour, and 47 in the Saturday pregame peak hour. By comparison, under the Reduced Parking Alternative there would be one additional impacted intersection in the AM peak hour (38 total) and one less in the midday (19 total). The numbers of intersections operating at LOS E or F would total 35, 16, 30, 19 and 38 in the weekday AM, midday, PM and pregame and Saturday pregame peak hours under the Reduced Parking Alternative, a decrease of one in the PM peak hour compared with future conditions with the Project under the base-case parking scenario analyzed in the SEIS. Overall, the numbers and locations of impacted intersections and the types of impacts that would occur under the Reduced Parking Alternative would generally be similar to those under the Project under the base-case parking scenario analyzed in the SEIS.

Like conditions for the Future With Phase II under the Project under the base-case parking scenario analyzed in the SEIS, many of the significant adverse traffic impacts that would occur with development of Phase II under the Reduced Parking Alternative could be fully mitigated. The traffic mitigation measures that have been identified for implementation, subject to NYCDOT approval, are set forth in Table E-3 in Appendix E to the FSEIS. The mitigation measures identified in the FSEIS shall be implemented at the direction of NYCDOT. These recommended operational improvements would fully mitigate all significant adverse traffic impacts from the Reduced Parking Alternative at a total of 28 out of 55 impacted intersections compared to 27 out of 56 impacted intersections under the Project under the base-case parking scenario analyzed in the SEIS. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project under the base-case parking scenario analyzed in the SEIS, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Fort Greene Place, a reduction in the amount of curbside space along which parking regulations would be changed at the intersection of Dean Street and Vanderbilt Avenue, and minor modifications to the recommended signal timing changes at a total of eight intersections.

### **b. Transit**

There would be no change in the amount of travel demand generated by Phase II or the Project as a whole under the Reduced Parking Alternative compared with the conditions analyzed for the Future With Phase II under the Project. While there may be some potential for a shift from the auto mode

to the transit modes as a result of the reduction of on-site parking under this alternative, any such shift, should it occur, is expected to be relatively minor and unlikely to result in material changes in the numbers of trips to individual subway stations and station elements, and subway and bus routes. Therefore, subway station, subway line haul and local bus conditions under the Reduced Parking Alternative would be similar to those disclosed for the Future With Phase II under the Project under the base-case parking scenario analyzed in the SEIS.

### c. Pedestrians

The elimination of the proposed parking garages on Blocks 1120 and 1128 and the reduction in parking capacity at other on-site facilities under the Reduced Parking Alternative would likely result in an increase in pedestrian trips on analyzed sidewalks and crosswalks since persons traveling by auto who would otherwise have parked on-site would need to walk between the project site and off-site parking facilities.

In the Future With Phase II under the Project under the base-case parking scenario analyzed in the SEIS, Phase II demand would significantly adversely impact four crosswalks in one or more peak hours under *CEQR Technical Manual* impact criteria for a CBD area, and two sidewalks and one additional crosswalk would be considered impacted if non-CBD criteria were used. As noted above, impacted pedestrian facilities would include:

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

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



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

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

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

The mitigation measures identified in the FSEIS shall be implemented by the project sponsors at the direction of NYCDOT. These recommended measures would fully mitigate all of the significant crosswalk impacts under the Reduced Parking Alternative.

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

#### **d. Pedestrians and Vehicular Safety**

The Reduced Parking Alternative is not expected to result in substantial changes to vehicular or pedestrian flow at two of the three intersections in proximity to the project site identified as high crash locations—Flatbush Avenue/Atlantic Avenue and Atlantic Avenue/4th Avenue—and would likely result in an overall reduction in the numbers of turning vehicles at the third high crash intersection—Atlantic Avenue and Vanderbilt Avenue—compared with the Future With Phase II

condition under the Project under the base-case parking scenario analyzed in the SEIS. Therefore, compared with the Project under the base-case parking scenario analyzed in the SEIS, there would likely be a reduced potential for conflicts between turning vehicles and pedestrians and cyclists at this latter intersection under the Reduced Parking Alternative.

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

#### **e. Parking**

Under the Reduced Parking Alternative, a total of 1,200 parking spaces would be provided on-site in 2035 compared with the 2,896 parking spaces analyzed for the Project under base-case scenario analyzed in the SEIS. This would include approximately 876 spaces of accessory parking for demand from the residential, commercial, retail, hotel and public school uses (*i.e.*, non-Arena uses) on the project site, 300 spaces to accommodate a portion of the demand from the Barclays Center Arena, and 24 spaces allocated to the NYPD's 78th Precinct station house. The lower number of on-site parking spaces provided for non-Arena uses compared with the Project under the base-case parking scenario analyzed in the SEIS would be consistent with the parking required under zoning for the Special Downtown Brooklyn District.

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

Under both the Project under the base-case parking scenario analyzed in the SEIS and the Reduced Parking Alternative, a total of 300 on-site parking spaces would be provided on the project site to accommodate a portion of the demand from a Nets game or other major event at the Barclays Center Arena. Remaining Arena demand would park at off-site public parking facilities or on-street, as occurs at present. Therefore, off-street parking conditions during a weekday evening and a Saturday afternoon Nets game at the Arena are also assessed to determine the potential combined effects of demand from both Arena and non-Arena Project uses on the off-street public parking

supply within a 1/2-mile study area (considered the maximum distance that persons en route to and from an event at the Arena would likely walk to access parking.)

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

As was the case for the Future With Phase II condition under the Project under the base-case parking scenario analyzed in the SEIS, the traffic mitigation plan for the Reduced Parking Alternative incorporates modifications to curbside regulations that would potentially affect existing curbside parking at a total of seven locations throughout the traffic study area. Depending on the peak hour, it is estimated that the net number of on-street parking spaces within 1/2-mile of the Arena that would be displaced by the traffic mitigation measures recommended for the Reduced Parking Alternative would represent approximately 0.2 percent of the existing 9,395 on-street parking spaces in this area, the same as for the Project's traffic mitigation plan under the base-case parking scenario analyzed in the SEIS. It is estimated that a total of approximately 18 on-street parking spaces would be displaced during the pregame peak period and 23 spaces in other periods. This would be unchanged compared to the Project's traffic mitigation plan under the base-case scenario analyzed in the SEIS.

It is expected that drivers currently parking in the on-street spaces that would be displaced under both the Project base-case scenario and the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity.

## **2. Operational Air Quality**

With the Reduced Parking Alternative, the Project's parking facilities would be smaller in overall capacity. Since there would be fewer on-site parking spaces available, there would be some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. This would result in similar traffic operations at the analyzed intersections. Therefore, like the Project under the base-case parking scenario analyzed in the SEIS, no significant adverse operational-related air quality impacts would result from the Reduced Parking Alternative.

## **3. Operational Noise**

Traffic levels during operation of the Reduced Parking Alternative would be comparable to those during operation of the Project under the base-case parking scenario analyzed in the SEIS on roadways adjacent to each of the noise receptor locations analyzed during each of the analyzed time periods. Based on the traffic levels associated with the Reduced Parking Alternative, the differences in noise levels at affected locations as compared with those with the Project would be minimal and would be less than the levels that would have the potential to result in a significant adverse impact. Consequently, as with the Project under the base-case parking scenario analyzed in the SEIS, the

Reduced Parking Alternative would not be expected to result in any significant adverse operational noise impacts.

#### **4. Operational Neighborhood Character**

The Reduced Parking Alternative, like the Project under the base-case parking scenario analyzed in the SEIS, would not result in significant adverse neighborhood character impacts. The Reduced Parking Alternative would result in significant adverse traffic impacts at 55 intersections in one or more peak hours compared to 56 under the Project, and the locations of the impacted intersections would generally be the same. Compared with the Project under the base-case parking scenario analyzed in the SEIS, the Reduced Parking Alternative would result in one additional impacted intersection in the AM peak hour (38 in the AM peak hour under the Reduced Parking Alternative compared with 37 under the Project) and one less in the midday (19 compared to 20). Mitigation measures for the Reduced Parking Alternative would fully mitigate significant adverse traffic impacts at 28 of the 55 impacted intersections compared to 27 out of 56 impacted intersections under the Project. Compared with the traffic mitigation plan recommended for the Future With Phase II under the Project, the mitigation plan recommended for the Reduced Parking Alternative would include implementation of an additional curbside parking restriction at the intersection of Atlantic Avenue and Fort Greene Place, a reduction in the amount of curbside space along which parking regulations would be changed at the intersection of Dean Street and Vanderbilt Avenue, and minor modifications to the recommended signal timing changes at a total of eight intersections.

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

No shortfalls in off-street public parking capacity are expected to occur as a result of either the Project under the base-case parking scenario analyzed in the SEIS or the Reduced Parking Alternative. The traffic mitigation plan for either the Project under the base-case parking scenario or the Reduced Parking Alternative would incorporate modifications to curbside regulations that would potentially affect existing curbside parking at a total of seven locations throughout the traffic study area. It is estimated that a total of approximately 18 on-street parking spaces would be displaced during the weekday pregame peak period and 23 spaces in other periods. This would be unchanged compared to the Project's traffic mitigation plan. It is expected that drivers currently parking in the on-street spaces that would be displaced under both the Project under the base-case parking scenario analyzed in the SEIS and the Reduced Parking Alternative would need to find other on-street spaces or park in off-street public parking facilities in the vicinity.

The minor differences in traffic and pedestrian impacts associated with the Reduced Parking Alternative compared with the Project under the base-case parking scenario analyzed in the SEIS would not affect conclusions regarding neighborhood character; neither the Project under the base-

case parking scenario nor the Reduced Parking Alternative would result in significant adverse neighborhood character impacts.

## **5. Construction Transportation**

### **a. Traffic**

Under this alternative, the 300 on-site Arena parking spaces would serve a dual purpose during the construction period and would also be available to accommodate construction worker parking demand. Therefore, there would be no change in the construction vehicle trip assignments. With respect to construction transportation, the Reduced Parking Alternative would result in significant impacts at the same locations identified with Phase II of the Project under the base-case parking scenario analyzed in the SEIS. The mitigation measures identified in the FSEIS shall be implemented at the direction of NYCDOT. The recommended mitigation measures would also mitigate or partially mitigate the construction impacts that would occur during the same construction quarters under this alternative.

### **b. Parking**

Accounting for the parking supply and demand generated by the completed Project buildings, construction worker parking demand from Site 5 and Building 1 construction, and the Phase II peak construction worker parking demand during the 1st quarter of 2032 under Construction Phasing Plan 3 (a condition representative of peak construction worker parking demand under the Extended Build-Out Scenario), there would be sufficient off-street public parking spaces to accommodate the anticipated future parking demand such that there would be no shortfall during Phase II construction of the Project under this alternative.

## **6. Construction Air Quality**

There would be no change to the number of construction vehicle trips generated by the Project under the base-case parking scenario analyzed in the SEIS or to the construction vehicle trip assignments under the Reduced Parking Alternative. Since there would be fewer on-site parking spaces available, there would be some localized redistribution of operational auto trips at intersections in the immediate vicinity of the Project site. However, this would result in the same or comparable traffic operations at the analyzed intersections. Therefore, like the Project under the base-case parking scenario, no significant adverse construction-related air quality impacts would result from the Reduced Parking Alternative.

## **7. Construction Noise and Vibration**

The primary source of noise and vibration associated with construction of Phase II of the Project would be the operation of on-site equipment, rather than construction-related vehicle trips, including construction trucks and construction worker autos, traveling to and from the project site. The types and amount of on-site construction equipment under the Reduced Parking Alternative would be comparable to that analyzed for construction of Phase II of the Project under the base-case parking scenario analyzed in the SEIS because the structures to be constructed under the Reduced Parking Alternative would be the same as those to be constructed as part of Phase II of the Project, with the exception of some of the parking structures, which would not be constructed. Consequently, the Reduced Parking Alternative would be expected to result in the same or fewer

significant adverse construction noise impacts as for Phase II of the Project under the base-case parking scenario. Additionally, as with construction of Phase II of the Project, construction of the Reduced Parking Alternative would not result in any significant adverse vibration impacts.

## **8. Construction Public Health**

As described above under Construction Noise and Vibration, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as for Phase II of the Project under the base-case parking scenario analyzed in the SEIS. Therefore, the Reduced Parking Alternative would not affect the conclusions of the public health analysis.

## **9. Construction Neighborhood Character**

Construction of Phase II of the Project under the Extended Build-Out Scenario is not expected to result in significant adverse neighborhood character impacts in neighborhoods surrounding the Phase II project site; however, increased traffic, noise, and views of construction activity would result in significant adverse localized neighborhood character impacts in the immediate vicinity of the Phase II project site.

The Reduced Parking Alternative would result in some localized redistribution of operational auto trips during peak construction compared with the Project under the base-case parking scenario analyzed in the SEIS; however this would not alter the conclusions of the analysis. There would be no material change in the number of construction workers using transit or how they would be distributed among the available transit options under the Reduced Parking Alternative, and there would be no material change in construction worker pedestrian trips. Similar to the peak construction parking analysis, there would be no shortfall of off-street parking anticipated during Phase II construction of the Project under the Reduced Parking Alternative. Likewise, the Reduced Parking Alternative would be expected to result in the same or fewer significant adverse construction noise impacts as for Phase II of the Project. Views of construction activities during the Phase II construction period would be materially the same under both the Reduced Parking Alternative and the Project under the base-case parking scenario analyzed in the SEIS.

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

## **B. No Unmitigated Significant Adverse Impact Alternative**

The 2006 FEIS determined that the Project would result in unmitigated impacts with respect to cultural resources, urban design and visual resources, shadows, traffic, and noise. The 2006 FEIS Analyzed a No Unmitigated Impact Alternative to the proposed project that would allow for the elimination of those impacts. In addition, the FSEIS identifies unmitigated significant adverse

impacts in the areas of community facilities, transportation and construction with regard to the Extended Build-out Scenario and explores alternatives to the Project that would allow for the elimination of these impacts.

## 1. Operational Community Facilities

The project site for Phase II is located in Sub-District 1 of CSD 13. Based on current *CEQR Technical Manual* methodology, Phase II of the Project under the Extended Build-Out scenario would introduce 1,430 elementary school students by 2035, increasing the elementary school utilization rate in CSD 13/Sub-District 1 by 88 percentage points, and bringing total utilization to 220 percent (under the conservative assumption that no new school capacity would be created between 2019 and 2035). Phase II would also introduce 592 intermediate school students by 2035, increasing the intermediate school utilization rate in CSD 13/Sub-District 1 by 69 percentage points, and bringing total utilization to 160 percent (also assuming no new school capacity would be created between 2019 and 2035). Therefore, Phase II would exceed the *CEQR Technical Manual* threshold for a significant adverse impact on elementary and intermediate schools.

The 2006 FEIS had also found that there would be a shortfall of seats at elementary and intermediate schools in the future with the Project, and that these shortfalls would constitute a significant adverse impact on elementary and intermediate schools within the 1/2-mile study area.

In order to mitigate the projected shortfall in school seats for elementary and intermediate schools in CSD 13/Sub-District 1, either one or a combination of the following measures would need to be undertaken:

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

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

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

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

Because the program and capacity for the proposed school that could be provided on-site as partial mitigation at the election of DOE, these new school seats have not been included in the quantitative assessment of future school utilization that is summarized above. Assuming that this proposed school is not provided, in order to avoid triggering the threshold for a significant adverse impact, Phase II would have to introduce approximately 278 or fewer residential units, which is 4,654 fewer units than proposed. With this number of residential units, the elementary school utilization rate with Phase II under the Extended Build-Out Scenario would increase only by 4.9 percentage points (136.9 percent utilization), and the intermediate school utilization rate would increase by 3.9 percentage points (94.4 percent utilization). If DOE elects to develop the proposed on-site school, it is expected that two-thirds of the total seats would be for elementary school use and one-third of the total seats would be for intermediate school use. In this scenario, in order to avoid triggering the threshold for significant adverse impacts, Phase II would have to introduce approximately 2,671 or fewer residential units, which is 2,261 fewer units than proposed. With these residential units, the elementary school utilization rate with Phase II under the Extended Build-Out Scenario would increase by 4.9 percentage points (136.9 percent utilization) and the intermediate school utilization rate would increase by 8.5 percentage points (99.0 percent utilization).

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

## **2. Operational Transportation**

Phase II of the Project under the Extended Build-Out Scenario would result in unmitigated significant adverse traffic impacts at 18 intersections in the weekday AM peak hour, three in the midday peak hour, 17 in the PM peak hour, five in the weekday pregame hour, and 19 in the Saturday pregame peak hour, and at one sidewalk in the weekday PM and Saturday pregame peak hours. Because of existing congested conditions at a number of intersections, and anticipated increases in congestion in the Future Without Phase II, even a minimal increase in traffic would



result in unmitigated significant traffic impacts at one or more locations. Based on a sensitivity analysis of intersections within the study area, it was determined that the addition of fewer than five cars during the PM peak hour would trigger a traffic impact that cannot be fully mitigated. Thus, almost any new development on the project site would result in unmitigated significant impacts in the area of transportation, and no reasonable alternative could be developed to completely avoid such impacts without substantially compromising the Project's goals.

### **3. Construction Traffic**

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

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

### **4. Construction Noise**

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

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

measures were provided by the project sponsors, those measures would continue to partially mitigate the impacts resulting from construction noise.

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

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

### **C. Multiple Developer Alternative**

ESD received a number of public comments on the draft scope for the DSEIS requesting it to assess a “multiple developer alternative” as a strategy for speeding construction of the Project. In response to those comments, the SEIS includes a detailed assessment of the feasibility of a multiple developer approach to Project construction, as well as the effectiveness of such an approach in accelerating completion of Phase II, in light of the currently existing facts and circumstances surrounding the Project. Among those facts and circumstances are the following:

- FCRC and its affiliated entities have been the designated project sponsors since the 2006 MGPP was first affirmed.
- The legal challenges to the 2006 MGPP, pursuant to which FCRC and its affiliates were designated as the project sponsors, were all dismissed.
- At the time of their designation as project sponsors, FCRC and/or its affiliates held title to most of the parcels comprising the Project site.
- Under its agreements with MTA, the project sponsors hold the exclusive right (subject to completing the rail yard and other conditions) to construct a platform and develop the air space over the rail yard on Blocks 1120 and 1121 – two parcels that comprise more than half of the Phase II site, and that are expected to accommodate about 65 percent of the Phase II floor area. Although one lawsuit was brought to challenge the contractual arrangements between the project sponsors and MTA, that case was dismissed and no appeal was taken. *See Montgomery v. MTA, Index No. 114304/09 (N.Y. Sup. Ct. Dec. 15, 2009).*
- The project sponsors hold leasehold interests in several of the Project parcels and the right to future leasehold interests pursuant to its agreements with ESD.
- The project sponsors have spent hundreds of millions of dollars to implement the Project in accordance with the existing agreements.

As lead agency, ESD has taken a hard look at the multiple developer alternative in light of these facts and circumstances. Accordingly, ESD has taken into account the fact that the project sponsors' rights and obligations, and those of other parties in interest, under the numerous agreements that

currently are in place would have to be substantially modified or rescinded if ESD were to pursue a multiple developer alternative. ESD is also mindful of the lengthy and complicated process that would be entailed in identifying and engaging additional developers for the Project and in satisfying the administrative and legal procedures applicable to the approval of such a Project modification under the UDC Act, SEQRA and other statutes. Moreover, ESD has considered whether a multiple developer alternative would be effective in accelerating construction when and if additional developers were engaged. Each of these issues is addressed briefly below, and discussed at more length in the FSEIS.

## **1. Modification of Current Project Structure**

As discussed above and summarized in the FSEIS, the project sponsors hold extensive contractual and property rights in the Project and the Phase II project site. Moreover, as noted in the 2006 FEIS, the project sponsors had acquired a substantial portion of the project site prior to affirmation of the 2006 MGPP. Subsequently, most of the properties were acquired by ESD from certain project sponsors through the exercise of eminent domain. ESD paid nominal consideration in these proceedings because the relevant agreements provided for the lease-back of the properties to the project sponsors for development of the Project. The project sponsors have spent more than \$100 million in performing their obligations under the contracts, and have used many of those agreements as security for financing the Project. Since the project sponsors have given no indication that either they or their secured lenders would be willing to give up their existing rights, complex legal issues would arise in connection with a switch by ESD and MTA to a multiple developer alternative, which would likely take years to resolve. Little if any progress would be made towards construction of the Project during this extended period.

## **2. Engagement of Multiple Developers**

In the event that issues arising from cancellation of the existing contracts were resolved in a way that would allow a multiple developer alternative to proceed, ESD and MTA would then, either individually or together, begin a formal procurement process to engage other developers. It is speculative to estimate how long that process would take, but it is clear that even with the consent and cooperation of the project sponsors, it would be complex and time consuming. One or more RFPs would have to be prepared and issued, and (in the event responsive proposals are submitted by responsible entities) either simultaneous or sequential consideration and negotiation of proposals would follow. Amendments could be required to the MGPP, following UDC Act procedures, if negotiations with other developers result in material changes to the Project or ESD's financial obligations; further environmental review under SEQRA would be required to address any material changes to the Project; new Public Authorities Control Board approval might have to be obtained depending on the nature of the new development agreements and their financial risks to ESD; appraisals would be needed with respect to any property dispositions; and applicable requirements of the Public Authorities Accountability Act would have to be satisfied. A new round of litigation, arising from the approval process, may then have to be resolved. It can be expected that progress on Project construction would remain at a standstill during this protracted process.

Moreover, a number of factors, such as the controversy and litigation that has surrounded the Project to date, complexities associated with unwinding the existing Project structure, high infrastructure costs (and the need to allocate those costs for work already planned or performed by the project sponsors), stringent affordable housing requirements, and the specialized nature of the

construction work required to build the new rail yard and new platform, could chill the interest of the development community in participating in the RFP process. Therefore, it is unclear whether viable proposals would be submitted in response to a solicitation. It is also uncertain whether the necessary transactional arrangements could be put into place in connection with any proposals that are submitted, because negotiations would be exceedingly complicated. Numerous parties would participate in such negotiations, including additional developers, ESD, MTA, the City, FCRC, existing and prospective secured lenders, and other parties in interest. The complexity of the negotiations would be compounded by the inter-related nature of several of the key Project elements, since a number of capital improvements, such as the new rail yard, the platform, parking facilities, utilities and open space would benefit several of the Phase II buildings. Sorting out responsibilities for parking would be particularly difficult, because Arena parking would have to be accommodated on parcels comprising the Phase II area. Although it is possible that the costs commensurate with the relative benefits of the common improvements could be allocated among multiple developers, the cross-site interdependency of critical Project elements would add considerable complexity to the negotiations. Moreover, it is unknown what the effect on financing would be if an individual developer's project were to be dependent on the actions (and solvency) of other developers in a multiple developer arrangement.

Thus, the process required to implement the multiple developer alternative would be extremely time consuming, and its outcome would be uncertain. It is only after that process is completed that additional developers could begin final design, arrange for financing and commence construction. Therefore, assuming that the effort to modify the existing agreements and bring on additional developers could succeed at all, it would take many years to bring the Project back to where it is today.

### **3. Construction and Project Coordination**

Assuming ESD and MTA were to succeed in bringing additional developers into the Project, logistical problems and inefficiencies would arise in the field that would hamper construction. The resources available at the site to support construction activities are constrained due to the limited means of access, and limited space for staging, truck marshalling, and major equipment operation. Multiple unrelated contractors would compete for these resources, with conflicts arising over the use of Pacific Street and other critical access points and staging areas. Such conflicts would be compounded by the need for adjoining and overlapping MPTs for multiple independent construction sites. Efficiencies that now exist with respect to contractor coordination of deliveries and joint use of equipment and materials would be lost, and contractors would be faced with conflicts associated with on-site operations, the timing of deliveries, and overall traffic control. Friction with respect to the timely completion of common open space and infrastructure could also be expected to arise, particularly where the completion of development on one site requires infrastructure work on another site to be completed. Additionally, the benefits of a single overall developer coordinating with municipal and state agencies would be lost.

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

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

In sum, multiple site developers would reduce the level of construction coordination at the Project site, and lead to conflicts that themselves would likely impede Project construction. The benefits of the project sponsors acting as a single overall development authority—in terms of efficiency and contractor coordination—would be lost. It also bears noting that the conversion of the Project to one constructed by multiple developers would have potential adverse environmental implications, because compliance with MEC requirements would be dispersed among multiple parties, and confusion could arise with respect to accountability for non-compliance with such requirements. Moreover, ESD’s environmental and construction oversight efforts would be considerably more complicated and therefore potentially less effective.

ESD understands that a number of other projects have been completed successfully with the participation of multiple developers. However, as explained in detail in the FSEIS such a course of action would not be practicable, and would not be effective in accelerating construction under the circumstances of this Project. On the contrary, because of the complexities and delay that would result from unwinding the existing transactions, putting multiple new arrangements in place, and possibly defending ensuing litigation, the alternative may cause progress on the site to cease for many years and potentially imperil the Project altogether.

In addition, as evidenced by the proposed Greenland transaction, one major objective of the multiple developer alternative—providing additional capital to facilitate an accelerated construction schedule for Phase II development—can be attained through the existing arrangements with the project sponsors. The project sponsors have advised ESD that Greenland is prepared to provide substantial funds for Project construction upon the closing of that transaction. That capital infusion would result from private arrangements that have already been negotiated and would be available without the need for a fundamental overhaul of the Project structure or the complications that would ensue.

## **IX. Summary of Unavoidable Significant Adverse Environmental Impacts**

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

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

As with the Project analyzed in the 2006 FEIS, Phase II of the Project under the Extended Build-Out Scenario would result in significant adverse impacts with respect to community facilities, construction-period open space, transportation (operational and during construction) and

construction noise. To the extent practicable, mitigation has been proposed for these identified significant adverse impacts. However, in a number of instances no practicable mitigation was identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the Project that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts. The following is a summary of those “Unavoidable Adverse Impacts.”

### **A. Community Facilities**

To mitigate the projected shortfall in school seats for elementary and intermediate schools in CSD 13/Sub-District 1, either one or a combination of the following measures will need to be undertaken:

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

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

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

Absent implementation by DOE of additional measures to ensure that this potential schools impact will be fully mitigated, or reasonable alternatives that will meet the purpose and need of the Project, eliminate this impact, and not cause other or similar significant adverse impacts, there will be unavoidable significant adverse schools impacts as a result of Phase II of the Project under the Extended Build-Out Scenario.

### **B. Operational Transportation**

It should be noted that subsequent to the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the Project’s traffic mitigation plan. As a result, the traffic mitigation analysis in the FSEIS indicates that fewer of the intersections

identified as impacted in the DSEIS would be fully mitigated. Significant adverse operational traffic impacts will remain unmitigated at 18 of the 37 intersections impacted in the weekday AM peak hour, three of the 20 intersections impacted in the midday peak hour, 17 of the 38 intersections impacted in the PM peak hour, five of the 27 intersections impacted in the weekday pregame peak hour and 19 of the 47 intersections impacted in the Saturday pregame peak hour.

Phase II demand under the Extended Build-Out Scenario will significantly adversely impact four crosswalks in one or more peak hours under *CEQR Technical Manual* impact criteria for a CBD area, and one additional sidewalk (along Dean Street) if non-CBD criteria were used. (Sidewalks and crosswalks along the Atlantic Avenue corridor that will be impacted only under the non-CBD criteria are not considered significantly adversely impacted as Atlantic Avenue is a major retail and commercial corridor where the CBD criteria should be considered applicable.)

With the recommended mitigation measures, all significant adverse impacts under the CBD criteria will be fully mitigated, while the significant adverse sidewalk impacts along Dean Street (in the PM and Saturday pregame peak hours) will remain unmitigated.

In the absence of NYCDOT approval and implementation of mitigation measures, additional unmitigated conditions will remain.

Absent practicable mitigation measures to ensure that these potential transportation impacts will be fully mitigated, or reasonable alternatives that will meet the purpose and need of the Project, eliminate these impacts, and not cause other or similar significant adverse impacts, there will be unavoidable significant adverse operational transportation impacts as a result of Phase II of the Project under the Extended Build-Out Scenario.

### **C. Construction Transportation**

Subsequent to the DSEIS, the recommended traffic mitigation measures were further reviewed by NYCDOT, and additional measures were explored, resulting in the elimination or modification of some of the measures included in the Project's traffic mitigation plan. As a result, the traffic mitigation analysis in the FSEIS indicates that fewer of the intersections identified as impacted in the DSEIS would be fully mitigated. Overall, under the Extended Build-Out Scenario, significant adverse construction traffic impacts were identified at 36 intersections during the 1st quarter of 2032 (when Buildings 5, 9, and 10, and the platform segments for Buildings 6 and 7 are assumed to be under concurrent construction at the project site, and Buildings 8, 11, 12, 13, 14, and 15 are assumed to be operational) and at 14 intersections during the 4th quarter of 2027 (when Buildings 11, 12, 13, and 15 are assumed to be under concurrent construction at the project site, and Building 14 is assumed to be operational) under the illustrative construction schedule for Construction Phasing Plan 3. The recommended operational traffic mitigation measures will be able to mitigate most construction impacts during these peak periods. In some cases, variations of the operational mitigation measures or additional measures have been recommended to fully mitigate the impacts during construction. However, there will be seventeen intersections—five during the 6-7 AM and fifteen during the 3-4 PM construction traffic analysis peak hours—where impacts could not be mitigated or could only be partially mitigated.

Absent practicable mitigation measures to ensure that these potential construction traffic impacts be fully mitigated, or reasonable alternatives that will meet the purpose and need of the Project,

eliminate these impacts, and not cause other or similar significant adverse impacts, there will be unavoidable significant adverse construction traffic impacts as a result of Phase II of the Project under the Extended Build-Out Scenario.

#### **D. Construction Noise**

The proposed mitigation measures will partially mitigate the predicted significant adverse construction noise impacts during the construction of Phase II of the Project under the Extended Build-Out Scenario at most receptors where significant adverse impacts were identified. However, there is one recently constructed residential building with outdoor balconies predicted to experience significant adverse noise impacts as a result of construction of Phase II of the Project under Construction Phasing Plan 1. At this location, there are no feasible or practicable mitigation to mitigate the construction noise impacts on the balconies.

Absent practicable mitigation measures to ensure that these potential construction noise impacts be fully mitigated, or reasonable alternatives that will meet the purpose and need of the Project, eliminate these impacts, and not cause other or similar significant adverse impacts, there will be unavoidable significant adverse construction noise impacts as a result of Phase II of the Project under the Extended Build-Out Scenario.

#### **X. Rationale for Selecting the Reduced Parking Alternative**

The DSEIS examines two parking scenarios for the Project: a base-case parking scenario of 2,896 on-site parking spaces, and a Reduced Parking Alternative of 1,200 on-site parking spaces, and ESD specifically solicited public comment on whether to follow one approach or the other. The Reduced Parking Alternative provides the same number of on-site parking spaces for the Arena (300 spaces) as the base-case parking scenario, but reduces the number of parking spaces required for the Project's residential units consistent with the 2012 Downtown Brooklyn Parking Text Amendment, which reduced parking requirements in Downtown Brooklyn, including portions of the Phase I project site, to 2 parking spaces per 10 market-rate residential units and no parking spaces per affordable unit. (It is important to note, however, that under the Reduced Parking Alternative, residents of the Project's affordable units would be eligible to park on-site on the same terms as those available to residents of the Project's market-rate rental units; the distinction between the number of parking spaces required for market-rate units and affordable units relates to the number of parking spaces required for the Project, rather than the parking privileges of future Project residents.) In adopting the text amendment, the City found that it was expected to result in the provision of parking supply that better reflects actual parking demand in Downtown Brooklyn, which—like the project site—features some of the best transit access in the city, including numerous subway and bus lines.

Relatively few members of the public submitted comments on the issue of whether ESD should select the Reduced Parking Alternative. Some commenters, however, expressed concern about the potential effect on the availability of on-street parking spaces. In considering this issue, ESD notes that regardless of the number of off-street parking spaces included in the Project site, future residents and Arena patrons would be able to park their automobiles on the street; accordingly, the development of the Project is expected to reduce the supply of on-street parking under any scenario, regardless of the number of off-street parking spaces included within the Project. For this reason, a focal point of the SEIS analysis was whether there would still be a sufficient supply of off-street



parking facilities in the relevant study areas even with the Reduced Parking Alternative. As noted above, the SEIS concluded that the supply of off-street parking spaces would be sufficient to meet anticipated Project demand even with the Reduced Parking Alternative. Moreover, the Reduced Parking Alternative would have the same, or very similar, environmental impacts as the base-case parking scenario analyzed in the SEIS.

ESD has determined to select the Reduced Parking Alternative because it believes that alternative to be superior to the base-case parking scenario for several reasons. First, the Reduced Parking Alternative is more in keeping with recent public policy trends, as reflected in the 2012 Downtown Brooklyn Parking Text Amendment, of encouraging utilization of mass transit facilities rather than use of private automobiles. Although this policy may be difficult to achieve at some locations, the Project site has convenient access to numerous subway and bus lines, as well as the LIRR Atlantic Terminal, making it an excellent location for more transit-orient development. Second, the reduction in parking requirements for the market-rate and affordable units will reduce the cost and physical magnitude of the construction required for the Project's residential buildings, thereby facilitating a faster construction schedule, from both a financial and construction-scope perspective. Third, the reduction in the scope of Project construction would reduce to some extent the magnitude of below-grade excavation at some locations, marginally reducing the duration of construction of certain individual Project elements and associated noise and other construction impacts. Finally, as noted above, the Reduced Parking Alternative has the same, or very similar, environmental impacts as the base-case parking scenario analyzed in the SEIS. Accordingly, ESD selects the Reduced Parking Alternative and in so doing requires the project sponsors to implement the mitigation with respect to that alternative as identified in the FSEIS and these supplemental findings.

## **XI. Summary of Evaluation of Impacts and Project Benefits**

ESD has considered carefully the facts, conclusions and analyses set forth in the FSEIS, as described above. It also has reviewed in detail the written and verbal comments that have been provided on the DSEIS, as well as the responses to those comments in the FSEIS. In light of all the information in the record, ESD has determined to issue supplemental findings under SEQRA: (i) with respect to Phase II of the Project as described in the 2009 MGPP and (ii) with respect to the modification of the Project to allow the transfer of up to 208,000 gsf of floor area from Phase I to Phase II and to reduce parking requirement in accordance with the Reduced Parking Alternative (collectively, the "2014 MGPP Amendments"). This section of this Supplemental Findings Statement summarizes some of the more compelling considerations that formed the basis for that determination.

As stated in the 2006 FEIS, the overarching goal of the Project is to transform a blighted area into a vibrant mixed-use community. Progress has been made towards achievement of this goal with construction of the Barclays Center and the new subway entrance on the southeast corner of Atlantic and Flatbush Avenues, and the demolition of many of the substandard and insanitary buildings previously standing at the site. As construction progresses, the Project will continue to have many significant social, environmental, civic and economic benefits.

Upon completion, the 11 Phase II buildings will provide more than 4,500 new residential units, contributing to meeting the growing demand for new housing in Brooklyn. Although the exact number of affordable units in Phase II is dependent on the number of affordable units included in Phase I (upon Project completion, the Project is required to contain not less 2,250 affordable

housing units), it can be anticipated that more than 1,500 of the Phase II residential units will be affordable. Phase II will also provide 8 acres of new publicly-accessible open space, which will be designed, landscaped and configured to be inviting to the public. When Phase II of the Project is completed, the open cut rail yard that has divided Brooklyn neighborhoods for decades will be covered over by a platform supporting a vibrant and economically diverse residential community. The network of pedestrian walkways and the bicycle path within the open space provided by Phase II will create visual and physical links between the previously-divided neighborhoods.

Moreover, in conformance with sound planning and “smart growth” policies, the thousands of new housing units provided by Phase II of the Project will be located near a major transit hub. The buildings will be “green” buildings that are to be LEED certified, at a minimum, with a goal of achieving a LEED silver designation. Phase II of the Project will also 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 construction of Phase II of the Project under the Extended Build-Out Scenario would result in a number of significant environmental impacts, and certain of these impacts cannot be fully mitigated. All such impacts have been thoroughly analyzed in the FSEIS, as discussed above. Among other things, prolonged Phase II construction would result in a significant localized adverse impact on neighborhood character during the construction period in the immediately surrounding area of the Phase II site as a result of significant construction traffic and noise impacts, and the visual effects of construction that would be experienced in the area. In addition, significant adverse noise impacts would be experienced during a prolonged construction period at the exterior of a number of residential and other buildings in the study area, including a public school located across Atlantic Avenue from the Phase II site, although the resulting interior noise levels within the school would not materially impair its operation. There also would be significant operational traffic and pedestrian impacts upon completion of Phase II after an extended build-out. Moreover, a delay in Phase II build-out would extend the duration of the significant adverse impact of Phase I of the Project on passive open space resources in the non-residential study area.

ESD has refined and supplemented the measures that it had previously imposed with respect to Project construction in order to minimize or avoid potential impacts addressed in the FSEIS. In addition to requirements previously imposed, the project sponsors and their contractors will have to prepare and adhere to dust control plans; utilize equipment that meets stringent noise specifications and demonstrate that noisy equipment complies with such specifications pursuant to a detailed protocol; limit emissions from equipment over 50 horsepower with state of the art emission controls; use vehicles that are equipped with sound-mitigated back-up alarms; erect visually enhanced construction fencing around many areas of the Project site; and take specific steps to improve compliance with construction-related environmental requirements. Because even with the source control measures required by ESD significant noise impacts are predicted at various buildings near the project site under the Extended Build-Out scenario, the project sponsors will be obligated to expand its current program to offer double paned windows and alternative ventilation to affected buildings. Compliance with these and other construction impacts minimization measures will be monitored by qualified engineers and technical personnel engaged or employed by the project sponsors. The work of these on-site environmental monitors will in turn be overseen by ESD’s team of environmental monitors. In addition, in order to partially address the temporary passive open space impact identified in the FEIS and FSEIS, the project sponsors will improve Times Plaza,

an existing open space area located directly across Flatbush Avenue from the project site. While these and other measures identified in the course of the environmental review would not eliminate the adverse effects of a prolonged build out of the Project, they would minimize such impacts to the extent practicable.

In issuing this Supplemental Findings Statement, ESD 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, as discussed in both the 2006 FEIS and FSEIS. Among other things, ESD has considered whether it would be in the public interest to reduce the density of Phase II of the Project, since less density would mean smaller buildings, fewer residents and a reduction in traffic congestion, and perhaps a shorter duration period for each building's construction. However, a reduced Phase II would also have fewer benefits – most notably, less market rate and affordable housing units than currently planned. To meet expected regional growth in the demand for housing, these lost housing units 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. After considering carefully both the benefits of Phase II of the Project and the associated environmental impacts disclosed in the FSEIS with respect to its construction under the Extended Build-Out Scenario, ESD has determined that its density remains appropriate.

ESD has prepared the FSEIS in accordance with the Court Order to examine the potential impacts of Phase II of the Project over an Extended Build-Out Scenario, assuming that it is not completed until the outside date for substantial completion of the Project in 2035. Although the pace of construction cannot be predicted with accuracy, the project sponsors have advised ESD of their intention to pursue construction on a considerably shorter schedule that is more consistent with the timetable assumed in the 2006 FEIS. Thus, it is likely that the Project will be constructed on a timetable falling within the range of schedules examined in the 2006 FEIS and FSEIS. ESD is making these supplemental findings on the basis of the information provided in both those documents.

**XII. Conclusions and Certification of Supplemental Findings Required by SEQRA**

Having considered the DSEIS and the FSEIS, including the comments on the DSEIS and responses thereto, and comments received on the FSEIS, and the preceding written facts and conclusions, and the environmental measures described above, ESD 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 approval of Phase II of the Project (as described in the 2009 MGPP) and the 2014 MGPP Amendments 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 2006 FEIS, FSEIS, 2006 Findings Statement and this Supplemental Findings Statement have identified as practicable.

**Agency: NYS Urban Development Corporation  
d/b/a Empire State Development  
633 Third Avenue  
New York, New York 10017**

**Signature of Responsible Officer:** \_\_\_\_\_

**Name of Responsible Officer:** \_\_\_\_\_

**Title of Responsible Officer:** \_\_\_\_\_

**Date:** \_\_\_\_\_