

Court of Appeals of the State of New York

Index No. 114631/09

In the Matter of the Application of

DEVELOP DON'T DESTROY (BROOKLYN), INC., COUNCIL OF BROOKLYN NEIGHBORHOODS, INC., ATLANTIC AVENUE BETTERMENT ASSOCIATION, INC., BROOKLYN BEARS COMMUNITY GARDENS, INC., BROOKLYN VISION FOUNDATION, INC., CARLTON AVENUE ASSOCIATION, INC., CENTRAL BROOKLYN INDEPENDENT DEMOCRATS, by its President Lucy Koteen, CROWN HEIGHTS NORTH ASSOCIATION, INC., DEAN STREET BLOCK ASSOCIATION, INC., DEMOCRACY FOR NEW YORK CITY, EAST PACIFIC BLOCK ASSOCIATION, INC., FORT GREENE ASSOCIATION, INC., FRIENDS AND RESIDENTS OF GREATER GOWANUS, PARK SLOPE NEIGHBORS, INC., PROSPECT HEIGHTS ACTION COALITION, by its President Patricia Hagan, PROSPECT PLACE OF BROOKLYN BLOCK ASSOCIATION, INC., SOCIETY FOR CLINTON HILL, INC., SOUTH OXFORD STREET BLOCK ASSOCIATION, and SOUTH PORTLAND BLOCK ASSOCIATION, INC.,

Petitioners-Respondents-Respondents,

(For Continuation of Caption See Inside Cover)

MOTION FOR LEAVE TO APPEAL

BRYAN CAVE LLP
*Attorneys for Respondent-Appellant-
Appellant Empire State Development
Corporation*
1290 Avenue of the Americas
New York, New York 10104
(212) 541-2000



For a Judgment Pursuant to Article 78
of the Civil Practice Law and Rules,

against

EMPIRE STATE DEVELOPMENT CORPORATION and
FOREST CITY RATNER COMPANIES, LLC,

Respondents-Appellants-Appellants.

Index No. 116323/09

In the Matter of the Application of

PROSPECT HEIGHTS NEIGHBORHOOD DEVELOPMENT COUNCIL, INC.,
ATLANTIC AVENUE LOCAL DEVELOPMENT CORP., BOERUM HILL
ASSOCIATION, INC., BROOKLYN HEIGHTS ASSOCIATION, INC., FIFTH
AVENUE COMMITTEE, INC., PARK SLOPE CIVIC COUNCIL, INC., PRATT
AREA COMMUNITY COUNCIL, INC., STATE SENATOR VELMANETTE
MONTGOMERY, NEW YORK CITY COUNCIL MEMBER LETITIA JAMES,
ALAN ROSNER, EDA MALENKY, PETER KRASHES, JUDY MANN,
RHONA HESTRONY, JAMES GREENFIELD, MICHAEL ROGERS, ANURAG
HEDA, ROBERT PUCA, SALVATORE RAFFONE, RHONA HETSTONY,
ERIC DOERINGER, JILLIAN MAY and DOUG DERRYBERRY,

Petitioners-Respondents-Respondents,

For a Judgment Pursuant to Article 78
of the Civil Practice Law and Rules,

against

EMPIRE STATE DEVELOPMENT CORPORATION and
FOREST CITY RATNER COMPANIES, LLC,

Respondents-Appellants-Appellants.

COURT OF APPEALS
STATE OF NEW YORK

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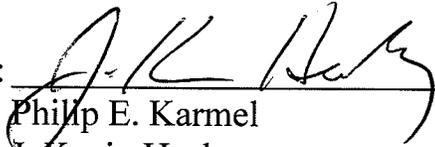
In the Matter of the Application of	:	
	:	New York County
DEVELOP DON'T DESTROY (BROOKLYN),	:	Index Nos. 114631/09, 116323/09
INC., et al.,	:	
	:	NOTICE OF MOTION FOR
Petitioners-Respondents-Respondents,	:	PERMISSION TO APPEAL
	:	TO COURT OF APPEALS
For a Judgment Pursuant to Article 78 of the CPLR	:	
	:	
– against –	:	
	:	
EMPIRE STATE DEVELOPMENT	:	
CORPORATION and FOREST CITY RATNER	:	
COMPANIES, LLC,	:	
	:	
Respondents-Appellants-Appellants.	:	
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In the Matter of the Application of	:	
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PROSPECT HEIGHTS NEIGHBORHOOD	:	
DEVELOPMENT COUNCIL, INC., et al.,	:	
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EMPIRE STATE DEVELOPMENT	:	
CORPORATION and FOREST CITY RATNER	:	
COMPANIES, LLC,	:	
	:	
Respondents-Appellants-Appellants.	:	
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PLEASE TAKE NOTICE that upon the annexed affirmation of Philip E. Karmel, dated May 11, 2012; the record on appeal in the Appellate Division, First Department, from the order and decision of the Supreme Court, New York County (Friedman, J.), originally entered in the office of the Clerk of the County of New York on July 19, 2011 (the "Supreme Court Order"), which granted in part and denied in part the relief sought by petitioners-respondents-respondents in these Article 78 Proceedings; the Order of the Appellate Division, First Department, entered on April 12, 2012, for which notice of entry was served on April 12, 2012 (the "Appellate Decision"), which affirmed the Supreme Court Order; and upon all the pleadings and proceedings herein, respondent-appellant-appellant Empire State Development Corporation ("ESDC") will move this Court at the Courthouse located at 20 Eagle Street, Albany, New York, on May 21, 2012, at 10:00 a.m. for an order granting ESDC leave to appeal to this Court from the Appellate Decision, pursuant to CPLR § 5602(a)(1)(i), and granting ESDC such other relief as this Court may deem just and proper.

Dated: New York, New York
May 11, 2012

BRYAN CAVE LLP

By:



Philip E. Karmel

J. Kevin Healy

1290 Avenue of the Americas
New York, New York 10104

212-541-2311 (phone)

212-541-1413 (fax)

*Attorneys for Respondent-Appellant-
Appellant Empire State
Development Corporation*

TO: HON. ANDREW W. KLEIN, CLERK OF THE COURT
Court of Appeals

Jeffrey S. Baker, Esq.
YOUNG, SOMMER, WARD, RITZENBERG, BAKER & MOORE, LLC
5 Palisades Drive
Albany, New York 12205
*Attorneys for Petitioners-Respondents-Respondents
Develop Don't Destroy (Brooklyn), Inc., et al.,*

Albert K. Butzel, Esq.
URBAN ENVIRONMENTAL LAW CENTER
249 West 34th Street, Suite 400
New York, New York 10001
*Attorney for Petitioners-Respondents-Respondents
Prospect Heights Neighborhood Development Council, Inc., et al.,*

Jeffrey L. Braun, Esq.
KRAMER LEVIN NAFTALIS & FRANKEL LLP
1177 Avenue of the Americas
New York, New York 10036
*Attorneys for Respondent-Appellant-Appellant
Forest City Ratner Companies, LLC*

Richard G. Leland, Esq.
FRIED, FRANK, HARRIS, SHRIVER & JACOBSON LLP
One New York Plaza
New York, New York 10004-1980
*Attorneys for Respondent-Appellant-Appellant
Forest City Ratner Companies, LLC*

COURT OF APPEALS
STATE OF NEW YORK

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In the Matter of the Application of :

DEVELOP DON'T DESTROY (BROOKLYN), :
INC., et al., :

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New York County
Index Nos. 114631/09, 116323/09

**AFFIRMATION IN SUPPORT
OF MOTION FOR
PERMISSION TO APPEAL
TO THE COURT OF
APPEALS**

PHILIP E. KARMEL, an attorney admitted to the practice of law in the State of New York, affirms and declares under penalty of perjury:

1. I am a member of Bryan Cave LLP, attorneys for New York State Urban Development Corporation doing business as Empire State Development Corporation (“ESDC”) in these Article 78 proceedings, which challenge ESDC’s determinations, made on September 17, 2009 and again on December 16, 2010, not to prepare a Supplemental Environmental Impact Statement (“SEIS”) for the Atlantic Yards Project (the “Project”) in Brooklyn. I make this affirmation upon personal knowledge of the history of these proceedings.

STATEMENT OF THE PROCEDURAL HISTORY

2. In 2006, ESDC prepared a comprehensive 3,500-page Final Environmental Impact Statement (“FEIS”) for the Project and approved the general project plan, establishing the location, size, uses and site plan for the Project’s 17 buildings. A1198-3181, A3276-3433.¹ Phase I of the Project entails construction of an arena, five other buildings, below-grade parking facilities, a new subway entrance, a new Long Island Rail Road yard and a surface parking lot. A3846, A3852-3858. Phase II is comprised of improvements to be located east of 6th

¹ Citations to “A___” reference the Joint Appendix filed with the Appellate Division, a copy of which has been filed with the Court of Appeals with this motion.

Avenue, including a platform over the rail yard, 11 predominantly residential buildings, additional below-grade parking facilities to replace the surface parking lot and 8 acres of open space. A3846-3847, A3858-3861. In connection with their approval of the Project in 2006, the ESDC Directors adopted a comprehensive statement of findings under the State Environmental Quality Review Act (“SEQRA”), A3182-3275, which identified a broad range of measures to mitigate the significant environmental impacts of the Project, including those impacts arising from its lengthy construction period. A3227-3252.

3. All lawsuits challenging the FEIS and the other 2006 Project approvals were dismissed. *See, e.g., Develop Don’t Destroy (Brooklyn) v. Urb. Dev. Corp.*, 59 A.D.3d 312 (1st Dep’t) (dismissing challenge to FEIS), *leave to appeal denied*, 13 N.Y.3d 713 (2009); *Anderson v. N.Y.S. Urb. Dev. Corp.*, 45 A.D.3d 583 (2d Dep’t 2007) (same), *leave to appeal denied*, 10 N.Y.3d 710 (2008); *Goldstein v. N.Y.S. Urb. Dev. Corp.*, 13 N.Y.3d 511 (2009) (dismissing challenge to use of eminent domain); *Goldstein v. Pataki*, 516 F.3d 50 (2d Cir.) (same), *cert. denied*, 554 U.S. 930 (2008).

4. By the time the lawsuits had been dismissed, clearing the way for acquisition of the Project site by eminent domain, the economic downturn had adversely affected the real estate market and the availability of financing for development projects.

5. As a result, on September 17, 2009, ESDC approved modifications to the general project plan to allow the private developer – Forest City Ratner Companies (“FCRC”) – more time to obtain the financing needed to acquire the land and air rights required for one of the Phase I buildings and seven of the Phase II buildings. The modifications approved by ESDC on September 17, 2009 did not materially alter the location, size, uses or site plan for the 17-building Project analyzed in the FEIS and approved in 2006, but they did give FCRC up to 25 years to complete construction, subject to FCRC’s contractual obligation to use commercially reasonable efforts to complete the Project within a 10-year time frame, and certain contingencies. A3852, A3914, A3965.

6. In conjunction with their approval of the modifications in 2009, the ESDC Directors determined that a SEIS was not warranted based on the information in the FEIS and a supplemental environmental assessment prepared in 2009 (the “2009 Technical Memorandum,” annexed as Exhibit A).

7. The FEIS had employed a 10-year schedule for the construction-period analysis because ESDC had determined that doing so would “concentrate construction activities at the site and assure[] that the reasonable worst-case construction condition is analyzed.” FEIS at 24-453 (A3079). ESDC likewise utilized a 10-year construction period as one scenario studied in the 2009 Technical Memorandum. In recognition of the potential for delays as a result of

economic conditions, the 2009 Technical Memorandum also considered the effects of a substantial delay in the Project, assuming that construction would take place over a 15-year period and would not be completed until 2024.

8. On October 16, 2009 and November 18, 2009, petitioners-respondents-commenced these proceedings to challenge ESDC's determination not to prepare a SEIS for the Project.

9. Because the 2009 modifications with respect to the timing of FCRC's acquisition of land and air rights for the Project did not materially alter the Project's location, size, uses or site plan, the focal point of the litigation below was whether the potential for a longer build-out period, in and of itself, warranted a SEIS.

10. On March 10, 2010, the trial court dismissed the proceedings in a written decision annexed as Exhibit B.

11. On November 9, 2010, the trial court granted a motion to renew in a written decision (annexed as Exhibit C) that directed ESDC to make further findings with respect to the potential impacts of a delay in Project construction. As grounds therefor, the trial court cited the development agreement that ESDC and FCRC executed on December 23, 2009 (the "Development Agreement"), which required FCRC to use commercially reasonable efforts to complete the Project by 2019, but set an outside date for Project completion in 2035, which is beyond the

10-year and 15-year time frames studied in the 2009 Technical Memorandum.

Exh. C at 9-17.

12. On December 16, 2010, ESDC made the further findings, based upon the FEIS and a second supplemental environmental assessment (the “2010 Technical Analysis,” annexed as Exhibit D), which assessed the environmental impacts of a delay in construction all the way to 2035, the outside date allowed under the relevant agreements. ESDC also prepared a document titled “ESDC Response to Supreme Court’s November 9, 2010 Order,” annexed as Exhibit E. On the basis of these documents, ESDC once again determined that a SEIS was not warranted in connection with the modifications to the general project plan approved in 2009.

13. On July 13, 2011, the trial court, in a written decision annexed as Exhibit F, upheld ESDC’s determination not to prepare a SEIS for Phase I of the Project, but required a SEIS for Phase II of the Project. *See* Exh. F at 9, 18. The trial court criticized ESDC for relying upon “common sense” in concluding that “less intense construction will result in lower impacts for conditions such as traffic, noise, and air quality” rather than “technical studies.” Id. at 11.

14. On April 12, 2012, the Appellate Division issued a Decision and Order, annexed as Exhibit G, affirming the trial court’s decision.

15. The courts below held that ESDC (i) was arbitrary and capricious in examining environmental impacts while continuing to use a 10-year construction schedule as one of the scenarios studied in the 2009 Technical Memorandum, in light of the provisions of the Development Agreement; and (ii) failed to undertake the requisite “hard look” at the environmental impacts of a potential delay in construction beyond the 10 years.

16. More particularly, the Appellate Division held that ESDC’s assessment of the potential environmental impacts of a delay in the Project’s construction schedule was deficient because ESDC’s detailed supplemental environmental assessments (the 2009 Technical Memorandum and 2010 Technical Analysis) lacked unspecified “technical studies.” Exh. G (Decision and Order at 10). The lower courts never explained what “technical studies” ESDC should have prepared or what new, useful information such studies would have yielded that is not already available to ESDC in the FEIS and the supplemental environmental assessments it prepared in 2009 and 2010. The lower courts also ignored ESDC’s specific determination that a “SEIS would not provide information that would be of material utility in identifying the environmental impacts of the Project or practicable measures to minimize or avoid such impacts beyond those already imposed [by the FEIS].” Exh. E at 37.

17. The Appellate Division's order requiring that a SEIS be prepared to study the impacts of a delay in the Project's construction schedule is an unprecedented expansion of SEQRA that would interfere not only with the progress being made on the Atlantic Yards Project, but with the progress of many other large-scale projects that are subject to delays due to adverse economic conditions or other circumstances.

TIMELINESS OF THIS MOTION FOR LEAVE TO APPEAL

18. ESDC was first served with the Decision and Order with Notice of Entry (annexed as Exhibit H) by overnight mail on April 12, 2012. This motion for leave to appeal is timely served within 30 days of the service of Notice of Entry.

JURISDICTION OF THIS COURT

19. The Appellate Division's Decision and Order is a final order pursuant to CPLR § 5611. This Court has jurisdiction to grant leave to appeal under CPLR § 5602(a)(1)(i).

QUESTIONS PRESENTED FOR REVIEW

20. Whether SEQRA requires a lead agency to prepare unspecified "technical studies," rather than rely upon the information in the FEIS, previous SEQRA findings, a new environmental assessment and the application of agency judgment, when it makes a determination whether to prepare a SEIS to study the

delay of a major real estate development project that is otherwise unchanged in scope?

21. Whether the lower courts erred in giving no weight to the lead agency's determination that a SEIS would not provide information that would be of material utility in identifying the environmental impacts of project delays or practicable measures to minimize or avoid such impacts beyond those already identified in the FEIS?

22. Whether the lower courts erred in ordering that a SEIS be prepared to study the environmental impacts of a delay in the Project's construction schedule, where ESDC had determined that the Project itself would not change materially and the delay would cause construction activities to be of reduced intensity over a longer time period?

WHY THE QUESTIONS PRESENTED MERIT REVIEW BY THIS COURT

23. Reading the Appellate Division decision, one would never guess that ESDC twice undertook detailed, substantive analyses to assess the potential environmental impacts of a delay in project construction, first in the 2009 Technical Memorandum (which assumed a substantial delay to 2024) and subsequently in the 2010 Technical Analysis (which assumed a delay all the way out to 2035).

24. For example, in the 2010 Technical Analysis, ESDC examined three sorts of impacts: (i) those that could occur upon completion of the Project in 2035; (ii) the effects of construction *activities* taking place over an extended period of time; and (iii) impacts associated with the *condition* of the Project site during an extended construction period. Exh. D at 7-71. In doing so, the agency developed a conceptual sequence of construction-related activities consistent with a hypothetical build year of 2035, with the understanding that construction of the Project would proceed on a parcel-by-parcel basis, with each building being individually designed, financed, and built. It also accounted for the fact that during certain periods more than one building could be expected to be under construction simultaneously. In order to thoroughly examine construction-related impacts, ESDC depicted how site conditions would exist at seven stages of Project completion. These seven stages were used as “snapshots” in time, showing how the Project site would appear, and would affect the surrounding area, at certain points in the construction process.

25. Notwithstanding the short shrift paid to ESDC’s efforts by the lower courts, the analyses presented in the 2009 Technical Memorandum and 2010 Technical Analysis were painstaking, thorough and sufficient. No prior case has ever required a SEIS-level analysis to determine whether a SEIS should be prepared.

26. The Appellate Division faulted the 2009 Technical Memorandum for its conclusion that construction impacts “would be ‘less intense’” if Project construction were to be spread out over a longer period, without providing a “comparison of the environmental impacts of ‘intense’ construction over a 10-year period with the environmental impacts of construction that continues for 25 years.” Exh. G (Decision and Order at 9-10). In making this criticism the Appellate Division turned a blind eye to the fact that the record in this matter contains a detailed examination of the impacts of Project construction over *three* separate time periods: 10 years, 15 years and 25 years. The lower court did not explain what sort of “comparison” beyond that already in the record was required.

27. The Appellate Division devoted only one page of its opinion to the 2010 Technical Analysis. *See* Exh. G (Decision and Order at 10-11). The lower court did not identify any specific elements of ESDC’s analysis that were flawed, or any specific environmental impacts that ESDC overlooked, but summarily dismissed the analysis on the ground that it failed to incorporate unspecified “technical studies.” The Appellate Division did not explain what type of additional “technical studies” were called for, or what information they might yield.

28. Thus, the Appellate Division, by overturning ESDC's determination for some failure to include additional comparisons or more technical studies, substituted its own judgment for that of the agency as to the nature and extent of the assessment required for a determination as to whether a SEIS should be prepared.

29. This Court has laid down the general rule that, in considering whether an agency has complied with the substantive requirements of SEQRA, the courts should "review the record to determine whether the agency identified the relevant areas of environmental concern, took a 'hard look' at them, and made a 'reasoned elaboration' of the basis for its determination." Jackson v. N.Y.S. Urb. Dev. Corp., 67 N.Y.2d 400, 417 (1986) ("Jackson"). At the same time, this Court has further established that this three-pronged test is "tempered" by the "rule of reason," taking into account the particular circumstances of the case. Id. One such circumstance is where the issue before the agency involves whether to prepare a SEIS (rather than an EIS).

30. This Court specifically addressed that circumstance in Riverkeeper, Inc. v. Planning Bd. of Town of Southeast, 9 N.Y.3d 219 (2007). There, this Court emphasized the discretionary nature of an agency's decision on the need for a SEIS, as compared to the determination of whether to prepare an EIS in the first instance. Thus, the Court in Riverkeeper highlighted the fact that "[t]he

relevant SEQRA regulations provide that: “[t]he lead agency *may* require a supplemental EIS,” as “distinguished from regulations regarding the preparation of a DEIS or FEIS, which a lead agency must ... prepare.” 9 N.Y.3d at 231 (emphasis in original) (quoting 6 N.Y.C.R.R. § 617.9[a][7][i]).

31. In sweeping aside ESDC’s judgment with respect to the environmental impacts of construction delays, the Appellate Division made no mention of the Riverkeeper standard, which interpreted Jackson in the context of an agency’s determination whether to prepare a SEIS.

First Question for Review

32. The Appellate Division’s determination that unspecified “technical studies” should have been used to assess the impacts of a delay creates a new SEQRA requirement not heretofore imposed by this Court’s SEQRA precedents. The first question presented for this Court’s review provides this Court with an opportunity to clarify the law on this point.

33. The first question also provides this Court with an opportunity to provide guidance to lead agencies on the extent of their discretion with respect to the assessment methods that should be used when determining whether to prepare a SEIS to study the potential environmental impacts of a delay in a project’s construction.

34. Doctrinally, the first question presented thus provides this Court with an opportunity to explain how Jackson's "hard look" standard should be integrated with this Court's holding in Riverkeeper that particular deference is due to an agency decision not to prepare a SEIS. ESDC asserts that the principles articulated in Riverkeeper result from the logical application of the "rule of reason" under Jackson to a circumstance where a comprehensive FEIS has already been prepared, findings under SEQRA have been issued, and mitigation measures have been established and enforced. At that point in the process, an agency will have been steeped in a project and its impacts for years, and its determination – drawing from a highly developed and comprehensive record – can be based on common sense, agency judgment and a focused environmental analysis deemed by the agency to be appropriate. ESDC contends that such a judgment merits particular deference under the clear language of the SEQRA regulations – and this Court's SEQRA jurisprudence – and should not be overturned for some unspecified failure in making comparisons or providing further unspecified technical studies.

35. The first question presented for review would also give this Court the opportunity to discuss the role of common sense and agency judgment in making determinations about whether project delays merit examination in a SEIS, in the face of the phenomenon known by some practitioners as "SEQRA creep" – where the analysis for every project must be at least as complex as the one for the

project that preceded it. This issue is particularly important because large, complex development projects (such as the 42nd Street Redevelopment Project reviewed in Jackson, Battery Park City, the World Trade Center redevelopment, the “Queens West” project, major university expansions, and other complex developments) are frequently delayed by litigation and economic cycles.

36. The decision of the Appellate Division leaves substantial uncertainty as to the depth of the analysis required to be performed by agencies facing such delays in deciding whether a SEIS is required. ESDC believes that such uncertainty is highly counterproductive to the success of these types of projects.

Second Question for Review

37. In Riverkeeper, this Court held that an agency’s “hard look” and determination whether to prepare a SEIS may rely on “material already in its file.” 9 N.Y.3d at 233. The second question for this Court’s review provides the Court with the opportunity to synthesize that holding with the broader principle articulated in Riverkeeper regarding the discretionary nature of the determination whether or not to prepare a SEIS.

38. Here, the Appellate Division disregarded ESDC’s determination that a SEIS would not provide information that would be of material utility in further identifying the environmental impacts of the Project or practicable

measures to minimize or avoid such impacts beyond those already imposed by the FEIS. *See supra* at ¶ 16. In making this determination, ESDC drew upon an extraordinarily comprehensive record – including an FEIS that ran for thousands of pages, with a 100-page chapter devoted to construction impacts assumed to last for a decade, comprehensive SEQRA findings that spelled out a broad regime of construction-related mitigation measures, and two full-blown supplemental assessments prepared in 2009 and 2010.

39. The second question presented for review would allow this Court to define the degree of deference owed to an agency’s determination that a SEIS would not be of material utility, in light of extensive environmental analyses already in the record and further consideration in supplemental environmental assessments.

Third Question for Review

40. The third question for review – which asks this Court to consider whether a SEIS should be judicially mandated when a major project is delayed by adverse economic conditions – raises an issue that is critical to the success of major real estate development projects in New York State, many of which are subject to years of delay due to economic conditions or other factors. If the courts were to require a SEIS to address project delays, even where the project has not otherwise changed and the agency has found that the effect of those delays

is to spread less intense construction activities over a longer period, they will trigger the full panoply of SEQRA procedures – and open the door to a renewed round of SEQRA litigation – with every dip in the economic cycle. They will thereby render the process for developing long-term projects in the State, which is already very difficult, virtually impossible.

41. Thus, with respect to the Atlantic Yards Project, the lower court's decision casts a shadow of uncertainty on Phase II of the Project. That shadow is likely to last for years if the decision of the Appellate Division is allowed to stand, while a SEIS is scoped, prepared in draft form, subject to public review and comment, finalized and inevitably challenged in a new round of litigation proceedings and appeals. The adverse effects of such long-term uncertainty well illustrate the disruption to major projects which would result from a court-mandated SEIS to study project delays in the midst of a project's implementation. *See generally Jackson*, 67 N.Y.2d at 425 (“A requirement of constant updating, followed by further review and comment periods, would render the administrative process perpetual and subvert its legitimate objectives.”).

WHEREFORE, it is respectfully requested that the motion seeking
leave to appeal be granted.

Dated: New York, New York
May 11, 2012



PHILIP E. KARMEL

LIST OF SUBSIDIARIES AND AFFILIATES

New York State Urban Development Corporation doing business as Empire State Development Corporation is a public authority of the State of New York created by the Urban Development Corporation Act of 1968. Its subsidiaries or affiliates are as follows:

1. 125th Street Mart, Inc.
2. 260-262 W. 125th Street Corp.
3. HUDC 323 St. Nicholas Realty Corp.
4. Broadway East Townhouses, Inc.
5. Carlken Manor Houses, Inc.
6. Cathedral Manor Houses, Inc.
7. Cherry Hill (Syracuse Hill III) Corporation
8. Highland Canal View Houses, Inc.
9. Kennedy Square (Syracuse Hill I) Corporation
10. Kenney Plaza I Corporation
11. Unity Park II (Niagara Park) Corp.
12. 42nd St. Development Project, Inc.
13. 900 Woolworth Redevelopment Corporation
14. Apollo Theatre Redevelopment Corporation
15. Archive Preservation Corporation
16. Brooklyn Arena Local Development Corporation
17. Brooklyn Bridge Park Development Corporation
18. Canal Side Local Development Corporation
19. Empire State Allsub Corporation*
20. Empire State Community Development Corporation
21. Empire State New Market Corporation
22. Erie Canal Harbor Development Corporation
23. Erie County Stadium Corporation
24. Excelsior Capital Corporation
25. FDA Headquarters, Inc.
26. Fordham Commercial Redevelopment Corporation
27. Governors Island Redevelopment Corporation
28. Harlem Community Development Corporation
29. Harriman Research and Technology Development Corporation
30. Harrison House Holding Corporation

31. Lower Manhattan Development Corporation
32. Metrocenter Development Corporation
33. Moynihan Station Development Corporation
34. New York Convention Center Development Corporation
35. New York Empowerment Zone Corporation
36. New York Harbor Preservation and Development Corporation
37. New York Job Development Authority
38. New York Liberty Development Corporation
39. New York State Mortgage Loan Enforcement Corporation
40. Queens West Development Corporation
41. Rebraf Redevelopment Corporation
42. Roosevelt Island Development Corp.
43. Seaport Redevelopment Corporation
44. Statewide Local Development Corporation
45. Times Square Hotel, Inc.
46. Townsend Towers Holding Corporation
47. UDC/Albee Square Redevelopment Corporation
48. UDC/Commercial Center, Inc.
49. UDC/Commodore Redevelopment Corporation
50. UDC-Harlem, Inc.
51. UDC-Love Canal, Inc.
52. UDC Special Development Corporation
53. UDC-St. George, Inc.
54. UDC-Ten Eyck Development Corporation
55. UDC-Ten Eyck Development Corporation II
56. UDC-Ten Eyck Development Corporation III
57. UDC-Utica Redevelopment Corporation
58. Upstate Empire State Development Corporation
59. USA Niagara Development Corporation

* The following former ESDC subsidiaries have been merged into Empire State Allsub Corporation with Empire State Allsub Corporation as the sole surviving corporation: Audubon Development Corporation; Aurelius Cayuga Development Corporation; Beach Redevelopment Corporation; Civic Hall Preservation Corporation; Deposit Industrial Redevelopment Corporation; Eagle Bridge Thomson Redevelopment Corporation; High Technology Incubators, Inc.; Lysander Development Corporation; Mt. Morris West Development Corporation; Niagara Falls Development Corporation; Painted Post Plaza Corp.; Rochester-Goodman Street, Inc.; UDC-Aurora Development Corporation; UDC-Buffalo Avenue Development Corporation; UDC-Clinton Square Development Corporation; UDC-Dewitt Development Corporation; UDC-Greater Rochester, Inc.; UDC/Harlem Development Corporation; UDC-Niagara, Inc.; UDC-Outer Loop Development Corporation; UDC-Stadium, Inc.; Upper Lake Redevelopment Corporation; West 45th Street Industrial Condominiums, Inc.; and West Avenue Redevelopment Corporation.

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EXHIBITS

- Exhibit A** Technical Memorandum, Atlantic Yards Arena and Redevelopment Project, June 2009
- Exhibit B** Decision, Order and Judgment, Supreme Court, New York County, filed March 11, 2010
- Exhibit C** Decision/Order, Supreme Court, New York County, filed November 10, 2010
- Exhibit D** Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project, December 2010
- Exhibit E** Atlantic Yards Land Use Improvement and Civic Project, ESDC Response to Supreme Court's November 9, 2010 Order
- Exhibit F** Decision, Order and Judgment, Supreme Court, New York County, filed July 19, 2011
- Exhibit G** Decision and Order, Appellate Division, First Department, entered April 12, 2012
- Exhibit H** Notice of Entry, April 12, 2012

EXHIBIT A

TECHNICAL MEMORANDUM

Atlantic Yards Arena and Redevelopment Project

A. INTRODUCTION

In November 2006, the Empire State Development Corporation (ESDC), in cooperation with the Metropolitan Transportation Authority (MTA) and the City of New York (the City), prepared the Final Environmental Impact Statement (FEIS) for the Atlantic Yards Arena and Redevelopment Project (the “approved project”). The approved project was subject to environmental review under the State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR). With ESDC as the lead agency, the approved project is being implemented pursuant to a General Project Plan (GPP) affirmed by the New York State Urban Development Corporation (UDC), a public benefit corporation of New York State, doing business as ESDC. In December 2006, ESDC adopted its SEQRA findings, pursuant to New York Environmental Conservation Law Article 8, and its implementing regulations adopted by the New York State Department of Environmental Conservation (NYSDEC) and codified at Title 6 of the New York Code of Rules and Regulations (N.Y.C.R.R.) Part 617 (the SEQRA Regulations).

This Technical Memorandum describes a proposed modification to the GPP, changes related to design development, changes to the project’s schedule, and changes in background conditions and analysis methodologies under the *CEQR Technical Manual* and assesses whether the project as currently envisioned would result in any new or different significant adverse environmental impacts not previously identified in the FEIS.

B. PROJECT DESCRIPTION

2006 FEIS

The project analyzed in the 2006 FEIS involves 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 ESDC, and would eliminate blighted conditions in the area by implementing development that would include a new arena for the New Jersey Nets National Basketball Association team, along with commercial office and retail, possible hotel, open space, and residential uses, including affordable housing. The project would also partially relocate, expand, platform over, and improve the MTA/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 FEIS.)

The FEIS analyzed two build years: 2010 (Phase I), which included development of the entire program slated for the project site west of 6th Avenue and the new LIRR rail yard; and 2016

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(Phase II), when the buildings at the eastern end of the project site—together with the Phase I development—were anticipated to be developed and occupied. At full build-out, the approved project would comprise the 150-foot-tall arena and 16 other buildings with maximum heights ranging from approximately 184 feet to approximately 620 feet.

The 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 proposed project’s 17 buildings: (1) a residential mixed-use variation containing approximately 336,000 gross square feet (gsf) of commercial office space, 165,000 gsf of hotel use (approximately 180 rooms), 247,000 gsf of retail space, and up to 6.4 million gsf of residential use (approximately 6,430 units); and (2) a commercial mixed-use variation, which would permit more commercial office use in three buildings closest to Downtown Brooklyn and would contain approximately 1.6 million gsf of commercial office space, 247,000 gsf of retail space, and up to approximately 5.3 million gsf of residential use (approximately 5,325 units). Both variations would provide eight acres of publicly accessible open space, with up to one additional acre of private open space on the roof of the arena and an enclosed, publicly accessible Urban Room. Both variations also assumed that community facility uses would occupy portions of the retail and residential space. In addition, both program variations included approximately 3,670 parking spaces (see Table 1 and Figures 1 and 2). Finally, both variations included as part of the project a new subway entrance at the southeast corner of Atlantic and Flatbush Avenues, which would provide direct pedestrian access at the western end of the project site to the Atlantic Avenue/Pacific Street subway complex.

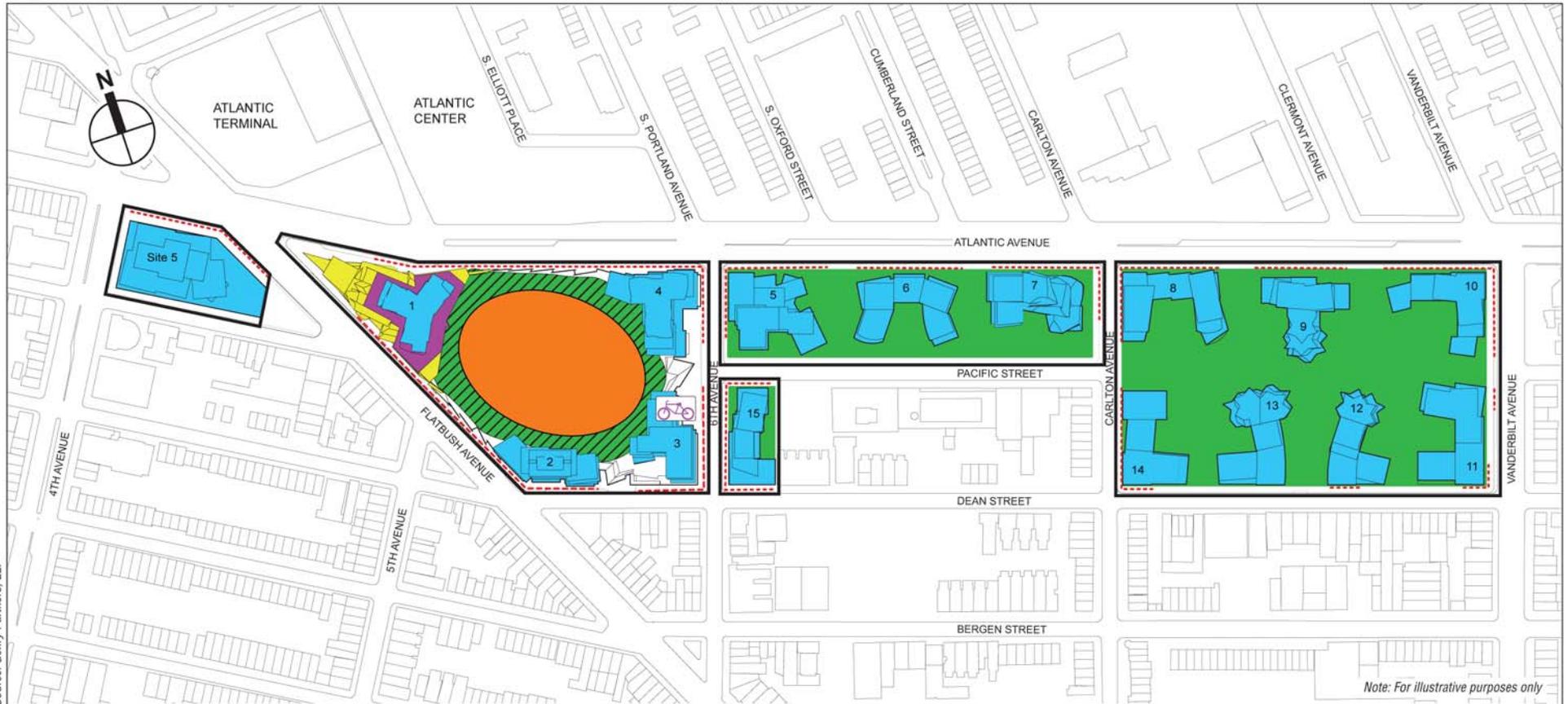
Table 1
FEIS Residential and Commercial
Mixed-Use Variation Programs for 2010 and 2016

Proposed Uses [†]	Residential Mixed-Use Variation	Commercial Mixed-Use Variation
Analysis Year: 2010 (Phase I: Development of arena block and Site 5)		
Residential	2,085,000 gsf (2,110 units)	994,000 gsf (1,005 units)
Hotel (180 rooms)	165,000 gsf	0 gsf
Retail	91,000 gsf	91,000 gsf
Commercial	336,000 gsf	1,606,000 gsf
Arena	850,000 gsf	850,000 gsf
Parking (spaces)	2,346 spaces	2,346 spaces
Private Open Space	±1 acres	±1 acres
Publicly Accessible Open Space	0 acres	0 acres
Analysis Year: 2016 (Phase I and Phase II: Full Build-Out)		
Residential ¹	6,363,000 gsf (6,430 units)	5,272,000 gsf (5,325 units)
Hotel (180 rooms)	165,000 gsf	0 gsf
Retail ¹	247,000 gsf	247,000 gsf
Commercial	336,000 gsf	1,606,000 gsf
Arena	850,000 gsf	850,000 gsf
Parking (spaces)	3,670 spaces	3,670 spaces
Private Open Space	±1 acres	±1 acres
Publicly Accessible Open Space	8 acres	8 acres
Notes:		
¹ A portion of the retail and residential space is expected to house community facilities.		
[†] An additional 100,000 gsf, not included in this table, may be built for a public school at the project site.		

Phase I

Phase II

9.4.08



Source: Gehry Partners, LLP

- Project Site Boundary
- Street-Level Retail
- Arena
- Residential Building
- Commercial Building
- Publicly Accessible Open Space
- Arena Rooftop-Private Open Space
- Hotel
- Bicycle Station

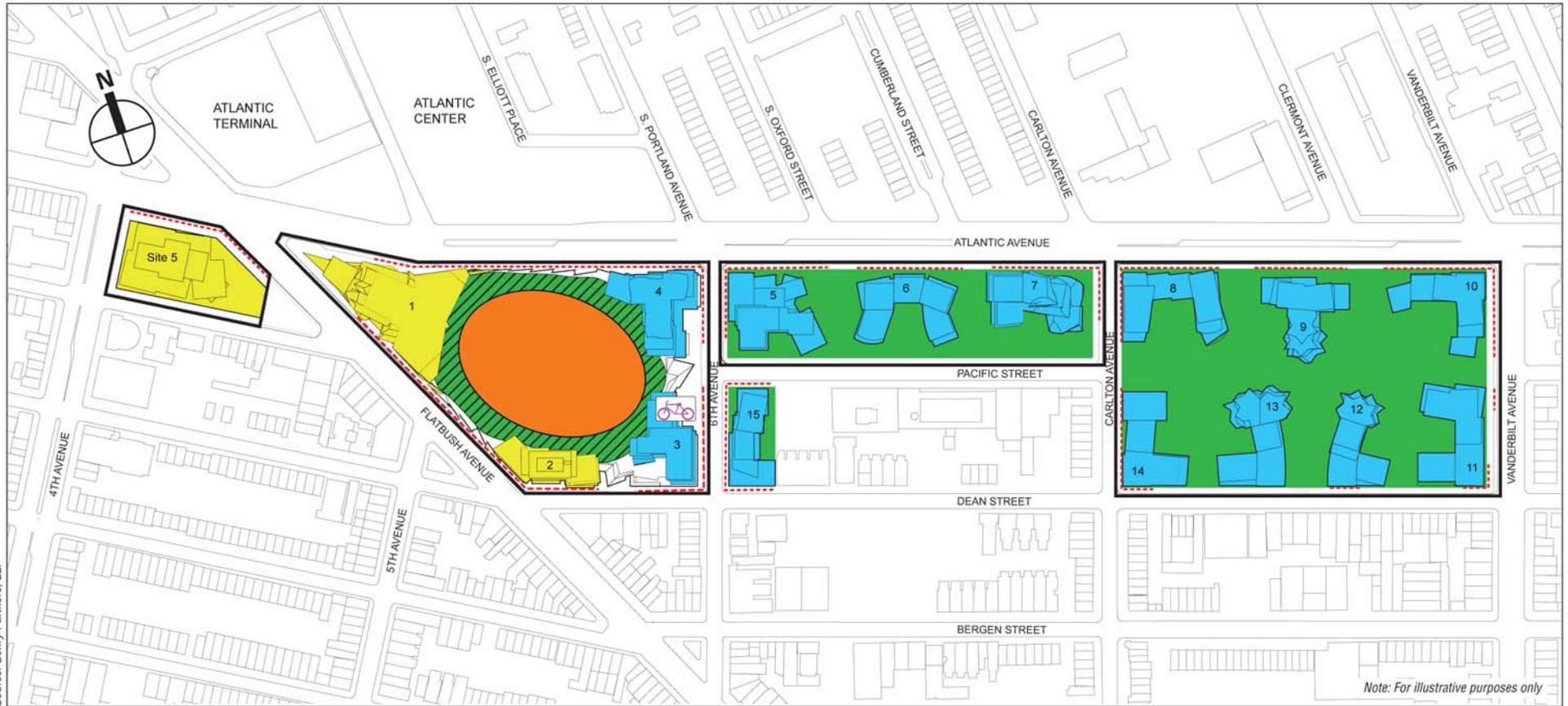
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Note: For illustrative purposes only

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Phase I

Phase II



Source: Gehry Partners, LLP

— Project Site Boundary

— Arena

— Residential Building

— Commercial Building

— Publicly Accessible Open Space

— Arena Rooftop-Private Open Space

- - - Street-Level Retail

— Bicycle Station

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SCALE

Note: For illustrative purposes only

The project as described in the FEIS also would include several roadway and pedestrian circulation changes near the project site: (1) Pacific Street between Flatbush and 6th Avenues, and 5th Avenue between Flatbush and Atlantic Avenues, would be closed to vehicular traffic to accommodate the arena, the Urban Room (the glass-enclosed, publicly-accessible space within Building 1 at the southeast corner of Flatbush and Atlantic Avenues), and a direct below-grade connection from the Urban Room to the Atlantic Avenue/Pacific Street subway complex; (2) Pacific Street between Vanderbilt and Carlton Avenues would be closed to vehicular traffic; (3) sidewalks along Flatbush Avenue between Atlantic Avenue and Dean Street would be set back to provide a lay-by lane for vehicles discharging and picking up passengers; (4) sidewalks along Atlantic Avenue between Flatbush and 6th Avenues would be set back to provide a lay-by lane along the south curb of Atlantic Avenue adjacent to the arena block and the street would be reconfigured to provide three eastbound through-lanes and four westbound lanes west of Fort Greene Place, and three travel lanes and a single 10-foot wide parking lane in each direction; (5) 6th Avenue between Atlantic and Flatbush Avenues would be converted to two-way operation, the roadway between Pacific Street and Flatbush Avenue would be widened by reducing the width of the sidewalks, and a lay-by lane between Atlantic Avenue and Dean Street would be provided; (6) Pacific Street between 6th and Carlton Avenues would be widened; and (7) wide sidewalks would be provided along the south side of Atlantic Avenue between Flatbush and Vanderbilt Avenues and the east side of Flatbush Avenue between Atlantic Avenue and Dean Street by setting the proposed buildings back from the street line.

PROJECT STATUS

Since final approval of the project in December 2006, a number of project-related construction tasks have been undertaken, including abatement and demolition work on certain project parcels under the control of the project sponsor or the MTA/LIRR. Remediation on several of the project sites, including the MTA/LIRR rail yard, has begun. Construction of the temporary MTA/LIRR rail yard has commenced, including excavation and installation work on the eastern portion of the yard (Blocks 1120 and 1121). Closure and dismantling of the Carlton Avenue Bridge started in January 2008 to accommodate the reconfigured rail yard. Several public infrastructure improvements have also begun, including the upgrade of water and sewer installations along Flatbush Avenue, Dean Street, and 6th Avenue bordering the arena block. Private utility work, including below-grade improvements for Con Edison, Verizon, Time Warner Cable, and National Grid services, commenced in June 2008. Two bus stops—the northbound B67 bus stop on the east side of Flatbush Avenue between Atlantic Avenue and Pacific Street, and the B65 bus stop on Dean Street at the east side of Flatbush Avenue—have been relocated until the completion of the utility and private infrastructure upgrades. The project sponsor also has begun implementing mitigation measures including installation of double-glazed or storm windows and air conditioning units to the affected residences (as identified in the FEIS), to mitigate the project's noise impacts during construction.

C. DESCRIPTION OF CHANGES AND MODIFICATIONS

GENERAL PROJECT PLAN MODIFICATION

A modification to the GPP is proposed to allow for the acquisition of property in two phases, rather than one phase as detailed in the FEIS. The first round of acquisition would occur towards the end of 2009 and would encompass the arena block including the streetbeds to be closed, Block 1129, Pacific Street between Vanderbilt and Carlton Avenues, Lots 42 and 47 on Block

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1121, and, if necessary for the construction and operation of the LIRR rail yard, easements or other property interests in Lot 35 on Block 1120 and possibly a small number of additional lots included in the project site. The second round would occur towards the end of 2011 and would encompass the remainder of the project site.

The GPP also would be modified to reflect the commitment by the project sponsor to assess project-generated day care enrollment and capacity as the project progresses, as explained in greater detail below.

Certain other changes to the GPP would affect the business terms, but would not have the potential to affect environmental conditions (see proposed 2009 Modified GPP). There are no modifications proposed to the Design Guidelines.

DESIGN DEVELOPMENT

As project planning has progressed, the project sponsor has further developed the design of certain buildings and eliminated certain project elements. This design development would affect the arena block and, to a lesser extent, Block 1129. None of the proposed uses of the project buildings would change; in addition, they would all still need to conform with the Design Guidelines detailed in the GPP and the principal exterior materials of the building would remain the same. The program, design, configuration, and uses of the proposed buildings on other blocks would not change. The changes are as follows:

- The height of **Building 1** would be reduced so that this structure would match the height of the nearby Williamsburgh Savings Bank building. The height of Building 1 would decrease from 620 feet to 511 feet.
- The design of the **arena façade** would be altered from the description in the FEIS to a more traditional design that incorporates a mixture of glass, masonry, and metal panels. In addition, the footprint of the arena would be slightly smaller compared to the description in the FEIS, and have a more efficient below-grade configuration. The area of the glass would be decreased from the images shown in the FEIS and the footprint would be slightly different; however, the design of the arena would conform to the GPP Design Guidelines and it would still be possible to see into the arena from certain vantage points in the surrounding area, including along Flatbush Avenue (see Figures 3a and 3b).
- As described in the FEIS, the project was anticipated to require the demolition and rebuilding of the **6th Avenue Bridge** between Atlantic Avenue and Pacific Street, to allow the arena's loading dock to extend below the bridge as well as to accommodate the LIRR's drill track. The arena's loading dock would now be redesigned to stay within the arena block footprint, and the LIRR drill track would be relocated partially off the arena block. Accordingly, the 6th Avenue Bridge would not need to be demolished.
- Due to the reconfiguration of below-grade space on the arena block, up to 100 spaces of **parking** that would have been provided under Building 2 of the arena block would be relocated to Block 1129. Initially, these parking spaces would be part of an interim parking facility on Block 1129. When Block 1129 is fully built out, this parking would be located in a below-grade facility.
- The **arena roof** would not incorporate stormwater detention tanks, a green roof, or rooftop private open space. Instead, the detention tanks would be located in the base of the arena and enlarged to accommodate the additional stormwater load associated with the elimination of the green roof.



NOTE: Figure does not include signage, which will conform to Design Guidelines

FOR ILLUSTRATIVE PURPOSES ONLY



NOTE: Figure does not include signage, which will conform to Design Guidelines

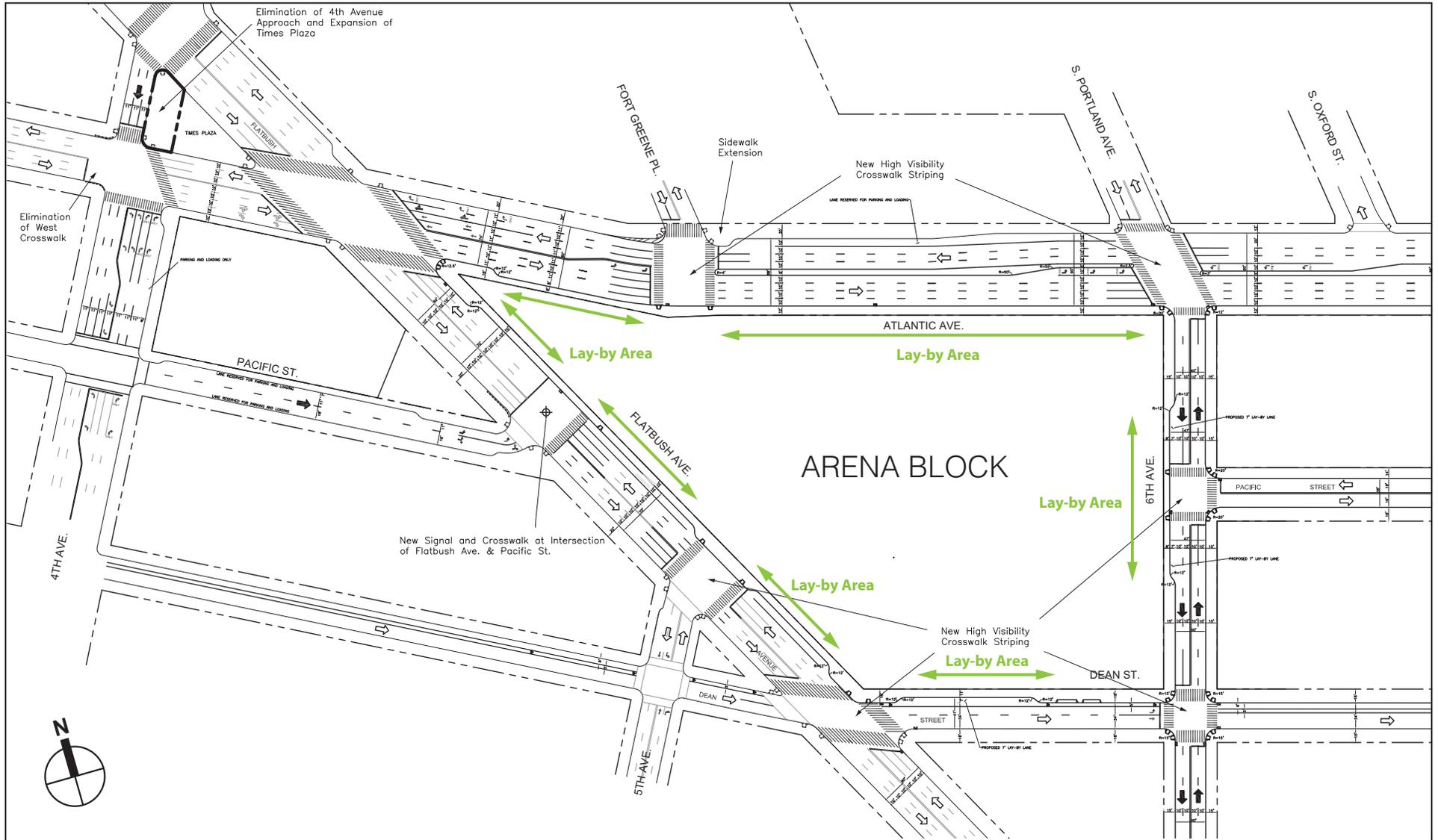
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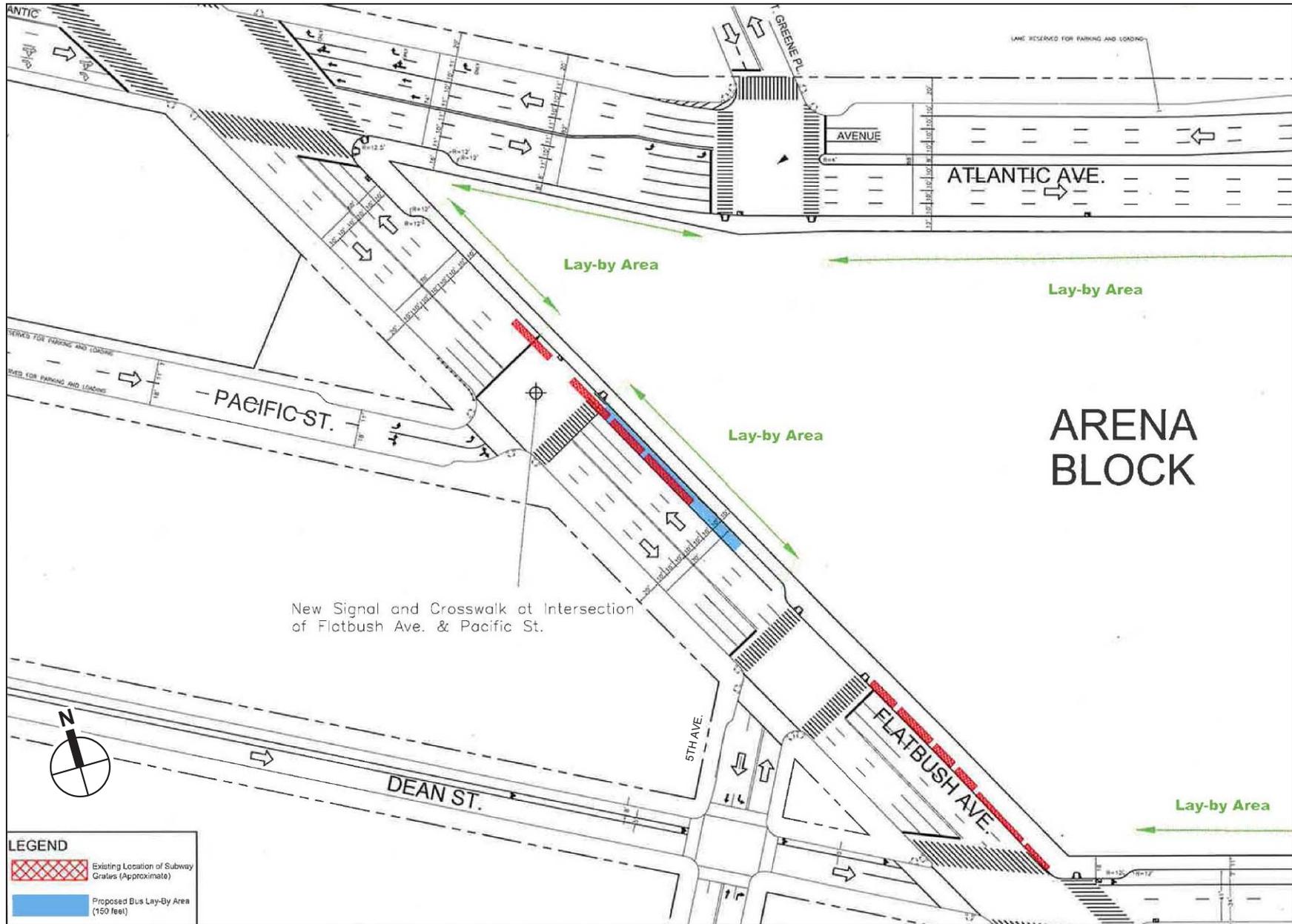
- **Heating systems** for the arena block would be decentralized, with the arena and each of the surrounding buildings on the arena block having individual HVAC and microturbine/distributed power systems. The arena boiler exhaust would be vented through a single stack located on the roof of Building 2.
- As stated in the project description in the FEIS and the GPP, the project will include a reconfigured and partially relocated yard to address the current and future needs of the **LIRR**. The proposed design for the yard would have seven tracks, compared to the nine described in the FEIS, and the drill track would be moved partially off of the arena block. The permanent yard would include the principal improvements described in the FEIS and GPP and would fully meet the operational needs and specifications of the LIRR. These improvements would include new switches and signals; the West Portal; a drill track; permanent storage tracks capable of storing MU series trains; a new electrical substation; the Central Instrument Location (CIL); toileting manifolds; employee facilities; and employee, truck and equipment parking.
- The **VIP entry** to the arena would be relocated to Atlantic Avenue, although an entrance from Dean Street would remain.
- The north **crosswalk** along Carlton Avenue at Dean Street and the north crosswalk along 6th Avenue at Dean Street would each be widened by one foot, compared to the design analyzed in the FEIS.
- As described in the FEIS (and as shown in Figure 4), it was proposed that the east sidewalk along northbound Flatbush Avenue on the arena block would be set back between Dean Street and Atlantic Avenue to provide for a 10-foot-wide lay-by lane along the east curb to accommodate pick-up/drop-off and loading/unloading activity adjacent to the arena. The **Flatbush Avenue lay-by lane** described in the FEIS had two lay-by sections: a northern section just south of Atlantic Avenue that included a bus stop and approximately eight parking spaces, and a southern section just north of Dean Street with approximately six parking spaces. Construction of these two lay-by sections would require the relocation and reconstruction of a series of existing subway vents along Flatbush Avenue between Dean Street and Atlantic Avenue. Due to the complexity in relocating these vents, a modified design for the lay-by lane entails the relocation of a smaller portion of the existing subway vents. As shown in Figure 5, the lay-by lane just south of Atlantic Avenue would remain unchanged, however, there would be no lay-by lane created along northbound Flatbush Avenue between 5th Avenue and Dean Street. The lay-by lanes on the other three sides of the arena block would not change.

Additionally, the Urban Room subway entrance may be reconfigured from what was analyzed in the FEIS. The illustrative transit connection design shown in the FEIS consisted of two 48-inch escalators each paired with a 9-foot-wide stair. Based on a more recent design developed in consultation with MTA/New York City Transit (NYCT), this configuration may be revised to group the two escalators together with a single, approximately 25-foot-wide stair. (Under both designs, a new elevator for ADA access would also be provided.) Overall, the total vertical circulation capacity of this revised configuration would be greater than the design analyzed in the FEIS.

SCHEDULE CHANGE TO 2019

The anticipated year of completion for Phase I of the project has been extended from 2010 to 2014 due to delays in the commencement of construction on the arena block. The anticipated





date of the full build-out of the project—Phase II—has been extended from 2016 to 2019 for the same reason. The projected completion date of the various project components is noted below in Table 2. As detailed in the table, the duration of construction of most project elements would not change as a result of their modified start date within the overall construction schedule. Rather, with the exception of project elements whose construction has already commenced, the schedule’s overall timeline reflects a shift by approximately three years from what was presented in the FEIS. The duration of the LIRR rail yard’s construction—as well as the duration of construction for the site preparation and platforms on Blocks 1120, 1121, and 1128—would be longer than anticipated in the FEIS.

**Table 2
FEIS and Revised Construction Phasing**

Project Component	FEIS		Revised	
	Duration	Time Period	Duration	Time Period
Phase I				
LIRR Rail Yard*	42 months	2006-2010	79 months	2007-2013
Arena**	32 months	2007-2009	29 months	2009-2012
Building 1	41 months	2007-2010	35 months	2010-2013
Building 2	22 months	2008-2009	22 months	2010-2012
Building 3	32 months	2008-2010	32 months	2010-2013
Building 4	36 months	2008-2010	36 months	2011-2014
Site 5	41 months	2007-2010	37 months	2011-2014
Phase II				
Platform Block 1120	23 months	2009-2011	29 months	2011-2014
Building 5	24 months	2011-2012	24 months	2013-2015
Building 6	21 months	2011-2012	21 months	2014-2016
Building 7	30 months	2011-2013	32 months	2014-2017
Site Preparation Blocks 1121 & 1129	71 months	2006-2012	107 months	2007-2014
Platform Block 1121	20 months	2011-2012	20 months	2014-2015
Building 8	18 months	2012-2014	18 months	2015-2017
Building 9	21 months	2014-2015	21 months	2017-2018
Building 10	20 months	2015-2016	20 months	2018-2019
Building 11	18 months	2015-2016	18 months	2018-2019
Building 12	21 months	2015-2016	20 months	2018-2019
Building 13	18 months	2014-2015	18 months	2017-2018
Building 14	15 months	2012-2013	15 months	2015-2016
Building 15	31 months	2010-2012	32 months	2012-2015
Notes: *Extended schedule reflects periodic suspensions of construction activity since commencement of the temporary yard in 2007.				
**Includes excavation				

D. CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

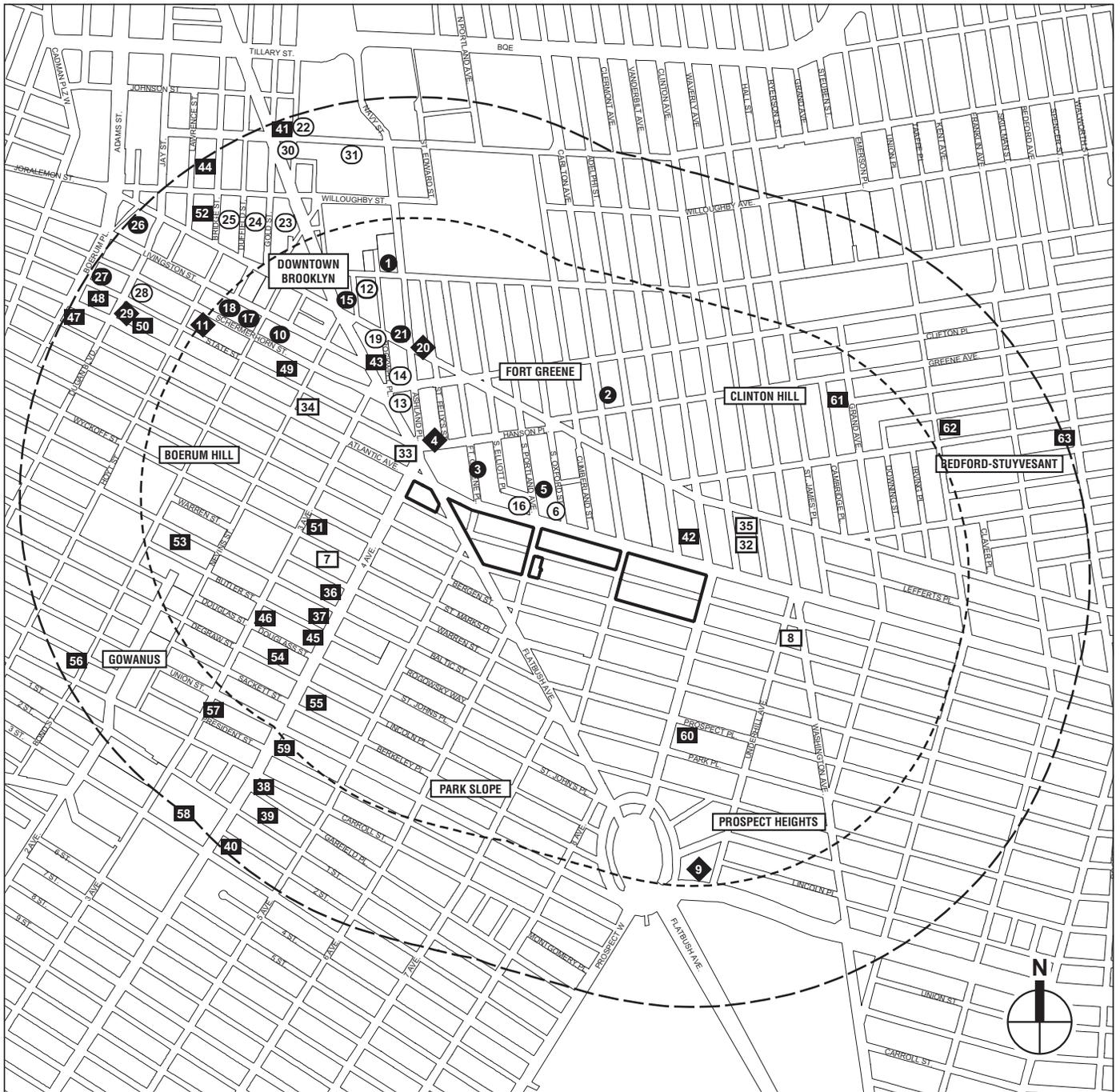
UPDATES TO BACKGROUND CONDITIONS

In connection with the preparation of this technical memorandum, background conditions and the status of development projects anticipated for completion through 2019 have been updated for the FEIS study area. Updates to the No Build list were made through review of New York City Department of Buildings permits, identification of construction sites, and review of project lists kept by various organizations. The updated No Build list includes projects that were planned prior to the current economic slowdown. Although some of these projects are now on

hold, they are assumed to still be moving forward in the future when market conditions improve. Therefore, since projects were not removed, this list is conservatively inclusive. Since the FEIS was completed in 2006, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development or are proposed (see Figure 6). Background conditions projected at this time include a higher number of residential units and less commercial development compared to the FEIS. As shown in Table 3, most of the development projects added since the FEIS will introduce new residential units, and several of the projects included as part of the FEIS, particularly those located in Downtown Brooklyn, have shifted from commercial to residential development. Table 3 provides updated information on developments in the study area. Information that has changed since the FEIS is noted in bold, italicized, and/or bracketed text (see table notes).

**Table 3
Development in the Study Area Recently Completed or Anticipated to be Complete by 2019**

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ⁸
1	LIU Recreation and Wellness Center (site of present Goldner Building and LIU tennis courts)	10,000 sf for Brooklyn Hospital Center/athletic staff; 117,000 sf wellness/recreation center with natatorium, tennis courts, track, 3,500 seating for athletic events	Primary	Completed
2	The Greene House, 383 Carlton Avenue between Lafayette and Greene Avenues	27 dwelling units	Primary	Completed
3	Atlantic Terminal	425,000 sf office, 470,000 sf retail, rehabilitated LIRR station ³	Primary	Completed
4	One Hanson Place (Williamsburgh Savings Bank Building)	178 [189] dwelling units; 30,000 sf dental offices; 23,000 sf retail	Primary	Completed [2007]
5	South Portland Avenue at Atlantic Avenue (Block 2004)	32 3-family houses	Primary	Completed
6	Atlantic Terrace (aka 669 Atlantic Avenue), Atlantic Ave. between South Portland Ave. and South Oxford St.	80 dwelling units; 12,100 [11,960] sf ground-floor retail, 87 subgrade parking spaces Rezoning: C6-1 to C6-2 ⁴	Primary	2010 [2008]
7	567 Warren Street between 3rd and 4th Avenues	20 dwelling units	Primary	Completed [2006]
8	The Washington, 35 Underhill Avenue between Pacific and Dean Streets	39 dwelling units	Primary	Completed [2006]
9	On Prospect Park/1 Grand Army Plaza [17 Eastern Parkway]	102 [200] dwelling units	Primary	Completed [2007]
10	Bond Street Garage	14,000 sf retail; 4,000 sf community facility	Primary	Completed
11	State Renaissance Court [Schermerhorn between Hoyt and Bond Streets (Block 171)]	158 [135] units, 14,700 sf ground-floor retail and 50 parking spaces, 14 townhouses ⁵	Primary	Completed [2009]
12	80 DeKalb Avenue between Hudson Avenue and Rockwell Place	335,000 [430,000] sf residential (365 residential units)	Primary	2010 [2009]
13	BAM LDC South (Block 2108 bounded by Ashland Place and Lafayette and Flatbush Avenues) ²	180 housing units, 187,000 sf rehearsal studio, cinema, visual arts space⁹ [140,000 sf visual and performing arts library, 40,000 sf theater, 15,000 sf commercial, 466 car public parking facility]	Primary	2013
14	BAM LDC North (Block 2107 bounded by Ashland and Rockwell Places, Lafayette Avenue, and Fulton Streets)	299 seat/30,000 sf [50,000 sf] theater, office/rehearsal space, public outdoor space, 187 [570,000 sf] residential units, 4,000 [10,000] sf retail space [7,000 sf open space, 43,000 sf dance center, 160,000 sf museum/gallery, 465-space parking facility]	Primary	2013
15	395 Flatbush Avenue Ext. ²	12,000 sf retail/office expansion	Primary	2013
16	Atlantic Center	850,000 sf residential, 500,000 [550,000] sf commercial, 395,000 sf retail on lower levels (same as in existing conditions)	Primary	TBD [2013]
17	254 Livingston Street ²	186,000 sf residential, 21,000 sf commercial	Primary	2013
18	230 Livingston Street at the southwest corner of Bond Street (Block 165, Lots 17-19 and 58) ²	271 unit/260,000 sf [163,000 sf] residential [18,000 sf commercial]	Primary	2013
19	Fulton Street/Rockwell Place (aka 29 Flatbush Avenue)	333 [140] dwelling units	Primary	2013 [2007]
20	The Forte: Fulton Street/Ashland Place	108 [100] dwelling units	Primary	Completed [2007]
21	BAM LDC East: 620-622 Fulton Street	150 [80] residential units (100,000 sf), 60,000 sf community facility [7,200 sf retail]	Primary	2013 [2009]
22	Ingersoll Community Center	18,250 sf community center (replaces former 9,000 sf center)	Secondary	2009 [2006]
23	City Point: Flatbush Avenue at Albee Square West (Block 149, Lots 1 and 49) ²	360,000 [1,233,000] sf office, 520,000 [415,000] sf retail, 650 unit/900,000 sf residential, 404 parking spaces (113,962 sf)⁶	Secondary	2013



Project Site

1/2-Mile Perimeter

3/4-Mile Perimeter

1 Recently Completed/No Build Projects Noted in the FEIS (see Table 3 for reference)

40 New No Build Projects Since the FEIS

6 Projects Changed Since the FEIS

34 Projects Completed Since the FEIS

34 Projects Changed and Completed Since the FEIS

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Recently Completed and No Build Project Locations

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Table 3 (cont'd)

Development in the Study Area Recently Completed or Anticipated to be Complete by 2019

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ⁸
24	Sheraton Aloft Hotel: 222-228 Duffield Street: Willoughby Street between Gold and Duffield Streets (Block 146, Lots 2, 7, 11-18, 23, 29, 34-37, 41-43, and 46-52) and Hotel Indigo (237 Duffield Street) ²	500 plus 180 hotel rooms (2 hotels), 1.25-acre [1.15-acre] public space (Willoughby Square), 700 -space [694-space] public parking facility [999,000 sf office, 48,000 sf retail]	Secondary	2009 [2013]
25	505 Fulton Street: Willoughby Street between Duffield and Bridge Streets (Block 145, Lots 8, 10, 13-16, 18-22, 26, and 32) ²	544,000 sf residential [office], 50,000 sf retail	Secondary	2013
26	Red Hook Lane: Adams Street/Boerum Place at Fulton Street (Block 153, Lots 3, 14, and 15; Block 154, Lots 1, 5, 11, 12, and 36-40) ²	788,000 sf office, 70,000 sf retail	Secondary	2013
27	53 Boerum Place	99 dwelling units, 85 parking spaces	Secondary	Completed
28	Schermerhorn House and Hoyt-Schermerhorn I and II: ESDC/HS (Block 170, south of Schermerhorn Street between Smith and Hoyt Streets)	440 dwelling units (including 217 [200] affordable)	Secondary	2009 [2008]
29	The Smith Condominiums and Hotel (75 Smith Street at Atlantic Avenue)	50 dwelling units, 93-unit hotel, 15,000 sf ground floor retail, 8,500 sf community facility, 130 space parking facility [31,500 sf commercial/office use]	Secondary	Completed [2007]
30	Toren, Myrtle Avenue at Flatbush Avenue (Block 2060, Lots 22-27, 32 [part], and 122; Block 2061, Lot 1 [part]; Block 2062, Lot 6 [part]) ²	280 residential units [300,000 sf], 60,000 sf retail; 457-space public parking facility	Secondary	2009 [2013]
31	Catsimatidis Red Apple/218 Myrtle Avenue between Fleet Place and Ashland Place (Block 2061, Lot 1 [part]) ²	660 residential units [259,000 sf], 22,000 sf [86,000 sf] retail	Secondary	2011 [2013]
32	The Collection 525 (525 Clinton Avenue)	30 dwelling units, 15,500 of medical office, 41 parking spaces	Primary	Completed [2007]
33	557 Atlantic Avenue	72 dwelling units	Primary	Completed [2006]
34	477 Atlantic Avenue	21 dwelling units	Primary	Completed [2006]
35	Waverly Avenue Charter School	Conversion of existing 80,000 sf building to a charter school	Primary	2009 [2008]
36	Park Slope Court (110 Fourth Ave near Warren)	49 residential units	Primary	2009
37	126 Fourth Avenue	50 residential units	Primary	Completed
38	255 Fourth Avenue	41 residential units	Secondary	2009
39	Elan Park Slope (255 First Street)	21 residential units	Secondary	Completed
40	Crest (302 2nd Street at 4th Avenue)	68 residential units	Secondary	Completed
41	159 Myrtle Avenue by Avalon Bay	650 residential units, 5,000 sf retail, parking	Secondary	2009
42	470 Vanderbilt Avenue	376 residential units, 115,424 sf retail, 579,645 sf office, 397 accessory parking spaces ⁷	Primary	2011
43	Rockwell Place	37 residential units	Primary	Completed
44	111 Lawrence Street (Block 148, Lot 1)	500 residential units	Secondary	2010
45	150 Fourth Avenue	95 residential units	Primary	2019
46	181 Third Avenue	130 room/65,785 sf hotel	Primary	2019
47	252 Atlantic Avenue/97 Boerum Place	65 residential units, ground floor retail, on-site parking	Secondary	2019
48	Brooklyn House of Detention (275 Atlantic Avenue)	Expansion of current jail from 815 to 1,478 beds (renovation and 40,000 sf of new construction)	Secondary	2012
49	Holiday Inn, 300 Schermerhorn Street (Block 174, Lot 24)	247 room/108,163 sf hotel	Primary	2010
50	307 Atlantic Avenue	26 residential units (27,462 sf)	Secondary	2019
51	316 Bergen Street	39 residential units (63,434 sf)	Primary	2019
52	388 Bridge Street	360 residential units	Secondary	2019
53	462 Baltic Street	35,551 sf office, 61 parking spaces	Primary	2019
54	611 DeGraw Street	25 room/12,625 sf hotel	Primary	2019
55	675 Sackett Street	38 residential units	Primary	2019
56	340-346 Bond Street	22 residential units	Secondary	2019
57	265 Third Avenue	57-room hotel	Secondary	2019
58	Consolidated Edison (block bounded by First and Third Streets)	52,000 sf office	Secondary	2019
59	225 Fourth Avenue	40 residential units	Secondary	2019
60	238 St. Marks Avenue	20 residential units	Primary	2019
61	324 Grand Avenue	29 residential units	Primary	2019

Table 3 (cont'd)

Development in the Study Area Recently Completed or Anticipated to be Complete by 2019

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ²
62	76 Lexington Avenue	21 residential units	Secondary	2019
63	1124 Bedford Avenue	67 residential units	Secondary	2019

Notes: Projects noted as complete (not bold text) were complete as of the FEIS. Projects noted as complete (**bold text**) have been finished since the FEIS. Changes in projects since the FEIS are noted with **bold text**; the portions of these projects that are no longer accurate are noted [in brackets] and *in italics*.

¹ See Figure 6.
² Projects anticipated as a result of the Downtown Brooklyn rezoning.
³ The LIRR station rehabilitation is currently under construction.
⁴ **Rezoning to C6-2 completed.**
⁵ **The townhouses are currently under construction.**
⁶ Includes 373,000 sf of existing retail; project will add 147,000 additional sf of retail
⁷ **Includes 578,554 sf of existing office and 200 existing parking spaces; project will add 1,091 sf office and 197 accessory parking spaces**
⁸ **Projects for which completion dates were not available were assumed to have a build year of 2019.**
⁹ **Development plan still being finalized.**

Sources: Downtown Brooklyn Council, New York City Economic Development Corporation, New York City Department of City Planning, New York City Department of Housing Preservation and Development, AKRF, Forest City Ratner Companies.

CHANGES IN ANALYSIS METHODOLOGIES

The FEIS was prepared generally in accordance with the guidelines set forth in the *CEQR Technical Manual*. As described in detail below, the *CEQR Technical Manual* methodologies for analyzing some technical areas have been updated since the FEIS. These updated analysis methodologies are noted where relevant.

E. POTENTIAL IMPACTS OF CHANGES

The purpose of the analysis that follows is to determine, with respect to each relevant technical area, whether the proposed GPP modification, design development, changes in schedule, or changes in background conditions or *CEQR Technical Manual* methodologies could result in any significant adverse environmental impacts not addressed in the FEIS. In the discussions below, for each of the environmental areas, the analysis is presented under individual headings for clarity of presentation. However, the evaluation and conclusions considered both the individual and collective effects of each component of the analysis.

LAND USE, ZONING AND PUBLIC POLICY

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to land use, zoning and public policy. The timing of property acquisition would not affect the project's land uses, building layout, density, the amount of affordable housing and publicly accessible open space, or the project's consistency with relevant public policies.

DESIGN DEVELOPMENT

The development on the project site is governed by the GPP's Design Guidelines, which serve in lieu of the underlying zoning. Development on the project site would conform to the height and bulk limits established by the Design Guidelines. The project as currently envisioned would result in the same uses on the project site as analyzed in the FEIS, and the land uses of the proposed project will continue to be compatible with the surrounding area. Therefore, the design

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development described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to land use, zoning and public policy.

After the completion of Phase I of the project, but while Phase II is under construction, the 100 parking spaces to be relocated from below the arena block to Block 1129 would be in a surface parking facility; however, when Phase II is fully built out, this parking would be located in a below-grade facility. The addition of a limited number of parking spaces to the surface parking lot for a period of time would not materially change its operation or appearance or effects and would not alter the conclusions of the FEIS with respect to land use, zoning and public policy.

SCHEDULE CHANGE TO 2019

The FEIS contemplated the location of a temporary surface parking facility on Block 1129, and the addition of 100 more spaces to that facility would not have notable effects on land use or cause any significant adverse impacts. The surface parking lot would be in place for no longer than described in the FEIS. The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to land use, zoning and public policy.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions since the FEIS are discussed below.

Land Use

As anticipated in the FEIS and described above, a substantial amount of new development in and around Downtown Brooklyn has been completed recently or is currently under construction—although a number of anticipated commercial office projects have been changed to residential projects—due in part to the rezoning of this area in 2004 (see discussion below). In the FEIS, 35 projects were included in the No Build list, six of which were listed as recently completed. Ten additional projects noted in the FEIS have since been completed. Several of the projects that have been completed, as well as others on the FEIS list, have been modified since the FEIS. Specifically, the projects that have been modified would create over 600 additional residential units compared to the No Build projections utilized in the FEIS. In general, the demand for office space has not been as high as anticipated in the FEIS and the overall amount of projected commercial development in the study area is less than assumed in the FEIS, whereas the demand for residential and hotel uses has been less adversely affected by current market conditions. As noted in Table 3, there are also 28 new projects in the study area that were not identified in the FEIS list, and which have either been recently completed or are anticipated to be complete by 2019. Most of these projects are residential in nature.

It is also expected that additional smaller projects and renovations—typically those allowable under the current zoning and not requiring environmental review—have occurred and will continue to occur throughout the study area. Overall, the development programs for some of the projects listed in the FEIS have changed and several new projects have been added to the No Build list. These changes are modest in relation to the overall land use development anticipated within the study area and notwithstanding these changes, the overall land use profile of the primary and secondary study areas will remain the same in the future without the proposed project as described in the FEIS.

In summary, changes in background conditions since 2006 and future conditions anticipated through 2019 would not substantially alter the conclusions presented in the FEIS for land use. Although there is more of a trend toward residential and hotel development than office uses and additional No Build projects have been added, the essential land use patterns within the study area have remained similar to what was expected in the FEIS.

Zoning and Public Policy

With respect to conditions in the study area, most public policy and zoning initiatives anticipated in the FEIS have been implemented. These initiatives, which include the Special Downtown Brooklyn District (established in 2001, amended in 2004) and the Park Slope Rezoning (2003), focus on building the density of Downtown Brooklyn while preserving the existing low-density character of established adjacent neighborhoods. Development in the BAM Cultural District has been reconfigured in a response to market and other trends but will continue to include cultural uses that will be a resource for the arts, the local community, the borough of Brooklyn, and the City as a whole.

Several additional zoning and public policy initiatives have been implemented or proposed for consideration since completion of the FEIS. The Fort Greene/Clinton Hill Rezoning (2007) is expected to preserve the predominantly brownstone character of that neighborhood's residential core and provide opportunities for apartment house construction and incentives for affordable housing on Myrtle Avenue, Fulton Street, and Atlantic Avenue within the rezoning area.

In addition, since completion of the FEIS the New York City Landmarks Preservation Commission (LPC) has held a public hearing on the proposed designation of the Prospect Heights Historic District—a portion of which is currently listed on the State and National Historic Registers—as a New York City Historic District in order to protect and preserve the low-density and historic context of Prospect Heights. The project site is not in the footprint of the proposed historic district.

These changes in zoning and public policy and their added limits on development further strengthen the conclusions in the FEIS, which state that the proposed project is not expected to spur substantial changes in the firmly established neighborhoods that surround the project site.

PlaNYC

In April 2007, the Mayor's Office of Long Term Planning and Sustainability released *PlaNYC: A Greener, Greater New York*. It includes policies to address three key challenges that the City faces over the next twenty years: (1) population growth; (2) aging infrastructure; and (3) global climate change. Elements of the plan are organized into six categories—land, water, transportation, energy, air quality, and climate change—with corresponding goals and objectives for each. These goals include, but are not limited to, the following:

- Create homes for almost a million more New Yorkers, while making housing more affordable and sustainable;
- Ensure that all New Yorkers live within a 10-minute walk of a park;
- Clean up all contaminated land in New York City;
- Reduce pollution by implementing infrastructure upgrades, and using best management practices to prevent stormwater from entering the sewer system;
- Improve access to transit;

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- Create or enhance a public plaza in every community;
- Target large consumers to accelerate efficiency upgrades;
- Reduce automobile travel, congestion, and emissions;
- Improve the efficiency of power plants and buildings,
- Implement natural strategies such as planting 1 million trees; and
- Reduce greenhouse gas emissions by 30 percent.

The Atlantic Yards project would assist in meeting many of the goals and objectives established in PlaNYC, by providing new housing to meet the needs of current and future residents, providing new open spaces, and better utilizing land already owned by the public. The project would include the creation of approximately 6,430 dwelling units, including 2,250 affordable dwelling units, and would create new development in an area that is very well served by existing transit infrastructure. It would also deck over a rail yard and would develop an underused area to knit neighborhoods together, and would meet the housing goal of PlaNYC. The project also would meet certain of the open space goals of PlaNYC: to create or enhance a publicly accessible open space in every community. The project's eight acres of planned publicly accessible open space would help achieve the PlaNYC goal that all New Yorkers live within a 10-minute walk of a park. The proposed open space would include landscaping and plantings and thus would help to green underutilized street and sidewalk space, another open space initiative of PlaNYC.

The project is largely consistent with the goals and objectives of water, transportation, energy, air quality, and climate change PlaNYC elements in that it is a new development that is anticipated to incorporate responsible design in terms of water utilization, stormwater management, transportation efficiency, energy demand, air quality emissions, 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. It is anticipated that the HVAC systems for Buildings 2, 3, and 4 will incorporate microturbines to generate electricity and heat (co-generation) as a LEED design element. The feasibility of incorporating combined heat and power into the design of other project buildings will be evaluated as the engineering design work for the project continues.

The development of the project site, which is located at one of the largest transportation hubs in the City, would also provide for a new subway access on the project site. This transit-oriented development would encourage use of mass transit and thus would reduce automobile travel, congestion, and emissions. The project also would promote cycling through the provision of an indoor parking station for up to 400 bicycles and the construction of new off-street bike route segments through the site. Therefore, the project is consistent with PlaNYC.

SOCIOECONOMIC CONDITIONS

GENERAL PROJECT PLAN MODIFICATION

While the proposed GPP modification would result in the postponement of property acquisition on portions of the site until 2011, thereby delaying direct displacement on certain sites, the project's potential for direct and indirect displacement and effects on specific industries at full build-out would remain the same as described in the FEIS. Therefore, the GPP modification

would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to socioeconomic conditions.

DESIGN DEVELOPMENT

The design development described above would not alter the FEIS build program notably. The overall number of dwelling units, as well as the total number of units in an affordable housing program, would remain the same. Similarly, the amount of anticipated commercial use is within the range of that considered in the FEIS. Therefore, the design development would not change the FEIS conclusion that the project would not result in significant adverse socioeconomic impacts.

SCHEDULE CHANGE TO 2019

As described above, the project's potential for direct and indirect displacement and effects on specific industries at full build-out would remain the same as described in the FEIS. Therefore, the schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to socioeconomic conditions. The delay in the project's build year to 2019 would postpone the full realization of the social and economic benefits of the completed project.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to socioeconomic conditions.

COMMUNITY FACILITIES

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not result in significant adverse environmental impacts with respect to any of the community facilities or services that were not addressed in the FEIS. The proposed GPP modification would affect the timing of property acquisition but it would not affect the proposed uses and program, which would remain the same as described in the FEIS. Thus, there would be no new demand for police protection, fire protection, emergency services, public schools, libraries, hospitals and health care facilities, or daycare centers as a result of the proposed GPP modification. Additional information on schools and day care facilities is discussed below.

DESIGN DEVELOPMENT

The design development described above would not change the FEIS build program notably. The overall number of dwelling units, as well as the total number of units in an affordable housing program, would remain the same. Similarly, the amount of anticipated commercial use is within the range of that considered in the FEIS. Space would still be made available for the anticipated on-site school, daycare, and intergenerational facility. The deadline for the New York City School Construction Authority (SCA) to decide whether or not it wants to develop a school at the project site would be extended from January 1, 2010 to January 1, 2013. Therefore, the design development would not result in significant adverse environmental impacts with respect to community facilities that were not addressed in the FEIS.

SCHEDULE CHANGE TO 2019

The proposed schedule change to 2019 would not result in significant adverse environmental impacts with respect to community facilities that were not addressed in the FEIS.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The updated information on background conditions would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts on police protection, fire protection, emergency services, libraries, or hospitals and health care facilities. Changes in background conditions would not affect the project's population, which would remain the same as described in the FEIS, and no changes have been made since the FEIS to the *CEQR Technical Manual* methodologies for analyzing the potential for significant adverse impacts on police protection, fire protection, emergency services, libraries, or hospitals and health care facilities.

Public Schools

The updated information on background conditions was reviewed to determine whether the project's potential effects on public schools would remain consistent with the conclusions in the FEIS. The schools analysis was also updated to account for new information on current school enrollment and new enrollment projections, and to use updated CEQR pupil generation rates.

Current school enrollment data and enrollment projections for up to 10 years into the future are released annually by the SCA. This analysis uses the most recent data available, which includes school enrollment for the 2007-2008 school year and enrollment projections for the 2017-2018 school year. The FEIS analysis used data on school enrollment for the 2004-2005 school year, and enrollment projections for the 2014-2015 school year (which the analysis held constant for the 2016 build year).

The updated CEQR pupil generation rates were released in November 2008 in conjunction with the release of SCA's new five-year (2010-2014) capital plan based on this information. The new student generation rates (i.e., the number of school-age children per household) differ from those used by SCA in the past, and those used in the FEIS based on 2001 *CEQR Technical Manual* guidelines. The New York City Office of Environmental Coordination (OEC) has issued an online addendum to the *CEQR Technical Manual* that incorporates these rates into a revised Table 3C-2 for CEQR schools analyses.

Future conditions at local schools were predicted based on the new school enrollment projections and estimated enrollment from the updated list of development projects in the study area. The updated CEQR pupil generation rates were applied to the build program as defined in the FEIS to determine how many school children would be introduced by the project. The effect of these school children on local schools was evaluated and compared to the effects of the project as presented in the FEIS.

As reflected in the technical analysis that follows, these changes would not result in any additional significant adverse impacts on public schools that were not identified in the FEIS.

Student Population. As described above, the FEIS analysis of the project's potential effect on public schools relied on student generation rates previously provided in Table 3C-2 of the *CEQR Technical Manual*. These rates were used to estimate the number of school age children generated per household given the location (by borough) and affordability level of new residential development. The updated CEQR pupil generation rates account for differences by borough, but do not differentiate by income mix.

As shown in Table 4, the FEIS concluded that the project would generate 1,757 elementary school students, 667 intermediate school students, and 412 high school students upon completion. Based on the updated CEQR pupil generation rates, the project would generate 1,734 elementary school students, 718 intermediate school students, and 837 high school students. This is 23 fewer elementary school students and 51 and 425 more intermediate and high school students, respectively, than disclosed in the FEIS.

Table 4
Estimated Number of Students Generated by the RWCDs Presented in the FEIS versus with Updated CEQR Generation Rates

School	FEIS Student Generation ¹	Updated CEQR Student Generation ²	Difference
PS	1,757	1,734	-23
IS	667	718	51
HS	412	837	425
Totals	2,836	3,289	453

Notes: 1. Based on student generation rates provided in the 2001 CEQR Technical Manual (0.27 elementary students, 0.10 intermediate students, and 0.06 high school students per high-income household; 0.31 elementary students, 0.13 intermediate students, and 0.08 high school students per moderate-high income household; 0.34 elementary students, 0.13 intermediate students, and 0.09 high school students per low-moderate income household; and 0.37 elementary students, 0.14 intermediate students, and 0.09 high school students per low-income household).
 2. Based on updated SCA pupil generation rates (0.29 elementary students, 0.12 intermediate students, and 0.14 high school students per household).
 Both the FEIS and this analysis assume that the 450 rental units set aside as senior housing would not introduce additional students.

As noted above, this analysis also uses the most recent school enrollment projections available. The updated projections estimate school enrollment in the 2017-2018 school year, whereas the projections used in the FEIS estimated enrollment in the 2014-2015 school year.¹ The updated projections predict lower elementary school enrollment in CSD 13, but higher elementary school enrollment in CSD 15 and CSD 13/15 combined. For intermediate schools and high schools, although the updated CEQR pupil generation rates predict greater numbers of students, the updated enrollment projections predict an overall decline in intermediate and high school enrollment compared to the projections utilized in the FEIS.

Conclusions. The FEIS concluded that the project would not result in significant adverse impacts on elementary or intermediate schools within CSD 13, CSD 15, or CSDs 13/15 combined, or on high schools within Brooklyn as a whole. The FEIS concluded that the project would result in significant adverse impacts on elementary and intermediate schools within a ½ mile of the project site.

Using the updated information on background conditions, the new school enrollment and projections data, and the updated CEQR pupil generation rates, the project’s effects on local schools would be substantially similar to those reported in the FEIS.

Table 5 below shows school enrollment, capacity and utilization based on the new methodology and updated background conditions in the 2019 future without the project and the 2019 future with the project. This analysis finds, as did the FEIS, that the project would result in a significant adverse impact on elementary schools within a ½-mile of the project site. As in the FEIS, this

¹ In both the FEIS and this analysis, the enrollment projections are held constant to project to the analysis year because the SCA does not issue school enrollment projections for more than 10 years in the future.

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analysis finds that the project would not result in a significant adverse impact on elementary schools within CSD 13, CSD 15, or CSD 13/15 combined. Although this analysis finds that CSD 15 would operate with a shortfall of 1,681 elementary seats (109.7 percent utilization) in the future with the project, this shortfall would not constitute a significant adverse impact because the project would increase the elementary school utilization rate in CSD 15 by slightly more than 1 percent compared to the future without the project. According to the *CEQR Technical Manual*, if a project causes an increase of 5 percent or more in a deficiency of available seats, a significant adverse impact may result. Because the project would increase the elementary school utilization rate in CSD 15 by less than 5 percent, the project would not result in a significant adverse impact.

Table 5

**Analysis with Updated Background Conditions and Methodology:
Estimated Public Elementary, Intermediate, and High School Enrollment, Capacity, and
Utilization 2019 Future Without and With the Project**

Study Area	2019 Future Without the Project				2019 Future With the Project			
	Total Enrollment	Capacity	Available Seats	Utilization	Total Enrollment	Capacity ¹	Available Seats	Utilization
Elementary Schools								
½-Mile Study Area	5,590	4,542	-1,048	123.1%	7,324	4,542	-2,782	161.3%
CSD 13	7,500	10,909	3,409	68.8%	9,008	10,909	1,901	82.6%
CSD 15	18,860	17,405	-1,455	108.4%	19,086	17,405	-1,681	109.7%
CSD 13 & 15	26,360	28,314	1,954	93.1%	28,094	28,314	220	99.2%
Intermediate Schools								
½-Mile Study Area	2,316	3,222	906	71.9%	3,034	3,222	188	94.2%
CSD 13	2,997	7,317	4,320	41.0%	3,621	7,317	3,696	49.5%
CSD 15	4,600	10,037	5,437	45.8%	4,694	10,037	5,343	46.8%
CSD 13 & 15	7,597	17,354	9,757	43.8%	8,315	17,354	9,039	47.9%
High Schools								
Brooklyn Total	61,230	89,951	28,721	68.1%	62,067	89,951	27,884	69.0%
Notes:	¹ The capacity column includes additional elementary, intermediate, and high school capacity identified as currently under construction in the DOE five-year capital plan. Any capacity not currently under construction was not included. The capacity does not include the school seats provided on the project site as mitigation for the FEIS impact on elementary an intermediate schools.							
Sources:	SCA <i>Enrollment Projections</i> ; DOE, <i>Utilization Profiles: Enrollment/Capacity/Utilization, 2007-2008</i> . DOE <i>FY 2010-2014 Five-Year Capital Plan</i> , Proposed February 2009							

Using the updated CEQR pupil generation rates and the new information about other projects planned in the study area, elementary schools within ½-mile of the project site and CSD 15 would have seat shortfalls that would be greater than predicted in the FEIS. This would occur for two primary reasons: 1) background conditions projected at this time include a greater number of residential units compared to the FEIS; and 2) the new CEQR pupil generation rates project greater numbers of students from market-rate residential units, which is what most of the surrounding development is expected to provide. Based on the revised SCA projections, predicted enrollment in these areas is higher compared to the FEIS.

This analysis finds that the project would not result in significant adverse impacts on intermediate schools in the ½-mile study area, CSD 13, CSD 15, or CSD 13/15 combined. As noted above, the new SCA enrollment projections predict lower intermediate school enrollment in all of the study areas. Therefore, based on the revised enrollment projections, unlike the FEIS, the project would not result in a significant adverse impact on intermediate schools within a ½-mile of the project site, as these schools would have excess capacity in the 2019 future with the project (see Table 5).

Using the updated information on background conditions, the new school enrollment and projections data, and the updated CEQR pupil generation rates, this analysis finds that the project would not result in any significant adverse impacts on high schools in Brooklyn. As noted above, the new SCA enrollment projections predict an overall decline in high school enrollment compared to the projections used in the FEIS. In this analysis, as in the FEIS, high schools would have surplus capacity in the future with the project.

Overall, as was the case in the FEIS, the revised analysis concludes that the project would result in a significant adverse impact on elementary schools within the ½-mile study area. However, based on the revised SCA enrollment projections, it would not result in a significant adverse impact on intermediate schools in the ½-mile study area.

The approved project included the provision of an approximately 100,000 square foot elementary and intermediate public school to partially mitigate the significant adverse impacts on elementary and intermediate schools within a ½-mile of the project site. The 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 FEIS.

As in the FEIS, the provision of an elementary and intermediate public school on the project site would alleviate but not fully mitigate the significant adverse impact on elementary schools within a ½-mile of the project site. Additional mitigation measures would still be required to fully mitigate the significant adverse impact on elementary schools within a ½-mile of the project site. As in the FEIS, upon completion of the on-site school there would still be additional capacity within CSD 13 and 15 combined (220 seats) to alleviate the shortfall within the ½-mile study area, but there would be much less extra combined CSD 13/15 capacity in 2019 than the FEIS had predicted for 2016, and there would be a shortfall of elementary school capacity in CSD 15 considered by itself.

No additional elementary school mitigation measures—beyond that proposed in the FEIS—are warranted based on these changes in background conditions and methodologies. Although larger shortfalls of seats are predicted than in the FEIS, the project would actually introduce 23 fewer elementary school students than in the FEIS. Therefore, the project's contribution to the elementary school shortfall in the ½-mile study area and CSD 15 would actually be smaller than in the FEIS. Most of the seat shortfall is the result of the greater number of residential units in background developments. Furthermore, as noted above, the shortfall of seats in CSD 15 in the future with the project would not constitute a significant adverse impact because the project would increase the elementary school utilization rate in CSD 15 by slightly more than 1 percent compared to the future without the project.

The shortfall of elementary school seats could be alleviated by the construction of new elementary schools as budgeted in the Department of Education (DOE) five-year capital plan. Any new schools that are currently under construction and expected to be complete by 2019 are included in the capacity figures reported in Table 5 above, but there are several additional schools in CSD 13 and CSD 15 that are planned but not yet under construction. According to the DOE capital plan, there are 416 seats in CSD 13 and 1,459 seats in CSD 15 that are planned but

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not yet under construction.² Should these schools be constructed as planned, they could alleviate a substantial portion of the seat shortfall within the ½-mile study area and CSD 15.

Overall, accounting for the changes in background conditions and the updated methodology, the project would not result in any significant adverse impacts on public schools not previously identified in the FEIS. In fact, the significant adverse impact on intermediate schools in the ½-mile study area would not occur. As described above, no additional elementary school mitigation measures—beyond that proposed in the FEIS—are warranted.

Day Care

The updated information on background conditions was reviewed to determine whether the project's potential effects on publicly-funded day care facilities would remain consistent with the conclusions in the FEIS. The day care analysis was also updated to account for current day care enrollment and capacity information and to use updated CEQR generation rates for the projection of day care-eligible children. Updated enrollment and capacity information was obtained from the Administration for Children's Services (ACS) for child care facilities and Head Start programs and is current as of October and December 2008, respectively. The updated CEQR generation rates for day care eligible children were released by the New York City Department of City Planning (DCP) in November 2008 and have since been incorporated into the *CEQR Technical Manual* via an online addendum on OEC's website. As with the FEIS, publicly funded day care facilities within one mile of the project site were identified and examined; private day care facilities were not considered in the analysis. Impacts were considered significant if the project would result in demand for slots in publicly funded day care centers greater than available capacity and the increased demand generated by the project would be 5 percent or more of the collective capacity of the day care centers serving the study area in the future without the project.

The new generation rates create two categories, children up to 6 years of age and children 6 to 12 years of age, to project the number of children that would be eligible for public child care services per new residential unit. The first category, children up to 6 years of age, is the primary age group receiving public child care services, and will be the focus of quantitative analysis. The second group, children ages 6 to 12, is more likely to receive after-school services and will only be discussed qualitatively. At this time there are limited enrollment and capacity data available for after-school programs and there are no criteria for a significant adverse impact on after-school programs for children age 6 to 12.

Day Care Enrollment and Capacity Projections. Based on the generation rates for day care eligible children previously presented in Table 3C-4 of the 2001 *CEQR Technical Manual*, the FEIS analysis found that the project would introduce 486 day care-eligible children.

Based on the updated CEQR generation rates, the project could generate 537 children under the age of 6 who would be eligible for publicly-funded day care programs. Although the project would introduce 1,350 units affordable to low- and low- to moderate-income households, these estimates are based on approximately 1,013 low- and low- to moderate-income units with the potential to introduce day care eligible children. Approximately 225 of the 1,350 low- to moderate-income units would be affordable to households earning between 80 and 100 percent of area median income (AMI), which would not qualify for publicly-funded day care. Therefore,

² DOE FY 2010-2014 Five-Year Capital Plan, Proposed February 2009. http://source.nycsca.org/pdf/capitalplan/2009/Feb_2009_2010-2014CapitalPlan.pdf

these households were not included in the analysis. Furthermore, approximately 112 of the 1,350 affordable units would be for seniors earning 80 percent or less of AMI. Senior housing units are not expected to introduce day-care eligible children, and therefore were also excluded from the day care analysis. Thus, a total of 337 of the 1,350 low- and low- to moderate-income units were found to not have the potential to introduce day care eligible children; therefore, this analysis is based on 1,013 units. The FEIS analysis did not exclude senior housing units or units for households earning 80 to 100 percent of AMI from the day care analysis.

As shown in Table 6, the 537 children under the age of 6 who would be eligible for publicly-funded day care programs according to the updated DCP generation rates would represent an increase of 51 children over the number of public day care-eligible children presented in the FEIS.

Table 6

Estimated Number of Publicly-Funded Day Care Eligible Children Generated by Project FEIS versus with Updated DCP Generation Rates

	FEIS Predicted Generation¹	New CEQR Child Generation²	Difference
Children Eligible for Publicly-Funded Day Care Services	486	537 ³	51
Notes: <ol style="list-style-type: none"> 1. Based on public day care-eligible child generation rates presented in Table 3C-4 of the 2001 <i>CEQR Technical Manual</i> (0.37 children per low-income unit and 0.34 children per low- to moderate-income unit). This number includes all children age 0 to 12. 2. Based on new CEQR public day care-eligible child generation rates (0.53 children under age 6 per low-income and low- to moderate-income unit). This value excludes the senior housing units affordable to low- and low- to moderate-income households. 3. This is the number of children under age 6 only because these are the children that would be eligible for publicly-funded day care programs. With the new generation rates, the project would also introduce 192 children between the ages of 6 and 12 who would be eligible for publicly-funded after school programs. 			

The project could also generate 192 children between the ages of 6 and 12 who would be eligible for publicly-funded day care services. Because these children are expected to be attending school during most of the day, their need would be for after-school care. Eligible children who qualify for ACS vouchers or other programming for after school care could be served by Family Child Care Networks or school-age slots in ACS contracted day care facilities, New York City Department of Youth and Community Development’s (DYCD) Out of School Time programs, and/or DOE-approved after school programs.

Conclusions. As described in the FEIS, a 100-seat day care facility is planned as part of the project. This facility would be publicly-funded or would accept ACS vouchers. The FEIS analysis concluded that the project would not result in a significant adverse impact on publicly-funded day care facilities because there would be remaining capacity at publicly-funded day care centers in the study area. Further, the analysis indicated that the potential increase in demand as a result of the project could be offset by several limiting factors, including: the presence of private day care facilities in the area, the use of day care facilities outside the study area (such as closer to a parent’s place of work), and the opening of new day care facilities within the study area as population increases.

Since publication of the FEIS, the changes in background conditions and the new analysis methodology would result in a shortfall in the number of available day care slots that was not predicted in the FEIS analysis. Based on the new CEQR generation rates, the project is predicted to introduce 537 day care-eligible children under the age of 6. As shown in Table 7, if no

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additional day care facilities open in the vicinity of the project site, day care facilities in the area will already be operating above capacity in the 2019 future without the project. If no new day care facilities are added in the study area to respond to this new demand, the 537 new children from the project would exacerbate the predicted shortage in day care slots and would constitute 14 percent of the collective capacity of day care and Head Start facilities (3,854 slots) in the study area.

Table 7
Analysis with Updated Background Conditions and Methodology:
Estimated Publicly-Funded Day Care Enrollment, Capacity, and Utilization
2019 Future Without and With the Project

Analysis	Enrollment	Capacity¹	Available Slots	Utilization
2019 Future Without the Project	3,958	3,754	-204	105%
2019 Future With the Project	4,495	3,854	-641	117%
Notes: ¹ Capacity in the future with the project includes the 100-seat day care facility included as part of the project.				
Sources: ACS.				

The projected shortfall would occur for several reasons. The updated CEQR generation rates for publicly-funded day care eligible children are substantially higher than the generation rates used in the FEIS. In addition, some day care centers have closed, some no longer accept ACS vouchers, and other programs have reduced capacity since the FEIS. As a result, there are four fewer day care and Head Start centers in the study area. The total number of day care slots available in the study area has decreased since the FEIS, from 5,241 slots to 3,854 slots. Finally, background conditions projected at this time include a greater number of low- and low- to moderate-income residential units compared to the FEIS.

Despite the predicted shortfall of slots, several factors may limit the number of children in need of publicly-funded day care slots. The number of children in need of publicly-funded day care may be smaller than presented in this analysis depending on the amount of new residential development that is completed in the area as well as the proportion of new residents who are children of low-income families. Families in the one-mile study area could make use of alternatives to publicly-funded day care facilities. There are slots at homes licensed to provide family day care that families of eligible children could elect to use instead of public day care centers. Parents of eligible children also may use ACS vouchers to finance care at private day care centers in the study area. Additionally, parents of eligible children are not restricted to enrolling their children in publicly-funded day care facilities in a specific geographical area, and could use the ACS voucher system to make use of public and private day care providers beyond the one-mile study area (some parent/guardians choose a day care center close to their employment rather than their residence).

To meet the additional demand projected based on the updated background conditions and updated CEQR generation rates, additional day care demand would need to be provided within the study area. The private market may respond to the additional demand by opening day care centers and increasing capacity in the study area as population increases. New capacity could also potentially be developed as part of ACS’s public-private partnership initiatives.

At this point, however, it is not possible to know exactly how much additional day care capacity would be needed or when its implementation would be necessary, because it is uncertain at this time whether new day care facilities will open in response to the projected increase in demand, how many new facilities will open, and how many day care slots they will add. Therefore, the

project sponsor will assess day care enrollment and capacity in the study area as the project progresses. If necessary, the project sponsor will work with ACS to develop appropriate measures to provide additional capacity on-site, such as interior-facing ground-floor space, or off-site as the project progresses.

In order to reduce the number of day care-eligible children introduced by the project to less than 5 percent of the collective capacity of day care centers in the study area, the project would need to provide day care slots for approximately 350 of the 537 day care-eligible children introduced by the project. This would reduce the number of project-generated day care-eligible children that would need to be accommodated in other day care facilities in the study area to 187 children ($537-350=187$ children), which would be less than 5 percent of the existing collective capacity of day care centers in the study area (3,754 slots without the project). As noted above, the project sponsor has already committed to the development of a 100-slot day care facility, and has now increased that commitment by up to approximately 250 more day care slots. This analysis is based on current day care capacity and represents a snapshot in time. If the capacity of day care centers changes in the future, the project's need for day care slots could change. As noted above, the project sponsor will monitor day care enrollment and capacity in the study area as the project progresses. In light of the project sponsor's commitment to monitor and, if necessary, provide approximately 250 additional day care slots, there would be no new significant adverse impacts on publicly funded day care facilities in the study area.

As noted above, based on the new generation rates, the project would also introduce 192 children age 6 to 12 who would also be eligible for publicly-funded child care services in the 2019 analysis year. These children are expected to be attending school during most of the day; therefore, their need would be for after-school care. These children would represent a small portion of the children at this age in the study area. Specifically, the 192 project-generated day care-eligible children between ages 6 and 12 would represent 2.6 percent of the projected elementary school enrollment in the half mile study area in 2019 with the project. Eligible children who qualify for ACS vouchers or other programming for after-school care could be served by Family Child Care Networks or school-age slots in ACS contracted child care facilities, DYCD Out of School Time programs, and/or DOE-approved after school programs. The change in the *CEQR Technical Manual* methodology for children age 6 to 12 would not result in a project-generated significant adverse impact.

In conclusion, although a shortfall of day care slots is identified with the project in 2019, this shortfall would occur due to changes in background conditions and analysis methodologies that would not be caused by the GPP modification, the project's design development, or the full build-out schedule change to 2019.

OPEN SPACE

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not result in significant adverse environmental impacts with respect to open space that were not addressed in the FEIS. The proposed GPP modification would affect the timing of property acquisition but not the amount or layout of the 8 acres of publicly-accessible open space or the project's population, which would remain the same as described in the FEIS.

DESIGN DEVELOPMENT

The design development described above would not increase the number of workers, visitors, or residents expected to be generated by the project. The private open space on the arena roof was not included in the quantitative FEIS open space analysis, and the decision to not proceed with this space would not affect the conclusions of that analysis. Qualitatively, the private open space on the arena's roof—as well as at the Urban Room and plazas around the outside of the arena—was to have helped address the deficiency in passive open space until the completion of Phase II. With or without these spaces, however, the FEIS identified a temporary significant adverse open space impact between the completion of Phase I and the completion of Phase II. This temporary impact would continue to be addressed by the completion of the Phase II open space.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not result in significant adverse environmental impacts with respect to open space that were not addressed in the FEIS. As described above, the FEIS identified a temporary significant adverse open space impact between the completion of Phase I and the completion of Phase II. With the schedule change to 2019, this temporary impact would extend through 2019, but would continue to be addressed by the completion of the Phase II open space.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not result in significant adverse environmental impacts with respect to open space that were not addressed in the FEIS. With the additional residents and workers generated by the new No Build projects and other changes in background conditions, there would be new demands on the area's public open spaces in the future baseline condition, and thus an exacerbation of existing and future shortfalls. The project would not affect these baseline conditions, as the project's publicly-accessible open space has not changed since the FEIS and the demand generated by the project-generated population would remain the same. The 8 acres of publicly-accessible open space to be provided by the project would continue to help meet the open space demands of residents and workers on the project site as well as in the surrounding area.

SHADOWS

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not result in significant adverse environmental impacts with respect to shadows that were not addressed in the FEIS because the proposed GPP modification would affect the timing of property acquisition but not the proposed massing envelopes analyzed for shadow impacts, which would remain the same as described in the FEIS.

DESIGN DEVELOPMENT

With the project as currently envisioned, the height and bulk of the arena block buildings would remain substantially the same or would be reduced from the configurations analyzed in the FEIS. Therefore, the project's design development would not have the potential to result in significant adverse shadows impacts that were not addressed in the FEIS.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not result in significant adverse environmental impacts with respect to shadows that were not addressed in the FEIS.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not result in significant adverse environmental impacts with respect to shadows that were not addressed in the FEIS.

HISTORIC RESOURCES

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not result in significant adverse environmental impacts with respect to historic resources that were not addressed in the FEIS. The proposed GPP modification would affect the timing of property acquisition but would not result in any changes that would affect the analysis of historic resources as described in the FEIS.

DESIGN DEVELOPMENT

The development in the project's design would not result in any effects to archaeological or architectural resources that were not previously identified in the FEIS; in addition, it would not change the stipulations of the Letter of Resolution among ESDC, the project sponsor, and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). Therefore, the project as currently envisioned would not have any significant adverse impacts to historic resources that were not previously identified in the FEIS, nor would the development of the project's design increase the effects of the project on any historic resource.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not result in significant adverse environmental impacts with respect to historic resources that were not addressed in the FEIS.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not result in significant adverse environmental impacts with respect to historic resources that were not addressed in the FEIS.

URBAN DESIGN AND VISUAL RESOURCES

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to urban design and visual resources. The proposed GPP modification would affect the timing of property acquisition but would not result in changes to the buildings' bulk, uses, the type or arrangement of the buildings, the layout of the open space, and other matters addressed in the Design Guidelines. The proposed GPP modification would not affect the urban design and visual resources analysis as described in the FEIS.

DESIGN DEVELOPMENT

The reduction in the height of Building 1 to match the height of the Williamsburgh Savings Bank building would lessen Building 1's impact on views to this visual resource. The design of the arena would change notably from the Frank Gehry design with the glass façade that was depicted in the FEIS in Figures 1-19, 1-20 and 8-36 (see illustrative renderings presented in Figures 3a and 3b). However, the arena would still conform to the GPP's Design Guidelines noted in the FEIS, and it would still be possible to view the interior of the arena and the scoreboard from certain vantage points in the surrounding area, including along Flatbush Avenue. All of the project buildings, lighting, and signage would need to conform with the GPP's Design Guidelines, and the principal exterior materials of the buildings would remain the same. As currently contemplated, the arena façade materials would continue to comprise masonry, glass, and metal panels. The proposed access and circulation reconfigurations would not create any notable changes to the site's urban design; while the VIP entry to the arena would be relocated to Atlantic Avenue, a secondary arena entrance on Dean Street would remain. The arena would continue to be surrounded by four buildings with active street frontages to enliven the pedestrian experience when the arena is not in use. The development in the project's design would not have any significant adverse impacts to urban design or visual resources that were not previously identified in the FEIS, nor would it increase the effects of the project on urban design and visual resources. Instead, the reduction in the height of Building 1 would somewhat lessen the project's effect on urban design and visual resources.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to urban design and visual resources.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to urban design and visual resources.

HAZARDOUS MATERIALS

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to hazardous materials. The proposed GPP modification would affect the timing of property acquisition but would not result in any changes that would affect the analysis of hazardous materials as described in the FEIS.

DESIGN DEVELOPMENT

The footprint of the project site would not change with the design development described above, and therefore there are no additional areas to be considered for their potential to contain hazardous materials. Therefore, the design development would not lead to any significant adverse hazardous materials impacts and no further analysis is required.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to hazardous materials.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to hazardous materials.

INFRASTRUCTURE

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to infrastructure, including water supply, sanitary wastewater treatment, stormwater runoff and combined sewer overflows (CSOs), solid waste management, and energy. The proposed GPP modification would affect the timing of property acquisition but it would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, there would be no increase in project-generated demand for these services.

DESIGN DEVELOPMENT

As described above, unlike what was anticipated in the FEIS, the arena roof would not incorporate stormwater detention tanks or a green roof. Instead, detention tanks would be located in the base of the arena and enlarged to accommodate the additional stormwater load associated with the elimination of the green roof. In addition, the demolition and reconstruction of the 6th Avenue Bridge would no longer occur.

An analysis using the same methodology as the FEIS determined that the changes to the stormwater detention system would not have a significant adverse effect in the volume of stormwater runoff from the project site, nor would the frequency of combined sewer overflow (CSO) events change substantially. Design development would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to sanitary wastewater treatment, solid waste management, or energy. None of these design elements materially affect the project-generated demand for these services.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to infrastructure.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to infrastructure.

TRAFFIC AND PARKING

GENERAL PROJECT PLAN MODIFICATION

The proposed GPP modification would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to traffic and parking. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the traffic and parking analysis as described in the FEIS.

DESIGN DEVELOPMENT

Two design development components would potentially affect traffic and/or parking conditions compared to the FEIS analysis and were therefore evaluated: (1) the relocation of up to 100 (out of 350) off-street parking spaces from the arena block below Building 2 to Block 1129; and (2) a decrease in the amount of lay-by lane capacity along the east side of Flatbush Avenue adjacent to the arena block. These changes would not change the FEIS conclusions with respect to on-street parking, bicycles, or accidents, because there would be no substantial change to traffic patterns in the study area.

Relocation of Arena Block Parking

The FEIS assumed that a total of 3,670 off-street below-grade public parking spaces would be provided on the project site with full build-out of the proposed project. (Prior to the completion of development on Block 1129, surface parking would be located on this block.) This would include approximately 400 spaces in a parking garage on Site 5; 350 spaces in a parking garage on the arena block; 800 spaces in two parking garages on Block 1120; 150 spaces in a garage on Block 1128; and 1,970 spaces in a garage on Block 1129 (see Figure 1-12 in the FEIS). Under both project variations, the proposed project would include sufficient off-street public parking capacity to fully accommodate all project-generated parking demand in the weekday AM, midday, and PM peak periods. During a weekday evening or Saturday afternoon Nets game, approximately 1,100 spaces would be available on-site to accommodate a portion of the demand from the proposed arena. Remaining arena demand would be accommodated at existing off-site public parking facilities.

As presently envisioned, up to 100 of the 350 parking spaces assumed to be located on the arena block in the FEIS would instead be accommodated on Block 1129 at the east end of the project site, increasing the total number of spaces on that block from 1,970 to 2,070. This would result in the diversion of some project-generated traffic previously assigned to the below-grade garage on the arena block. Intersections where traffic diversions are expected to occur were therefore analyzed to assess the potential for additional significant adverse traffic impacts.

It was assumed for the analysis that during the weekday AM, midday and PM peak periods (when the parking supply on the project site would exceed demand), vehicles diverted from the arena block parking garage would instead park in nearby facilities on Blocks 1120 and 1128 as many of these trips would be en route to office and residential uses located in Buildings 1, 2, 3, and 4. During these three peak periods, diverted inbound vehicles are therefore expected to continue east on Dean Street and turn north onto 6th Avenue to access the parking facilities on Blocks 1120 and 1128. (Outbound vehicles are expected to utilize 6th Avenue and from there follow routes similar to the assignment assumed in the FEIS.) The analysis of weekday AM, midday, and PM peak hour traffic conditions with the relocated arena block parking therefore

focuses on the 6th Avenue/Dean Street and 6th Avenue/Pacific Street intersections, where these diverted trips would be concentrated (see Table 8a).

During the weekday and Saturday pre- and post-game periods (when on-site parking capacity would be fully utilized) all diverted trips were assigned to the parking garage on Block 1129, where up to 100 parking spaces from the arena block would be relocated. During these four peak periods, diverted vehicles are therefore expected to continue east on Dean Street to access the parking facility on Block 1129. Outbound diverted vehicles would utilize Carlton, Atlantic, and 6th Avenues, from which they would rejoin the routes analyzed in the FEIS. (Outbound diverted vehicles assumed to utilize eastbound Dean Street in the FEIS would rejoin this corridor directly from the parking facility on Block 1129 resulting in no net change in vehicle trips at the Dean Street/Vanderbilt Avenue intersection.) The analysis of weekday and Saturday pre-game and post-game peak hour traffic conditions with the relocated arena block parking therefore focuses on a total of seven intersections along these corridors, where diverted traffic is expected to be concentrated (see Table 8b).

These seven intersections are:

- 6th Avenue at Dean Street;
- 6th Avenue at Pacific Street;
- Carlton Avenue at Dean Street;
- Carlton Avenue at Pacific Street;
- Atlantic Avenue at South Portland Street/6th Avenue;
- Atlantic Avenue at Cumberland Street; and
- Atlantic Avenue at Carlton Avenue.

The results of the analysis are shown in Tables 8a and 8b. It should be noted that while a three-year extension from 2016 to 2019 for full build-out of the proposed project is now contemplated, the analysis in Tables 8a and 8b assumes no increase in No Build and Build traffic volumes compared to the 2016 conditions assessed in the FEIS. As discussed in more detail below, neither the level of No Build development anticipated to occur through 2019, nor the additional background growth associated with the proposed change in the Build year, are expected to result in overall traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.

The data in Tables 8a and 8b establish that the proposed relocation of arena block parking would improve conditions for some movements and would worsen conditions for others compared to the FEIS analysis. Overall, however, the proposed relocation of 100 parking spaces from the arena block to Block 1129 would not result in any new significant adverse traffic impacts at any of the seven analyzed intersections in any peak hour, under the *CEQR Technical Manual* criteria. One location of note is the intersection of 6th Avenue and Dean Street where the FEIS revealed a significant adverse impact to the eastbound Dean Street approach in the Saturday pre-game peak hour; this impact would remain unmitigated under the proposed project's traffic mitigation plan outlined in the FEIS. As shown in Table 8b, in the 2016 Build with Mitigation condition, the eastbound approach would operate at LOS E with 77.6 seconds of delay compared to LOS B with 16.3 seconds of delay in the 2016 No Build. The relocation of on-site parking capacity from the arena block to Block 1129 would add an additional 9 vehicles to the eastbound through-right movement in the Saturday pre-game peak hour, worsening the unmitigated impact to this

Atlantic Yards Arena and Redevelopment Project

Table 8a
2019 Traffic Conditions with Relocation of 100 Parking Spaces to Block 1129
Weekday AM and PM Peak Hours

Signalized Intersections	Lane Group	AM Peak Hour									MD Peak Hour									PM Peak Hour								
		No Build 2016			Build w/ Mitigation 2016			Revised 2019			No Build 2016			Build w/ Mitigation 2016			Revised 2019			No Build 2016			Build w/ Mitigation 2016			Revised 2019		
		V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS
6th Avenue(N-S) @ Pacific St. (E-W)	EB-TR	0.10	10.5	B		NA			NA		0.14	10.8	B		NA			NA		0.21	11.4	B		NA			NA	
	WB-L	0.26	12.7	B		NA			NA		0.14	11.2	B		NA			NA		0.12	11.0	B		NA			NA	
	WB-LR		NA		0.36	13.2	B	0.34	13.1	B		NA		0.23	11.7	B	0.23	11.7	B		NA		0.22	11.6	B	0.22	11.6	B
	NB-TR		NA		0.45	14.2	B	0.55	16.4	B		NA		0.32	12.4	B	0.41	13.9	B		NA		0.43	13.9	B	0.49	15.2	B
6th Avenue(N-S) @ Dean St. (E-W)	SB-LT	0.24	11.6	B	0.46	13.4	B	0.47	13.5	B	0.25	11.7	B	0.44	13.3	B	0.46	13.6	B	0.22	11.1	B	0.50	13.8	B	0.52	14.1	B
	EB-L		NA		0.75	31.1	C	0.82	38.4	D		NA		0.31	12.7	B	0.34	13.1	B		NA		0.78	32.9	C	0.67	22.1	C
	EB-TR	Same as Approach			0.65	19.0	B	0.64	18.9	B	Same as Approach			0.89	34.1	C	0.88	32.7	C	Same as Approach			0.94	40.5	D	0.95	40.3	D
	EB-Approach	0.39	13.3	B	---	23.3	C	---	26.3	B	0.50	15.0	B	---	28.6	C	---	27.2	C	0.48	14.6	B	---	38.4	D	---	35.2	D
	NB-TR		NA		0.16	11.0	B	0.19	11.4	B		NA		0.12	10.7	B	0.11	10.6	B		NA		0.20	11.4	B	0.28	14.5	B
SB-LT	0.20	11.0	B	0.62	15.7	B	0.62	15.8	B	0.19	11.0	B	0.51	14.1	B	0.52	14.3	B	0.28	11.6	B	0.59	15.2	B	0.68	19.0	B	

Note: NA - Not Applicable due to change in lane configurations

Table 8b
2019 Traffic Conditions with Relocation of 100 Parking Spaces to Block 1129
Weekday/Saturday Pre-Game and Post-Game Peak Hours

Signalized Intersections	Lane Group	PM PRE-GAME PEAK HOUR									PM POST-GAME PEAK HOUR									SAT MIDDAY PEAK HOUR									SAT POST-GAME PEAK HOUR								
		No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019		
		V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS						
Atlantic Ave. (E-W) @ S. Portland Ave. (N-S)	EB-L	0.23	9.0	A	0.33	25.2	C	0.33	25.4	C	0.08	7.4	A	0.10	7.9	A	0.09	7.8	A	0.81	65.4	E	0.97	125.2	F	0.99	125.2	F	0.87	70.5	E	1.18	172.7	F	1.18	172.7	F
	EB-TR	0.73	11.7	B	0.87	31.9	C	0.86	31.6	C	0.49	9.9	A	0.44	9.2	A	0.44	9.2	A	0.70	11.1	B	0.79	25.7	C	0.79	25.7	C	0.74	11.9	B	0.68	10.3	B	0.68	10.3	B
	WB-L	0.59	22.9	C	0.84	44.4	D	0.83	42.8	D	0.12	7.8	A	0.40	14.3	B	0.36	12.7	B	0.67	27.4	C	1.05	100.6	F	1.05	100.5	F	0.32	11.8	B	1.52	299.0	F	1.52	299.0	F
	WB-TR	0.50	8.0	A	0.58	10.2	B	0.58	10.2	B	0.40	8.8	A	0.51	9.8	A	0.50	9.7	A	0.72	10.9	B	0.80	12.9	B	0.81	12.9	B	0.67	10.0	A	0.75	11.5	B	0.75	11.5	B
	NB-DefL		NA			NA			NA			NA		0.53	31.5	C	0.40	27.0	C		NA		0.54	44.2	D	0.53	43.2	D		NA		0.91	81.7	F	0.87	73.4	E
	NB-TR		NA			NA			NA		0.41	26.9	C	0.40	26.6	C		NA		0.44	37.4	D	0.44	37.4	D		NA		0.32	34.1	C	0.32	34.1	C			
	NB-LTR		NA		0.44	34.1	C	0.42	33.1	C		NA			NA			NA			NA			NA			NA			NA			NA				
	SB-LTR	1.03	90.7	F	---	63.2	E	---	63.7	E	0.46	25.8	C	0.79	43.4	D	---	28.0	C	1.00	83.4	F	---	66.9	E	---	66.9	E	1.38	224.6	F	1.28	181.3	F	1.28	181.3	F
	SB-L		NA		0.97	81.1	F	0.97	81.8	F		NA			NA		0.57	33.1	C		NA		0.99	92.8	F	0.99	92.8	F		NA			NA				
SB-TR		NA		0.38	33.3	C	0.38	33.3	C		NA			NA		0.24	22.2	C		NA		0.50	37.7	D	0.50	37.7	D		NA			NA					

Table 8b (cont'd)
 2019 Traffic Conditions with Relocation of 100 Parking Spaces to Block 1129
 Weekday/Saturday Pre-Game and Post-Game Peak Hours

Signalized Intersections	Lane Group	PM PRE-GAME PEAK HOUR									PM POST-GAME PEAK HOUR									SAT MIDDAY PEAK HOUR									SAT POST-GAME PEAK HOUR								
		No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019			No Build 2016			Build w/ Mit 2016			Revised 2019		
		V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS	V/C Ratio	Delay (sec.)	LOS			
Atlantic Ave. (E-W) @ Cumberland St. (N-S)	EB-T	0.67	10.1	B	0.73	11.2	B	0.73	11.1	B	0.43	9.0	A	0.52	9.9	A	0.52	9.9	A	0.61	9.3	A	0.68	10.3	B	0.68	10.2	B	0.67	10.1	B	0.79	12.5	B	0.79	12.5	B
	WB-T	0.57	8.7	A	0.65	9.9	A	0.65	9.8	A	0.43	9.1	A	0.52	9.9	A	0.52	9.9	A	0.83	13.9	B	0.96	22.9	C	0.95	22.3	C	0.74	11.3	B	0.90	17.2	B	0.91	18.0	B
	SB-L	0.27	32.8	C	0.29	33.3	C	0.29	33.3	C	0.07	20.1	C	0.07	20.1	C	0.07	20.1	C	0.11	30.2	C	0.12	30.5	C	0.12	30.5	C	0.22	31.9	C	0.25	32.8	C	0.25	32.8	C
	SB-R	0.16	31.2	C	0.17	31.5	C	0.17	31.5	C	0.07	20.2	C	0.08	20.3	C	0.08	20.3	C	0.09	30.1	C	0.11	30.5	C	0.11	30.5	C	0.28	33.4	C	0.33	34.9	C	0.33	34.9	C
Atlantic Ave. (E-W) @ Carlton St. (N-S)	EB-L	0.15	7.7	A	0.28	16.7	B	0.27	16.0	B	0.11	7.8	A	0.17	9.1	A	0.18	9.2	A	0.67	51.3	D	0.92	103.4	F	0.92	103.4	F	0.43	21.2	C	0.62	39.0	D	0.62	39.0	D
	EB-T	0.69	10.3	B	NA	NA	NA	NA	NA	0.42	8.9	A	NA	NA	NA	NA	NA	NA	0.59	9.0	A	NA	NA	NA	NA	NA	0.67	10.0	A	NA	NA	NA	NA	NA	NA		
	EB-TR	NA	NA	NA	0.88	22.9	C	0.87	22.6	C	NA	NA	0.53	10.0	A	0.53	10.0	A	NA	NA	0.65	8.0	A	0.65	8.0	A	NA	NA	0.78	11.7	B	0.78	11.7	B			
	WB-L	NA	NA	NA	0.42	21.8	C	0.42	21.6	C	NA	NA	0.12	11.4	B	0.12	11.4	B	NA	NA	0.70	42.8	D	0.70	42.8	D	NA	NA	0.59	42.8	D	0.59	42.8	D			
6th Avenue(N-S) @ Pacific St. (E-W)	WB-TR	0.57	8.8	A	0.64	9.0	A	0.64	9.0	A	0.45	9.2	A	0.50	9.7	A	0.50	9.7	A	0.81	13.0	B	0.88	13.6	B	0.88	13.6	B	0.73	11.2	B	0.79	12.0	B	0.79	12.0	B
	NB-LTR	0.26	31.8	C	0.52	37.4	D	0.53	37.7	D	0.13	20.5	C	0.36	23.1	C	0.38	23.4	C	0.39	33.8	C	0.73	44.9	D	0.74	45.3	D	0.47	35.3	D	0.77	44.0	D	0.77	44.0	D
	EB-TR	0.15	10.9	B	0.20	11.5	B	0.20	11.5	B	0.08	10.3	B	0.29	12.4	B	0.30	12.4	B	0.19	11.2	B	0.26	12.0	B	0.32	12.6	B	0.80	25.9	C	0.80	26.1	C			
	WB-L	0.12	10.9	B	0.49	15.0	B	0.49	15.0	B	0.03	10.0	A	0.26	11.9	B	0.32	12.7	B	0.17	11.7	B	0.43	13.9	B	0.43	13.9	B	0.47	17.8	B	0.45	14.2	B	0.53	16.0	B
6th Avenue(N-S) @ Dean St. (E-W)	SB-LT	0.27	11.8	B	0.44	13.2	B	0.44	13.2	B	0.10	10.4	B	0.20	11.1	B	0.20	11.1	B	0.32	12.4	B	0.47	13.6	B	0.47	13.6	B	0.31	12.2	B	0.50	13.9	B	0.50	13.9	B
	EB-L	NA	NA	NA	0.98	70.8	E	0.97	68.5	E	NA	NA	0.58	22.8	C	0.54	20.5	C	NA	NA	0.87	52.1	D	0.86	52.1	D	NA	NA	0.91	59.9	E	1.30	59.9	E			
	EB-TR	Same as Approach	0.84	25.5	C	0.86	26.9	C	Same as Approach	0.39	11.6	B	0.38	11.6	B	Same as Approach	1.10	86.4	F	1.12	88.9	F	Same as Approach	1.18	113.3	F	1.34	113.3	F								
	EB-Approach	0.36	13.0	B	---	38.2	D	---	38.4	D	0.18	11.1	B	---	15.3	B	---	14.4	B	0.57	16.3	B	---	77.6	E	---	82.2	F	0.68	19.2	B	---	103.4	F	---	103.4	F
Carlton Ave. (N-S) @ Pacific St. (E-W)	NB-TR	NA	NA	NA	0.22	14.2	B	0.22	14.2	B	NA	NA	0.16	12.9	B	0.16	12.9	B	NA	NA	0.40	16.2	B	0.40	16.2	B	NA	NA	0.25	13.9	B	0.22	13.9	B			
	SB-LT	0.19	10.9	B	0.63	18.8	B	0.63	18.8	B	0.07	10.2	B	0.33	14.1	B	0.34	14.1	B	0.23	11.2	B	0.64	18.1	B	0.64	18.1	B	0.29	11.7	B	0.85	25.4	C	0.81	25.4	C
	EB-L	NA	NA	NA	0.04	13.4	B	0.04	13.4	B	NA	NA	0.01	13.1	B	0.01	13.1	B	NA	NA	0.06	13.5	B	0.06	13.6	B	NA	NA	0.09	13.9	B	0.09	13.9	B			
	EB-LT	0.26	15.8	B	NA	NA	NA	NA	0.11	14.2	B	NA	NA	NA	NA	0.32	16.7	B	NA	NA	NA	NA	NA	NA	NA	0.50	20.4	C	NA	NA	NA	NA	NA				
Carlton Ave. (N-S) @ Dean St. (E-W)	WB-TR	0.17	14.8	B	NA	NA	NA	NA	0.09	13.9	B	NA	NA	NA	NA	0.31	16.5	B	NA	NA	NA	NA	NA	NA	0.43	18.6	B	NA	NA	NA	NA	NA	NA				
	NB-LTR	0.31	8.8	A	NA	NA	NA	NA	0.14	7.2	A	NA	NA	NA	NA	0.43	7.5	A	NA	NA	NA	NA	NA	0.40	7.1	A	NA	NA	NA	NA	NA	NA					
	NB-LT	NA	NA	NA	0.55	12.0	B	0.56	12.2	B	NA	NA	0.62	13.6	B	0.63	13.9	B	NA	NA	0.80	19.9	B	0.79	19.5	B	NA	NA	0.73	13.9	B	0.73	14.2	B			
	SB-R	NA	NA	NA	0.12	7.2	A	0.12	7.2	A	NA	NA	0.04	6.6	A	0.05	6.7	A	NA	NA	0.13	7.3	A	0.15	7.5	A	NA	NA	0.16	7.5	A	0.16	7.5	A			
Carlton Ave. (N-S) @ Dean St. (E-W)	EB-LT	0.53	20.5	C	---	30.7	C	---	28.5	C	0.23	15.7	B	0.53	21.0	C	0.53	21.0	C	0.79	31.4	C	---	289.2	F	---	286.8	F	1.06	79.5	E	1.95	458.0	F	1.95	458.0	F
	EB-L	NA	NA	NA	0.47	19.5	B	0.45	18.2	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.42	682.3	F	2.42	682.3	F	NA	NA	NA	NA	NA	NA	NA	NA				
	EB-T	NA	NA	NA	0.86	37.0	D	0.84	34.1	C	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.85	33.5	C	0.87	35.8	D	NA	NA	NA	NA	NA	NA	NA	NA				
NB-TR	0.32	9.2	A	0.69	15.5	B	0.71	16.9	B	0.16	5.7	A	0.22	6.1	A	0.22	6.1	A	0.37	9.8	A	0.82	24.5	C	0.82	24.5	C	0.44	10.6	B	0.67	15.2	B	0.67	15.2	B	

Notes:
 * Unmitigated Significant Adverse Impact
 NA - Not Applicable due to change in lane configurations

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approach. With these 9 additional vehicles, conditions on the eastbound approach would worsen to LOS F and 82.2 seconds of delay. The eastbound through-right movement would operate at LOS F with 88.9 seconds of delay and a v/c ratio of 1.12, compared to LOS F, 86.4 seconds of delay and a v/c ratio of 1.10 in the 2016 Build with Mitigation condition reported in the FEIS.

As the proposed relocation of up to 100 off-street parking spaces from the arena block to Block 1129 would not change the total amount of off-street parking capacity provided on the project site from what was analyzed in the FEIS, no new significant adverse impacts to off-street parking conditions are anticipated.

Change in Lay-by Lane Configuration on Flatbush Avenue

Under the plan for the arena block described in the FEIS (as shown in Figure 4), the east sidewalk along northbound Flatbush Avenue would be set back between Dean Street and Atlantic Avenue to provide for a 10-foot-wide lay-by lane along the east curb to accommodate pick-up/drop-off and loading/unloading activity adjacent to the arena. This segment of Flatbush Avenue would operate with three travel lanes and the lay-by lane in the northbound direction, and two travel lanes and a curb lane in the southbound direction.

The FEIS assumed approximately 61 vehicle spaces of lay-by lane capacity on the arena block under the plan assessed in the FEIS. This included approximately 14 spaces along the east side of Flatbush Avenue—8 to the north of 5th Avenue and 6 to the south; 7 spaces along Dean Street; 6 spaces along 6th Avenue; and 34 spaces along Atlantic Avenue. These estimates assumed 22 feet per space, and exclude the curbside space within the Flatbush Avenue/Pacific Street intersection that would be newly signalized and reconfigured with a new crosswalk under the traffic mitigation plan as outlined in the FEIS (see Figure 19-1 in the FEIS). Also excluded is 150 feet of curb length along Flatbush Avenue north of 5th Avenue assumed to be occupied by a bus stop for northbound B41 and B67 buses, as well as the northbound B63 that would be re-routed to operate along Flatbush Avenue between 5th and Atlantic Avenues.

In addition to taxis, black cars, and buses serving remote parking garages and ‘park & ride’ lots on Staten Island during Nets games, the FEIS assumed that pick-up and drop-off activity by commuter vans serving the new subway entrance on the project site would also be accommodated in the lay-by lanes proposed along both Atlantic and Flatbush Avenues.

As currently envisioned, a lay-by lane would be located along the east side of Flatbush Avenue between Atlantic and 5th Avenues, but the east sidewalk along Flatbush Avenue between Dean Street and 5th Avenue would not be set back and a lay-by lane would not be provided along this block. (As a result, the east sidewalk on this block would be wider than the design analyzed in the FEIS.) Instead, no stopping would be permitted along northbound Flatbush Avenue between Dean Street and 5th Avenue and this block would function with three northbound moving lanes with no parking lane. North of 5th Avenue, the lane configuration of Flatbush Avenue would remain unchanged from what was analyzed in the FEIS.

Overall, the current plan would reduce the number of lay-by spaces along Flatbush Avenue by a total of approximately 6 spaces. Along the arena block frontages, approximately 8 spaces would remain on Flatbush Avenue (compared to 14 under the plan assessed in the FEIS) and 47 spaces would remain along the lay-by lanes on Atlantic Avenue, 6th Avenue, and Dean Street. In addition, substantial curbside space would continue to be available in the proposed lay-by lanes along Atlantic Avenue adjacent to Blocks 1120 and 1121 and along the north curb of Pacific Street adjacent to Block 1120 (see Figure 12-5 in the FEIS).

A screening analysis was performed to identify the potential for the absence of a lay-by lane south of 5th Avenue to result in new significant adverse traffic impacts at the Flatbush Avenue/5th Avenue intersection. The analysis focuses on the weekday and Saturday pre-game and post-game peak hours when the highest amount of curbside pick-up and drop-off activity adjacent to the arena is expected to occur. As a worst-case condition for this screening analysis, the northbound Flatbush Avenue approach was assumed to operate with only two moving lanes approaching 5th Avenue, a condition that would occur if vehicles were to illegally stop in the curbside lane. The analysis was performed using the same methodology that was utilized in the FEIS—the methodology presented in the *Highway Capacity Manual Software [HCS] 2000 Release 4.1f*. The results of this analysis are shown below in Table 9, which illustrates the volume-to-capacity (v/c) ratios, approach delays, and levels of service (LOS) on the northbound approach for the 2016 FEIS No Build condition, the 2016 FEIS Build with Mitigation condition, and 2019 Build condition assuming only two northbound moving lanes on Flatbush Avenue approaching 5th Avenue due to vehicles illegally stopping in the curbside lane. (It should be noted that while a three-year extension to 2019 for full build-out of the proposed project is now contemplated, the analysis in Table 9 assumes no increase in No Build and Build traffic volumes compared to the 2016 conditions assessed in the FEIS. As discussed below, neither the level of No Build development anticipated to occur through 2019, nor the additional background growth associated with the proposed change in Build year are expected to result in overall traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.) With only two travel lanes, northbound Flatbush Avenue at the Flatbush Avenue/5th Avenue intersection would continue to operate at an acceptable LOS B or C in all pre-game and post-game peak hours when demand for curbside space adjacent to the arena is expected to be greatest. Based on the results of this screening analysis, no new significant adverse traffic impacts are anticipated on northbound Flatbush Avenue at 5th Avenue due to the absence of a lay-by lane south of 5th Avenue, even if vehicles were to illegally stop in the curbside lane. This should be considered a conservative, worst-case analysis because the presence of traffic control officers before and after a major arena event and posted no stopping regulations along this block are expected to deter drivers from illegally stopping or standing.

Table 9
Traffic Impact Screening Analysis for Northbound Flatbush Avenue at 5th Avenue with Lay-by Lane Modifications

	Analysis Period	2016 FEIS No Build			2016 FEIS Build with Mitigation			2019 Build Screening Analysis Condition ¹		
		V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
Northbound Flatbush Avenue @ 5th Avenue	Weekday Pre-Game	0.74	14.7	B	0.47	9.5	A	0.68	13.1	B
	Weekday Post-Game	0.73	21.4	C	0.47	15.1	B	0.68	19.8	B
	Saturday Pre-Game	1.14	87.8	F	0.63	11.7	B	0.92	25.4	C
	Saturday Post-Game	0.98	34.0	C	0.62	8.2	A	0.81	14.2	B
Notes: V/C ratio – volume-to-capacity ratio LOS – level of service sec/veh – seconds per vehicle ¹ As a worst case scenario, the screening analysis assumes only two northbound moving lanes on Flatbush Avenue approaching 5 th Avenue, a condition that would occur if vehicles were to illegally stop in the curbside lane.										

Other Design Development Components

Other design development components now contemplated are not expected to result in traffic or parking conditions substantially different from what was analyzed in the FEIS. Changes in the design of the arena's façade, roof, stormwater detention tanks, heating systems, the height of Building 1, and the potential Urban Room subway entrance reconfiguration would not affect traffic or parking conditions. The relocation of the arena's VIP entry to Atlantic Avenue from Dean Street would also not result in significant changes to traffic flow or parking, nor would the one-foot widening of a crosswalk on Carlton Avenue at Dean Street or a similar widening of a second crosswalk on 6th Avenue at Dean Street. (The potential effects of these changes in crosswalk widths on pedestrian flow are discussed below in the "Transit and Pedestrians" section.) Neither Build condition traffic flow nor parking capacity/utilization would be affected by the modifications to the LIRR Vanderbilt Yard. Lastly, although the 6th Avenue Bridge between Atlantic Avenue and Pacific Street would not be demolished and rebuilt, the configuration of travel lanes and parking lanes along the bridge would be the same as what was analyzed in the FEIS.

SCHEDULE CHANGES TO 2019

The three-year extension to 2019 for the full build-out of the project was analyzed to determine whether there would be any effect on the conclusions of the FEIS. As discussed in Chapter 12 of the FEIS and in the technical memorandum entitled *Summary of No Build Sites Considered for the EIS Transportation Analyses* included in Appendix C of the FEIS, a 0.5 percent per year background growth rate was applied to the entire 2006 existing baseline traffic network for the 2006 through 2016 period. This background growth rate, recommended in the *CEQR Technical Manual* for projects in Downtown Brooklyn, was applied to account for travel demand from smaller developments, as-of-right developments not reflected in the land use analyses, and general increases in travel demand not attributable to specific development projects. The background growth rate was conservatively applied to every intersection in the traffic study area in each peak hour, and is equivalent to an approximately five percent increase in traffic by 2016 compared to 2006 levels. In the AM peak hour alone, the amount of background growth assumed for the 2006 through 2016 period would account for roughly 2,000 additional vehicle trips entering and exiting the study area, equivalent to the travel demand generated by 19,000 new dwelling units or nine million square feet of new office space in Downtown Brooklyn.

The proposed change in the Build year from 2016 to 2019 would potentially represent an additional 1.5 percent of background growth over 2006 levels. However, it is important to note that traffic volumes in New York City have declined in recent years. For example, March 2009 traffic volumes at two of Brooklyn's primary gateway facilities—the Brooklyn-Battery Tunnel and the Verrazano-Narrows Bridge—declined by approximately 11.6 percent and 4.4 percent, respectively, compared to March 2006 volumes.³

To assess the localized change in traffic volumes in the vicinity of the project site since the baseline traffic network for the FEIS was developed, automatic traffic recorder (ATR) counts were conducted on Flatbush Avenue south of Dean Street and on Atlantic Avenue east of South Oxford Street in September 2008. A comparison with ATR data collected at these same locations in 2005 is presented in Table 10. The 2008 ATR data indicate that average weekday two-way traffic volumes on Atlantic Avenue have declined by approximately 11.5 percent since

³ Source: MTA Bridges and Tunnels.

2005, while Saturday volumes have declined by approximately 7.3 percent. Two-way traffic volumes on Flatbush Avenue have declined by approximately 9 percent on weekdays and 10.7 percent on Saturdays over the same three-year period.

Table 10
Comparison of 2005 and 2008 Daily Two-Way Traffic Volumes

	2005		2008		Percent Change: 2005 to 2008	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Atlantic Avenue	46,445	45,898	41,087	42,570	-11.5	-7.3
Flatbush Avenue	44,848	48,700	40,801	43,481	-9.0	-10.7

Source: June 2005 and September 2008 ATR counts conducted on Atlantic Avenue east of South Oxford Street and on Flatbush Avenue south of Dean Street.

Overall, the FEIS analysis assumed a one percent increase in existing traffic levels due to background growth from 2006 to 2008 and an approximately five percent total increase from 2006 through 2016, while recent ATR data indicate that weekday and Saturday traffic volumes on the primary arteries serving the project site have actually declined by approximately 7 to 12 percent since 2005. As such, it appears that the FEIS traffic analysis overestimates background growth by substantially more than the potential 1.5 percent increase associated with the proposed change in the project’s Build year from 2016 to 2019. Any potential increase in study area background traffic associated with the change in the schedule for the full build-out would therefore not be expected to result in total traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.

In addition to the background growth assessment discussed above, the amount of traffic generated by No Build development was also assessed to account for changes in the status of No Build projects identified in the FEIS (see Table 11). These include developments located within the ¾-mile secondary land use study area, developments outside of the secondary study area that were included in the FEIS at the request of DOT, and developments located in proximity to corridors analyzed for the traffic analysis. All of the projected development sites for the Downtown Brooklyn Development project were also included. Projects with programs less than the minimum development thresholds for Downtown Brooklyn identified in Table 30-1 in the *CEQR Technical Manual* as potentially requiring traffic, parking, transit, and/or pedestrian analyses were not included.⁴ (Exceptions were made if a development program included a mix of uses that in aggregate were expected to generate 50 or more vehicle trips or 200 or more transit or pedestrian trips in a peak hour.)

As shown in Table 11, the discrete No Build sites accounted for in the FEIS transportation analyses comprised a total of approximately 6,254 dwelling units; 5,185,400 sf of office space; 1,152,100 sf of retail space; and 504 hotel rooms. A total of 2,244,615 sf of “other” space (a mix of academic, performance, community facility, marina, and courthouse space) was also included.

⁴ These minimums are: 200 residential dwelling units; 100,000-gsf office space; 20,000-gsf retail space; and 25,000-gsf community facility space.

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Table 11
**Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with the 2019 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2019						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
1	LIU Recreation and Wellness Center	2005		10,000			117,000	2005		10,000			117,000	completed
2 [NA]	Federal Courthouse (Adams & Tillary Sts)	2005					700,000	2005					700,000	completed
3 [NA]	Pier 12	2006					23,200	2006					23,200	completed
4 [NA]	110 Livingston Street	2006	375				6,000	2006	300				6,000	completed
5 [NA]	Brooklyn Marriott Expansion	2006			8,500	280		2006			8,500	280		completed
6 [NA]	IKEA Red Hook	2006			346,000			2006			346,000			completed
7 [NA]	Fairway Supermarket	2006		91,500	119,300		19,200	2006	45	6,000	119,300			completed
8 [4]	Williamsburgh Savings Bank Building	2007	189		23,000			2007	178		23,000			completed; 30,000 sf of existing dental office space retained
9 [9]	17 Eastern Pkwy (Union Temple site)	2007	200					2007	102					completed
10 [29]	Atlantic Avenue & Smith Street	2007	50	31,500	15,000		8,500	2007	50		15,000	93	8,500	Completed; "other" includes community facility space
11 [NA]	306 & 313 Gold Street	2015	517					2008	527					Oro Condominiums (306 Gold St.) completed w/303 D.U.; 313 Gold Street w/214 D.U. under construction
12 [11]	Schermerhorn St btwn Hoyt and Bond Sts	2009	149		14,700			2009	172		14,700			158 D.U. completed; 14 townhouses under construction

Table 11 (cont'd)
**Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with the 2019 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2019						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
13 [24]	Willoughby St btwn Gold & Duffield Sts	2013		999,000	48,000			2009					680	
14 [28]	ESDC/HS Schermerhorn St Block 170	2008	440					2009	440					
15 [30]	Myrtle Ave & Flatbush Ave	2013	300		60,000			2009	280		60,000			
16 [35]	Waverly Avenue Charter School	2008					80,000	2009					80,000	
17 [41]	159 Myrtle Avenue by Avalon Bay		Not included in FEIS No Build Scenario					2009	650		5,000			
18 [12]	80 DeKalb Ave	2009	430					2010	365					
19 [44]	111 Lawrence Street		Not included in FEIS No Build Scenario					2010	500					
20 [49]	Holiday Inn: 300 Schermerhorn Street		Not included in FEIS No Build Scenario					2010					247	
21 [42]	470 Vanderbilt Avenue		Not included in FEIS No Build Scenario					2011	376	1,091	115,424			totals reflect the displacement of 578,554 sf of existing office uses on the site.
22 [31]	Myrtle Ave & Ashland Pl	2013	259		86,000			2011	660		22,000			
23 [NA]	Brooklyn Bridge Park	2012	1,210	164,400	237,600	224	(see note)	2012	1,210	164,400	237,600	224	(see note)	"other" includes a 185-slip marina and 1,000-seat theater.
24 [48]	Brooklyn House of Detention		Not included in FEIS No Build Scenario					2012					40,000	"other" includes expansion of current jail from 815 to 1,478 beds

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Table 11 (cont'd)
**Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with the 2019 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2019						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
25 [13]	BAM LDC (bounded by Ashland Pl and Lafayette & Flatbush Aves)	2013		15,000			180,000	2013	180				187,000	"other" includes rehearsal studio/cinema/visual arts space
26 [14]	BAM LDC North (bounded by Ashland Pl, Rockwell Pl, Lafayette Ave, & Fulton St)	2013	570		10,000		253,000	2013	187	0	4,000	0	74,000	"other" includes rehearsal/performance/arts space
27 [15]	395 Flatbush Avenue Ext.	2013			12,000			2013			12,000			
28 [17]	254 Livingston Street	2013	186	21,000				2013	186	21,000				
29 [18]	236 Livingston St (SW corner of Bond St)	2013	163	18,000				2013	271					
30 [23]	Flatbush Ave at Albee Square W.	2013		1,233,000	42,000			2013	650	360,000	147,000			excludes 373,000 sf of existing retail that would be retained
31 [25]	Willoughby St btwn Duffield & Bridge Sts	2013		544,000	50,000			2013	544		50,000			
32 [26]	Adams St/Boerum Pl at Fulton St	2013		788,000	70,000			2013		788,000	70,000			
33 [NA]	Site C, Jay & Johnson Sts	2013		720,000			8,000	2013		720,000			8,000	
34 [NA]	Site G, Johnson & Gold Sts	2013	71		10,000			2013	71		10,000			
35 [19]	29 Flatbush Avenue		Not included in FEIS No Build Scenario					2013	333					
36 [21]	BAM LDC East		Not included in FEIS No Build Scenario					2013	150				60,000	"other" includes community facility space

Table 11 (cont'd)
**Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with the 2019 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2019						Notes	
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)		
37 [52]	388 Bridge Street		Not included in FEIS No Build Scenario						2014	360					
38 [16]	Atlantic Center	2013	850	550,000				TBD	850	500,000					
39 [NA]	Bridge Plaza Rezoning	2004	295					TBD	648						
40 [NA]	City University (Site A)	TBD					590,777	TBD					244,000		
41 [NA]	City University (Site B)	TBD					258,938	TBD					157,000		
	Development 2006–2008		814	133,000	511,800	280	873,900		675	16,000	511,800	373	854,700		
	Development 2008–2016/2019		5,440	5,052,400	640,300	224	1,370,715		9,610	2,554,491	747,724	1,151	850,000		
	Total Development 2006–2016/2019		6,254	5,185,400	1,152,100	504	2,244,615		10,285	2,570,491	1,259,524	1,524	1,704,700		

Note: Numbering used in Table 3 is reflected in brackets.

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Since the issuance of the FEIS, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development. Overall, as shown in Table 11, development totaling approximately 675 dwelling units, 16,000 sf of office space, 511,800 sf of retail space, 373 hotel rooms and 854,700 sf of courthouse and other space was completed by 2008. As noted above, even with the additional travel demand generated by this completed development, 2008 traffic volumes in the vicinity of the project site are actually lower than the 2006 baseline volumes for the FEIS analysis. In order to determine the transportation demand that would be generated by new development anticipated to occur from 2008 through 2019, an updated No Build scenario for the transportation analyses was developed based on the same criteria used for identifying discrete No Build sites for the transportation analyses in the FEIS. Based on current data, it is anticipated that a total of approximately 9,610 dwelling units; 2,554,491 sf of office space; 747,724 sf of retail space, 1,151 hotel rooms, and 850,000 sf of other space would be developed in Downtown Brooklyn and its vicinity by 2019.

Table 12 shows the estimated travel demand generated by the No Build residential, office, retail and hotel development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from such new development now anticipated to occur by 2019. As shown in Table 12, the residential, office, retail and hotel uses in the FEIS No Build development scenario would generate an estimated 336 to 2,504 vehicle trips (auto, taxi and truck) in each analyzed peak hour. For the FEIS traffic analyses, the vehicle trips generated by No Build sites were added to the 2006 baseline network (along with a total of approximately five percent background growth—0.5 percent per year) to forecast 2016 No Build conditions. By comparison, new residential, office, retail and hotel development now anticipated to occur by 2019 would generate an estimated 437 to 2,167 vehicle trips in each peak hour. There would be 173 fewer vehicle trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 251 fewer in the midday and 337 fewer in the weekday PM peak hour. In the weekday pre-game and post-game and Saturday pre-game and post-game peak hours, development now planned by 2019 would generate approximately 123, 100, 292 and 275 more vehicle trips, respectively, compared to the FEIS scenario. These increases in vehicle trips in the pre- and post-game peak hours are primarily due to an increase in the number of residential dwelling units now planned for development in the study area. Given that No Build development sites are widely dispersed throughout Downtown Brooklyn and its vicinity, the number of these additional vehicle trips occurring at any one intersection is expected to be relatively small.

In addition to residential, office, retail and hotel uses, the FEIS No Build scenario accounted for travel demand from the development of approximately 2,244,615 square feet of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater, and performing and visual arts space. By contrast, as shown in Table 11, it is now anticipated that a total of only 850,000 square feet of such space would be developed from 2008 through 2019. Given this decrease in projected development, it is not expected that these miscellaneous uses would generate greater travel demand than what was analyzed in the FEIS, and separate travel demand forecasts for these uses are not included in Table 12.

Table 12
Travel Demand Comparison
FEIS 2016 No Build Scenario vs Anticipated Development 2008 - 2019

		FEIS 2006 - 2016 NO BUILD SCENARIO					DEVELOPMENT ANTICIPATED 2008-2019					NET DIFFERENCE				
		Residential	Office	Retail	Hotel	Total	Residential	Office	Retail	Hotel	Total	Residential	Office	Retail	Hotel	Total
Total Development		6,254 (D.U.)	5,185,400 (sf)	1,152,100 (sf)	504 (rooms)	----	9,610 (D.U.)	2,554,491 (sf)	747,724 (sf)	1,151 (rooms)	----	3,365 (D.U.)	(2,630,909) (sf)	(404,376) (sf)	647 (rooms)	----
Peak Hour Vehicle Trips																
Auto+Taxi+Truck	Weekday AM	643	1,095	166	60	1,964	994	544	112	141	1,791	351	-551	-54	81	-173
	Weekday MD	348	392	926	80	1,746	531	192	594	178	1,495	183	-200	-332	99	-251
	Weekday PM	711	1,249	470	74	2,504	1,091	613	296	167	2,167	380	-636	-174	93	-337
	Weekday Pre-Game	543	371	138	63	1,115	830	181	88	139	1,238	287	-190	-50	76	123
	Weekday Post-Game	214	62	44	16	336	332	30	32	43	437	118	-32	-12	26	100
	Saturday Pre-game	610	24	431	103	1,168	936	9	279	236	1,460	326	-15	-152	133	292
	Saturday Post-Game	622	69	445	105	1,241	958	33	285	240	1,516	336	-36	-160	135	275
Peak Hour Transit Trips																
Subway Trips	Weekday AM	3,309	7,159	878	36	11,382	5,085	3,527	570	83	9,265	1,776	-3,632	-308	47	-2,117
	Weekday PM	3,891	8,312	2,720	42	14,965	5,978	4,095	1,766	97	11,936	2,087	-4,217	-954	55	-3,029
	Weekday Pre-Game	3,018	2,426	850	37	6,331	4,637	1,195	552	83	6,467	1,619	-1,231	-298	46	136
Bus Trips	Weekday AM	138	660	220	10	1,028	211	326	142	24	703	73	-334	-78	14	-325
	Weekday PM	162	767	680	12	1,621	249	378	442	29	1,098	87	-389	-238	17	-523
	Weekday Pre-Game	126	224	212	10	572	193	110	138	25	466	67	-114	-74	15	-106
Note: In addition to the residential, office, retail and hotel uses shown in the table, the FEIS No Build scenario accounted for travel demand from approximately 2.2 million sf of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater and performing and visual arts space. As only 850,000 sf of such space is now planned for the 2008-2019 period, these uses are not expected to generate greater travel demand than was analyzed in the FEIS, and travel demand forecasts for these uses are not included in the table.																

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In summary, the analysis of future traffic conditions in the FEIS utilized a 2006 baseline condition that was increased by a total of approximately five percent to account for background growth through 2016 (0.5 percent per year) and to which was added travel demand from No Build developments. By contrast, recent ATR data indicate that 2008 weekday and Saturday traffic volumes on the primary arteries serving the project site are actually lower than the 2006 baseline used for the FEIS. In addition, there would be up to 337 fewer vehicle trips in the weekday AM, midday and PM peak hours generated by the No Build development now anticipated to occur by 2019. Although there would be up to 292 more vehicle trips from No Build development in the pre-game and post-game peak hours by 2019 than considered in the FEIS, these trips would be widely dispersed throughout Downtown Brooklyn and its vicinity, and the number of additional vehicle trips from changes in No Build developments occurring at any one intersection is expected to be relatively small. Furthermore, as noted previously, there has been a 7 to 12 percent decline in weekday and Saturday traffic volumes on the primary arteries serving the project site from 2005 to 2008. Therefore, the potential 1.5 percent increase in study area background traffic associated with the three-year shift in the Build year and the changes in anticipated No Build development now expected to occur by 2019 would not be expected to result in total traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.

The shift in the Build year from 2016 to 2019 is also not expected to result in greater demand for off-street public parking in the vicinity of the project site than was analyzed in the FEIS. Overall, the FEIS analysis assumed an approximately five percent increase in existing parking demand due to background growth from 2006 through 2016. However, as discussed above, recent ATR data indicate that weekday and Saturday traffic volumes on the primary arteries serving the project site have actually declined by approximately 7 to 12 percent since 2005. Given these ATR data and the recent increase in unemployment city-wide, it is expected that parking demand in the vicinity of Downtown Brooklyn has also declined during this period. In addition, based on current data there would be a net decrease in new office space developed by 2019 compared to the development program assumed for the 2016 No Build analysis in the FEIS. Future office -related parking demand would therefore also be substantially lower than what was assumed in the FEIS. By contrast, the increase in residential development anticipated by 2019 compared to the 2016 scenario is not expected to substantially increase the demand for public parking. It is anticipated that residential parking demand would be generally accommodated in accessory parking, as zoning in the area typically imposes minimum parking requirements for any new residential developments that are designed to accommodate the development's parking demand. As such, it is not expected that parking demand in the vicinity of the project site in 2019 would be greater than what was analyzed in the FEIS for the 2016 Build year. In addition, it should be noted that in the 2016 future with the proposed project, the parking study area would continue to operate with a surplus of between 624 and 2,919 off-street public parking spaces in the analyzed weekday AM, midday, evening and Saturday midday peak hours under both project variations (see Tables 12-27 and 12-38 in the FEIS). Therefore, even if there were to be a small increase in parking demand by 2019 compared to the levels forecast for 2016, sufficient off-street public parking capacity would be expected to be available to accommodate this demand, and it would not result in new significant adverse parking impacts.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The potential effects on traffic and parking of changes to anticipated No Build developments in the vicinity of the project site were discussed previously in conjunction with the change in the schedule to 2019. As noted above, the potential 1.5 percent increase in study area background traffic associated with the three-year shift in the Build year and the changes in anticipated No Build development now expected to occur by 2019 would not be expected to result in total traffic volumes or parking demand greater than what was analyzed in the FEIS for the 2016 Build year.

TRANSIT AND PEDESTRIANS

GENERAL PROJECT PLAN MODIFICATION

The proposed GPP modification would not result in significant adverse environmental impacts with respect to transit and pedestrians that were not addressed in the FEIS. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses for transit facilities, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the transit and pedestrians analysis as described in the FEIS.

DESIGN DEVELOPMENT

One design development—the potential reconfiguration of the Urban Room subway entrance—may affect transit conditions compared to what was analyzed in the FEIS. In addition, two components of the design development—the relocation of up to 100 (out of 350) off-street parking spaces from the arena block below Building 2 to Block 1129 and the widening of two crosswalks, one on 6th Avenue at Dean Street and one on Carlton Avenue at Dean Street—would potentially affect pedestrian conditions compared to the FEIS analysis. These three design developments are, therefore, evaluated below.

Transit-Subway

As discussed previously, the Urban Room subway entrance may be reconfigured from what was analyzed in the FEIS. The illustrative transit connection design shown in the FEIS consisted of two 48-inch escalators each paired with a 9-foot-wide stair with an estimated effective width of approximately 6 feet. Based on a more recent design developed in consultation with MTA/NYCT, this configuration may be revised to group the two escalators together with a single, approximately 25-foot-wide stair. (Under both designs, a new elevator for ADA access would also be provided.) Using the same methodology as was used in the FEIS, it is estimated that this stairway would have an effective width of approximately 17.6 feet if divided by handrails into five lanes. This compares to a total of 12 feet of effective stair width for the two-stair configuration analyzed in the FEIS. Overall, the total vertical circulation capacity of this revised escalator/stair configuration would be greater than the design analyzed in the FEIS. Therefore, pedestrian access between the Urban Room and the subway would be improved compared to conditions reflected in the FEIS, and no further analysis of this design change is warranted.

Pedestrians

As discussed previously, up to 100 of the 350 parking spaces planned for a parking garage on the arena block would instead be relocated to a parking garage on Block 1129, increasing the total number of parking spaces on Block 1129 to 2,070 spaces. This would result in additional pedestrian demand on sidewalks and crosswalks along the north side of Dean Street linking Block 1129 and the Arena (i.e., between Vanderbilt and 6th Avenues), primarily in the weekday and Saturday pre-game and post-game peak periods. During these periods, from 32 to 36 additional pedestrians would be expected to utilize these sidewalks and crosswalks in the peak 15-minutes compared to the volumes forecast in the FEIS.

As shown in Table 13-50 in the FEIS, the sidewalks and corner areas along the north side of Dean Street between Vanderbilt and 6th Avenues are projected to operate at LOS A or B in all analyzed peak periods under platoon conditions in the 2016 Build conditions. With the addition of up to 36 peak 15-minute pedestrian trips, these sidewalks and corner areas would continue to operate at an

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acceptable LOS B or better, and would not experience new significant adverse impacts in any analyzed peak period.

As shown in Table 19-11 in the FEIS, under pre-mitigation 2016 Build conditions, the north crosswalk on Carlton Avenue at Dean Street would experience significant adverse impacts in the weekday and Saturday pre-game peak periods, and the north crosswalk on 6th Avenue at Dean Street would experience significant adverse impacts in the Saturday pre-game peak period. The FEIS proposed widening the north crosswalk on Carlton Avenue by four feet (from 16 to 20 feet in width) and the north crosswalk on 6th Avenue by one foot (from 16 to 17 feet in width) to return both of these crosswalks from LOS E to LOS D conditions, thereby fully mitigating these impacts.

As noted above, the relocation of up to 100 spaces of parking capacity from the arena block to Block 1129 under the proposed design development would result in the addition of 32 to 36 pedestrians to each of these two crosswalks in the peak 15 minutes of each peak hour in the weekday and Saturday pre-game peak periods. To accommodate this additional demand, the design development includes the widening of the north crosswalk on Carlton Avenue at Dean Street and the north crosswalk on 6th Avenue at Dean Street by an additional one-foot each. Widening the north crosswalk on Carlton Avenue from 20 feet in width (in the FEIS Build with Mitigation condition) to 21 feet and the north crosswalk on 6th Avenue from 17 feet in width to 18 feet would maintain each of these crosswalks at an acceptable LOS D, with more than 15 square feet/pedestrian in each peak hour. Therefore, with the proposed further one-foot increase in the width of the north crosswalk on Carlton Avenue at Dean Street and the similar one-foot increase in the width of the north crosswalk on 6th Avenue at Dean Street (compared to the FEIS Build with Mitigation condition), the additional pedestrian demand generated by the relocated parking would be accommodated.

Other design development components now contemplated are not expected to result in transit or pedestrian conditions substantially different from what was analyzed in the FEIS. Changes in the design of the arena's façade, roof, stormwater detention tanks, heating systems, and the height of Building 1 would not affect transit or pedestrian conditions. With the elimination of a lay-by lane along the east side of Flatbush Avenue between Dean Street and 5th Avenue, the sidewalk along this block would be wider than the design analyzed in the FEIS, and therefore, pedestrian conditions would be improved. Although the arena's VIP entry would be relocated to Atlantic Avenue from Dean Street, this would affect only a relatively small number of arena pedestrian trips, and a substantial change in pedestrian flow patterns is not anticipated. There would continue to be a secondary entrance for arena patrons located on Dean Street as assumed in the FEIS.

The modifications to the permanent LIRR Vanderbilt Yard are unrelated to and would not affect subway, bus or pedestrian conditions. Lastly, although the 6th Avenue Bridge between Atlantic Avenue and Pacific Street would not be demolished and rebuilt, the configuration of the travel lanes, lay-by lanes and sidewalks along the bridge would be the same as analyzed in the FEIS, and there would be no change in pedestrian conditions.

SCHEDULE CHANGE TO 2019

As discussed in Chapter 13, "Transit and Pedestrians," of the FEIS, a total of approximately five percent background growth (0.5 percent per year) was applied to 2006 existing baseline transit (subway and bus) and pedestrian volumes for the 2006 through 2016 period. This background growth rate, recommended in the *CEQR Technical Manual* for projects in Downtown Brooklyn, was applied to account for travel demand from smaller developments, as-of-right developments not reflected in the land use analyses, and general increases in travel demand not attributable to specific

development projects. The proposed change in the Build year from 2016 to 2019 would potentially represent an additional 1.5 percent of background growth over 2006 levels.

Transit—Subway

Analyzed stairways and fare arrays at the Atlantic Avenue/Pacific Street subway station complex, and the Bergen Street (2, 3), Fulton Street (G), and Lafayette Avenue (C) subway stations were assessed to determine their sensitivity to future increases in peak hour demand above what was assumed in the FEIS analyses. As demonstrated in Tables 13-45 through 13-47 and Tables 19-9 and 19-10 in the FEIS, existing stairways and fare arrays that would be utilized by project-generated demand are all projected to operate at no more than 61 percent of capacity under 2016 Build with Mitigation conditions. Therefore, future 2019 volumes at these existing facilities would have to increase by 39 percent or more from what was forecast in the FEIS before reaching capacity conditions. In addition, much of the future demand at the proposed new on-site entrance and associated circulation improvements at the Atlantic Avenue/Pacific Street subway station complex is expected to be generated by the development on the project site. These facilities would therefore not be as sensitive to increases in general background growth (background growth would not apply to project-generated demand).

It is also important to note that, in addition to background growth, the analyses of 2016 subway and bus conditions in the FEIS reflect the transit demand from No Build developments that were anticipated in Downtown Brooklyn and its vicinity by 2016 (see Table 11). Since issuance of the FEIS, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development. Overall, as shown in Table 11, development totaling approximately 675 dwelling units, 16,000 square feet of office space, 511,800 square feet of retail space, 373 hotel rooms and 854,700 square feet of courthouse and other space was completed by 2008. As discussed previously, an additional 9,610 dwelling units; 2,554,491 sf of office space; 747,724 sf of retail space, 1,151 hotel rooms, and 850,000 sf of other space is now anticipated to be developed in Downtown Brooklyn and its vicinity. Of the approximately 5,185,400 square feet of office space considered in the 2016 No Build scenario for the transportation analyses in the FEIS, only 2,570,491 square feet has been developed or is now planned for development, a decrease of approximately 50 percent. Much of this office space has been or is projected to be developed as residential space, a use that typically generates a lower level of transit demand during the weekday AM, PM, and weekday pre-game peak hours analyzed in the FEIS.

Table 12 shows the estimated travel demand generated by the No Build residential, office, retail and hotel development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from such new development now anticipated to occur by 2019. As shown in Table 12, it is estimated that the residential, office, retail and hotel uses in the FEIS 2016 No Build development scenario would generate 11,382 subway trips in the weekday AM peak hour, 14,965 in the weekday PM peak hour and 6,331 in the weekday pre-game peak hour. For the FEIS subway analyses, the subway trips generated by No Build sites were added to the 2006 baseline network (along with a total of approximately five percent background growth) to forecast 2016 No Build conditions. By comparison, new residential, office, retail and hotel development now anticipated to occur by 2019 would generate an estimated 9,265, 11,936 and 6,467 new subway trips in the AM, PM and weekday pre-game peak hours, respectively. There would be 2,117 fewer subway trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 3,029 fewer in the PM and a relatively small increase of 136 trips in the weekday pre-game peak hour.

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As noted previously, in addition to residential, office, retail and hotel uses, the FEIS No Build scenario accounted for travel demand from the development of approximately 2,244,615 square feet of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater, and performing and visual arts space. By contrast, as shown in Table 11, it is now anticipated that a total of only 850,000 square feet of such space would be developed from 2008 through 2019. Given this decrease in projected development, it is not expected that these miscellaneous uses would generate greater transit (subway and local bus) demand than what was analyzed in the FEIS, and separate travel demand forecasts for these uses are not included in Table 12.

The analysis of future subway conditions in the FEIS utilized a 2006 baseline condition that was increased by a total of approximately five percent to account for background growth through 2016 (0.5 percent per year) and to which was added travel demand from No Build developments. It should be noted that overall New York City Transit subway ridership actually increased by an average of roughly four percent per year from 2006 to 2008, more than the 0.5 percent per year rate assumed in the FEIS (likely due in part to the surge in gasoline prices that occurred during this period). However, recent MTA data indicate that subway ridership is now declining, with 4.3 percent fewer riders in February 2009 compared to February 2008.

In summary, the shift in the Build year from 2016 to 2019 would potentially represent a 1.5 percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. However, future 2019 volumes at existing subway station stairways and fare arrays analyzed in the FEIS would have to increase by 39 percent or more compared to what was forecast for the 2016 Build with Mitigation condition in the FEIS before reaching capacity. It should also be noted that as much of the demand at the new on-site entrance and associated circulation improvements planned for the Atlantic Avenue/Pacific Street subway station complex is expected to be generated by the development on the project site, these facilities would not be as sensitive to increases in general background growth (background growth would not apply to project-generated demand). In addition, the number of subway trips generated by No Build development through 2019 is expected to be less than what was forecast for 2016 in the analyzed weekday AM and PM peak hours, and comparable or only marginally more in the weekday pre-game peak hour. Therefore, the potential changes in No Build subway demand resulting from a shift in the Build year from 2016 to 2019 are not expected to result in new significant adverse subway station impacts.

Under *CEQR Technical Manual* criteria, projected increases in subway load levels from a No Build condition to a Build condition that exceed practical capacity may be considered significant impacts if a proposed action generates five or more additional passengers per car. As shown in Table 13-48 in the FEIS, with full build-out, the proposed project would generate an average of no more than 4.2 additional passengers per car in the peak direction on all subway lines serving the project site. The proposed project would therefore not result in significant adverse impacts to subway line haul conditions under *CEQR Technical Manual* criteria, irrespective of any increase in background growth or demand from No Build site development.

Transit-Buses

As shown in Table 13-49 in the FEIS, the proposed project would generate from 2 to 38 new peak direction trips on analyzed bus routes in either the AM or PM peak hour in the 2016 Build condition. As disclosed in the FEIS, under NYCT guidelines, this demand would result in a capacity shortfall of 14 spaces on westbound B38 buses in the AM peak hour, resulting in a significant adverse bus impact based on the current service frequency of B38 buses. As standard practice, NYCT routinely

conducts ridership counts and adjusts bus service frequency to meet its service criteria, within fiscal and operating constraints. Therefore, no mitigation was proposed for this potential impact on westbound B38 bus service. With the project changes analyzed in this technical memorandum, there would be no change in the number of peak hour bus trips generated by the proposed project and, therefore, the incremental change in bus load levels resulting from the proposed project in 2019 would also remain unchanged from what was analyzed in the FEIS.

It is expected, however, that there would be changes in background growth and No Build site demand under the proposed 2019 No Build scenario. The shift in the Build year from 2016 to 2019 would potentially represent a 1.5 percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. By contrast, overall New York City Transit bus ridership actually increased by only 0.7 percent from 2006 to 2008, less than the 1.0 percent (0.5 percent per year) assumed in the FEIS, and recent MTA data indicate that bus ridership is now declining, with 1.2 percent fewer riders in February 2009 compared to February 2008.

Table 12 shows the estimated travel demand generated by the No Build development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from new development now anticipated to occur by 2019. As shown in Table 12, it is estimated that the residential, office, retail and hotel uses in the FEIS No Build development scenario would generate 1,028 bus trips in the weekday AM peak hour, 1,621 in the weekday PM peak hour and 572 in the weekday pre-game peak hour. By comparison, new residential, office, retail and hotel development now anticipated to occur by 2019 would generate an estimated 703, 1,098 and 466 new bus trips in these peak hours, respectively. There would be 325 fewer bus trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 523 fewer in the PM and 106 fewer in the weekday pre-game peak hour. Overall, the data in Table 12 indicate that the number of bus trips generated by No Build residential, office, retail and hotel development through 2019 is expected to be less than what was forecast for 2016 in the analyzed weekday AM, PM and pre-game peak hours. However, it should be noted that some bus routes may experience localized increases in No Build demand due to background growth and new No Build projects located in their proximity and/or changes in the directional distribution of peak hour trips due to changes in programmed uses (e.g., from an office travel pattern to a residential one).

It is therefore possible that one or more additional bus routes could experience over-capacity conditions in the proposed 2019 Build scenario. As it is anticipated that the proposed project would generate from 2 to 38 new peak direction bus trips on any analyzed route—less than the 65-passenger capacity of a single bus—any new over-capacity condition that may occur would be fully addressed by the addition of a single peak direction bus in the affected peak hour. As previously noted, NYCT routinely conducts—as standard practice—periodic ridership counts on its local bus routes and increases service where operationally warranted and fiscally feasible. Therefore, no additional measures would need to be proposed to address any new over-capacity conditions on local bus service under the proposed schedule change to 2019.

Pedestrian

Existing pedestrian volumes at the project site are relatively low; and all sidewalks, corner areas, and crosswalks analyzed in the FEIS are expected to operate at good levels of service (LOS A or B) in all peak hours under 2016 FEIS No Build conditions. The shift in the project's Build year from 2016 to 2019 would increase No Build volumes by approximately 1.5 percent (i.e., 0.5 percent/year). Given the low existing baseline volumes, this added background growth would result in no more than three additional pedestrians at any analyzed facility in the peak 15-minutes in any peak hour. This small

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increase in volume compared to the volumes analyzed in the FEIS is not expected to result in any new significant adverse impacts at any analyzed sidewalk, corner area or crosswalk.

As shown in Table 12 and discussed above, peak hour transit demand from discrete No Build sites in the vicinity of Downtown Brooklyn is generally expected to be lower than was forecast in the FEIS due to changes in anticipated No Build development since the FEIS analyses were conducted. Overall, this would be expected to result in somewhat fewer pedestrian trips at analyzed pedestrian elements than was originally forecast. It should be noted, however, that one new development not previously analyzed in the FEIS—470 Vanderbilt Avenue—would add approximately 376 dwelling units, 1,091 square feet of office space, and 115,424 square feet of retail space in proximity to the intersection of Vanderbilt and Atlantic Avenues at the northeast corner of the project site. As all analyzed sidewalks, corner areas, and crosswalks at this intersection were predicted to continue to operate at high levels of service (LOS A or B) in all peak hours in the 2016 FEIS Build condition, the additional pedestrian demand from this one development, coupled with the additional background growth resulting from the schedule change to 2019, is not expected to result in any new significant adverse pedestrian impacts.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The potential effects on transit and pedestrian conditions of changes to anticipated No Build developments in the vicinity of the project site were discussed previously in conjunction with the change in the project schedule to 2019. As discussed above, the changes in No Build site development along with the potential 1.5 percent increase in study area background demand associated with the three-year shift in the Build year are not expected to result in new significant adverse impacts to subway station, subway line haul or pedestrian conditions. However, it is possible that one or more additional bus routes could experience impacts due to increased No Build demand by 2019. Any new bus impact that may occur would be fully mitigated by the addition of a single peak direction bus in the affected peak hour. NYCT routinely conducts—as standard practice—periodic ridership counts on its local bus routes and increases service where operationally warranted and fiscally feasible. Therefore, no additional mitigation would need to be proposed to address any new potential impacts to local bus service that may occur as a result of changes in No Build site development and additional background growth.

AIR QUALITY

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to air quality. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses, their emissions, or traffic generated by those uses, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the air quality analysis as described in the FEIS.

DESIGN DEVELOPMENT

The design development described above would result in a decentralized system for heating and hot water on the arena block. Separate steam plants would provide heating for the arena and Building 1.

The steam plant serving the arena would have a capacity of 1,200 bhp¹ (49 MMbtu/hr)² while the steam plant serving Building 1 would have a capacity of 1,000 bhp (40.83 MMbtu/hr). Each residential unit in Buildings 2, 3, and 4 would be provided with air-source heat pump air conditioning units for cooling and heating, supplemented with electrical resistance heating coils. Domestic hot water for the arena and Buildings 2, 3, and 4 would be provided by separate natural gas fired boilers, while domestic hot water for Building 1 would be provided by an electric water heater. The arena would have 150 bhp (6 MMbtu/hr) capacity hot-water boilers; Buildings 2 and 3 would each have 1.94 MMbtu/hr capacity gas-fired boilers; and Building 4 would have 2.91 MMbtu/hr capacity gas fired boilers. In addition, base electrical loads for each of the residential buildings would be served by (2)-65 kilowatt (kW) (1.68 MMbtu/hr) natural gas fired micro-turbines, which would also supply heat for domestic hot water. The arena boiler exhaust would be vented through a single stack located on the roof of Building 2. The exhaust from the boilers and microturbines in Buildings 2-4 would be directed to the roof of each building.

The use of electric heaters for residential units and the hot water heating for Building 1 would result in a combined steam plant capacity somewhat smaller compared to what was analyzed in the FEIS (3,200 bhp, 130.6 MMbtu/hr), and aggregate emissions of air pollutants from the arena block steam and hot water boilers and microturbines would be lower than the arena block emissions analyzed in the FEIS.

In addition, the steam plant equipment and exhaust stack for Building 1 is now anticipated to be located in Building 1 rather than Building 4 as assumed in the FEIS. The relocated steam plant exhaust would be farther away from most of the other project buildings where the maximum concentrations were predicted. However, in some cases the emission sources would be on buildings that would be lower in height than the Building 4 design analyzed in the FEIS. Therefore, an analysis was undertaken to assess the potential for air quality impacts from HVAC systems with the design development. This analysis considered both the potential for on-site (project-on-project) and off-site impacts. The analysis utilized the EPA-approved air dispersion model, AERMOD, and the same general procedures and assumptions outlined in the FEIS air quality chapter were followed. The results of the analysis determined that maximum concentrations of air pollutants would not increase as compared to the scenario that was analyzed in the FEIS. Therefore, the project with the design development described above would not have the potential to result in significant adverse air quality impacts that were not previously identified in the FEIS.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to air quality.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to air quality.

¹ Bhp: Boiler horsepower; 1 bhp = 33,478 British thermal units per hour (btu/hr)

² MMbtu/hr: Million British thermal units per hour

NOISE

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not result in significant adverse environmental impacts with respect to noise that were not addressed in the FEIS. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the noise analysis as described in the FEIS.

DESIGN DEVELOPMENT

The development in the project's design would not result in significant adverse environmental impacts with respect to noise that were not addressed in the FEIS. The modification of the arena's design and storm water system and the relocation of up to 100 parking spaces from the arena to Block 1129, the reconfiguration of the Flatbush Avenue lay-by lane, and the reconfiguration of the LIRR rail yard would not be expected to affect the results of the analysis presented in the FEIS. With this design development, noise levels due to the proposed project would be expected to be similar to those presented in the FEIS. Consequently, the project would not be expected to result in significant adverse noise impacts that were not previously identified in the FEIS.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not result in significant adverse environmental impacts with respect to noise that were not addressed in the FEIS.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not result in significant adverse environmental impacts with respect to noise that were not addressed in the FEIS.

NEIGHBORHOOD CHARACTER

GENERAL PROJECT PLAN MODIFICATION

The proposed GPP modification would not change the FEIS conclusion that the completed project would not result in significant adverse environmental impacts with respect to neighborhood character. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the neighborhood character analysis for the completed project as described in the FEIS.

DESIGN DEVELOPMENT

As presented in the FEIS, the project would result in localized neighborhood character impacts to immediately adjacent lower density uses in the transitional areas to the south of the project site, but would not result in significant adverse impacts to the overall neighborhood character of the study areas. The design development described above would not change the FEIS build program notably—the project would still result in new development that would clearly and substantially alter neighborhood character on the project site—and would not result in impacts different from those previously identified in the FEIS. Similarly, there would not be any additional significant adverse or

unmitigated impacts to historic resources, urban design and visual resources, socioeconomics, traffic, or noise.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the completed project would not result in significant adverse environmental impacts with respect to neighborhood character.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the completed project would not result in significant adverse environmental impacts with respect to neighborhood character.

CONSTRUCTION IMPACTS

The FEIS construction analysis examined the potential effects of project construction on a number of technical areas, including land use, socioeconomic conditions, community facilities, open space, historic resources, hazardous materials, traffic and parking, transit and pedestrians, air quality, noise and vibration, infrastructure, and neighborhood character. The analysis of construction impacts presented below focuses only on those areas that could be affected by the GPP modification, design development, schedule change to 2019, or changes in background conditions and methodologies and therefore does not specifically address land use socioeconomic conditions, community facilities, open space, historic resources, hazardous materials, pedestrians, or infrastructure.

GENERAL PROJECT PLAN MODIFICATION

With the proposed modification to the GPP, the taking of property would be divided into two phases. The first phase of property acquisition would occur towards the end of 2009 and would encompass the arena block, including the streetbeds to be closed, Block 1129, Pacific Street between Vanderbilt and Carlton Avenues, Lots 42 and 47 on Block 1121, and, if necessary for the construction and operation of the LIRR rail yard, easements or other property interests on Lot 35 on Block 1120 and possibly a small number of additional lots included in the project site. The second phase would occur towards the end of 2011 and would encompass the remainder of the project site. Therefore, certain land that had been planned to be used for staging of materials would not be available. Instead, part of the construction material staging for the arena would be on the arena block, and the remainder of the staging area would continue to be located on Block 1129. Parking for construction workers would continue to be located on Block 1129.

Several residential buildings adjacent to the arena block, on the north side of Dean Street between 6th and Carlton Avenues (Block 1128: Lots 85-87), which were assumed in the FEIS to be acquired before the construction of the arena block, would not be expected to be acquired prior to the arena's construction. With respect to air quality, these buildings are approximately the same distance away from the arena block construction as the previously analyzed residential receptors at the intersection of Dean Street and 6th Avenue. As presented in FEIS Figures 17b-5 and 17b-6, concentration increments at the buildings are expected to be similar to those predicted at the nearby receptors. The FEIS concluded that no significant adverse air quality impacts are predicted during the construction of the proposed project at any location, including the residential receptors at the intersection of Dean Street and 6th Avenue. Moreover, none of the windows of the buildings face west toward the arena block. The adjacent lot would be used as parking, storage, and/or construction trailers, and thus

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would not have active construction activities. Therefore, applying the same criteria as in the FEIS for the added sensitive receptors in Block 1128 during arena construction, no new air quality impacts would occur during the construction of the project.

Furthermore, since the FEIS was published, additional information regarding emissions controls has become available, indicating that the diesel particle filters (DPFs)—the central component of the emissions reduction program being applied for the construction of the project—reduce emissions significantly more than was assumed in the analysis. In the FEIS, DPFs were assumed to reduce diesel particulate matter (DPM) by 85 percent. The latest information indicates that almost all DPFs reduce DPM emissions by at least 92 percent, and most are in the range of 95 to 98 percent. Several large construction projects analyzed more recently under CEQR have applied an assumption of 90 percent reduction. Applying this assumption would result in overall emission increments that are at least 1/3 lower than presented in the FEIS, and in all likelihood closer to 2/3 lower. This information further substantiates the conclusion that the project would not result in any significant adverse air quality impacts during construction.

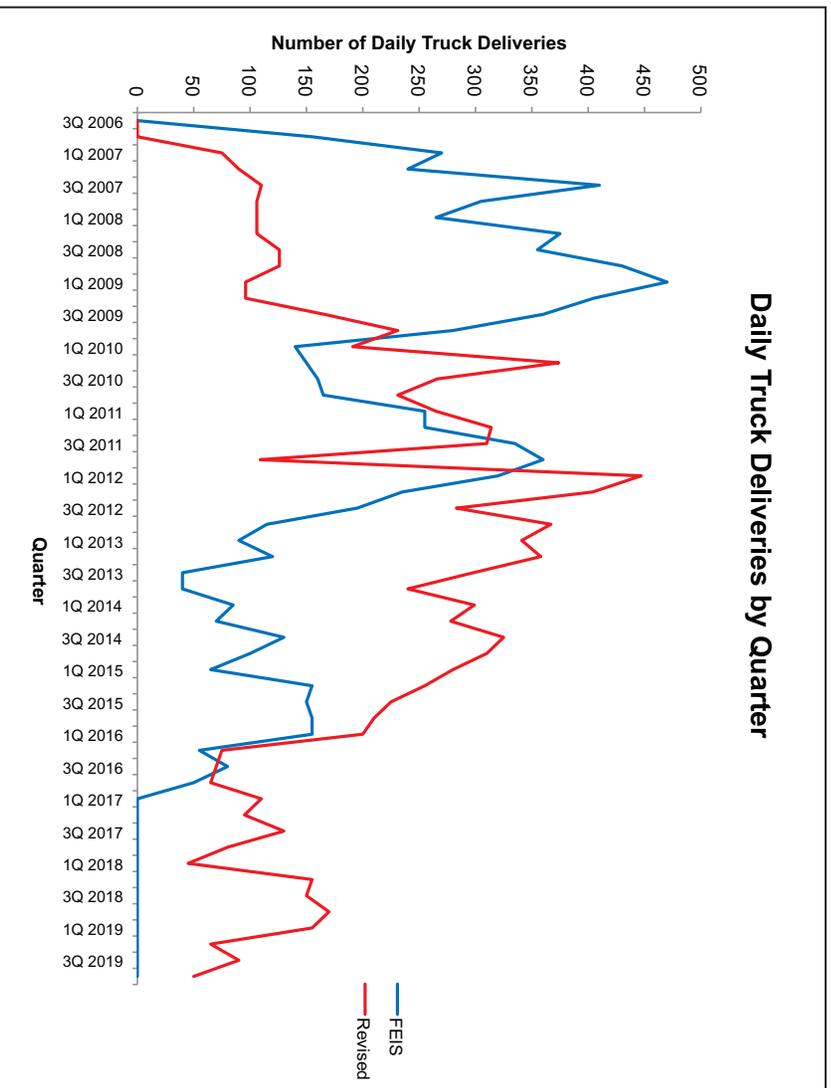
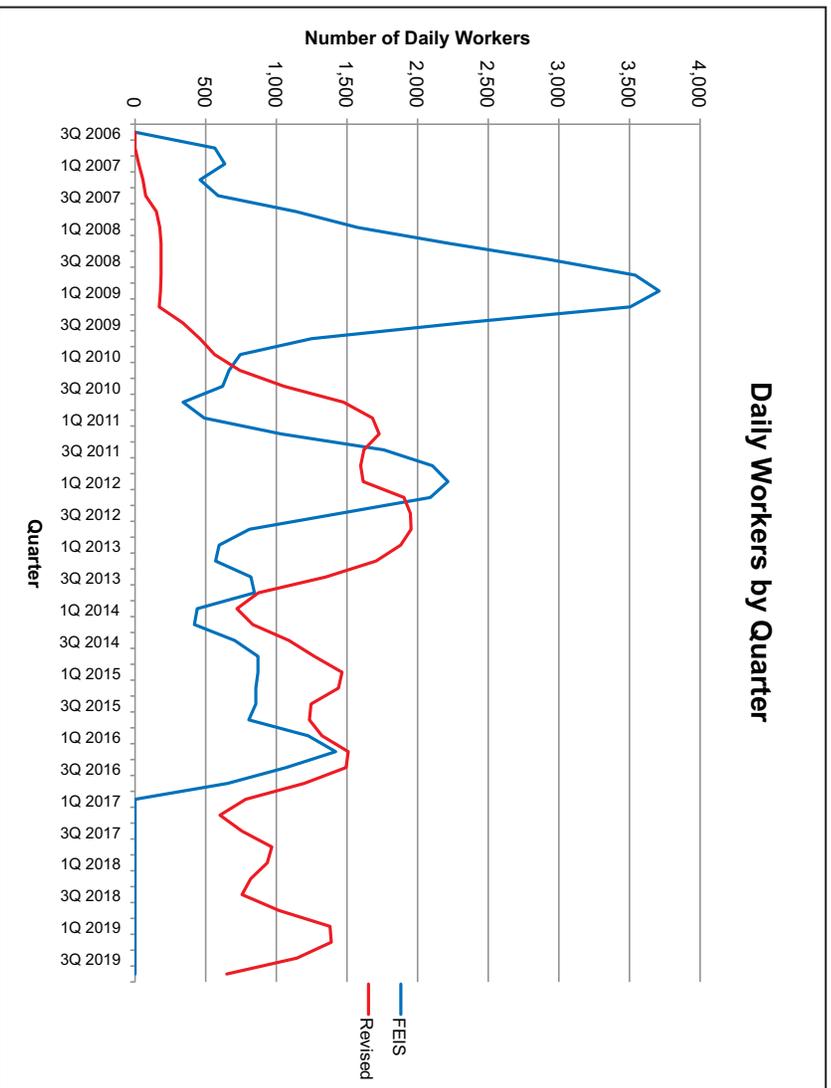
Noise impacts on Block 1128: Lots 85-87, would be similar in character to those disclosed in the FEIS. As noted above, these buildings are approximately the same distance away from the arena block construction as the previously analyzed residential receptors on the south side of Dean Street. It is reasonable to expect that the buildings on the north side of Dean Street would experience no greater level of construction noise as the buildings on the south side of Dean Street. According to the FEIS, the original construction schedule would result in significant increases in 2008 and 2009. The construction activity peaks of 2008 and 2009 in the original schedule correspond most closely with the construction that would occur during 2010 and 2011 under the new schedule. As a result, based on the new proposed schedule, significant noise level increases would be expected to occur during 2010 and 2011 along Dean Street. The project sponsor has already offered all residents on the project site the same noise mitigation measures provided to the other nearby buildings.

The FEIS also noted that properties along Dean Street were potential areas of concern for construction-related vibration. However, the project sponsor has and will continue to implement a monitoring program to ensure that vibration levels at buildings within this area are kept below the 0.50 inches/second PPV limit and that no architectural or structural damage would be expected to occur. As a result, there would be no new significant vibration impacts as a result of the revised construction schedule.

Thus, the proposed modification to the GPP would not result in new or greater significant adverse impacts presented in the FEIS analysis with respect to construction-related air quality, noise, or vibration impacts.

DESIGN DEVELOPMENT

The general means and methods used for construction, as presented in the FEIS, are not expected to change as a result of the design development. The modified design of the arena is simpler than described in the FEIS, but would still require substantially the same number of workers and truck deliveries. In addition, the modified arena would cover less ground area during construction. This additional space could be used for on-site staging of materials. The replacement of the 6th Avenue Bridge would no longer be necessary with this design development, and thus there would be fewer infrastructure improvements constructed. In summary, the design development would not result in significant adverse environmental impacts with respect to construction impacts that were not addressed in the FEIS.



SCHEDULE CHANGE TO 2019

Overall, construction activities with the schedule change would be similar to those of the approved project analyzed in the FEIS. However, there would be an approximate three-year shift in the overall construction schedule with completion of Phase II anticipated in 2019. The construction schedule presented in the FEIS showed construction activities taking place over a 10-year period, from the fourth quarter of 2006 to the fourth quarter of 2016. The revised construction schedule anticipates construction activities lasting until the fourth quarter of 2019. Under the schedule presented in the FEIS, in the fourth quarter of 2009 the construction of the arena would be completed and by the fourth quarter of 2010 the remaining arena block buildings—Buildings 1, 2, 3, and 4—would be completed. Under the revised schedule, completion of the arena construction would occur in the first quarter of 2012, and the reconstruction of the Carlton Avenue Bridge would be completed in time for the opening of the arena and would be compatible with LIRR rail yard operations and the new permanent yard, which is expected to be completed in 2013. Under this revised schedule, the improvements to the LIRR rail yard are anticipated to be completed in 2013. The last building on the arena block would be completed in the second quarter of 2014.

General construction practices, equipment, staging, maintenance and protection of traffic, and work hours would be the same as described in the FEIS. Lane and sidewalk closures would also be comparable to that described in the FEIS. Certain activities that were expected to take place during the intensive construction on the arena block have proceeded since the FEIS was completed. These activities have included demolition of some existing structures and construction of the temporary rail yard. Comparisons to the findings presented in the FEIS with respect to traffic and transportation, air quality, and noise are described below.

Traffic and Transportation

The FEIS analyzed potential construction traffic and transportation impacts by dividing the construction period into Phase I (2006-2010) and Phase II (2011-2016). The highest level of construction activities during Phase I was projected to take place between the third quarter of 2008 and the second quarter of 2009, with a 4-quarter daily average of just over 3,400 construction workers and approximately 420 truck deliveries. During Phase II, the peak construction activities would have taken place between the third quarter of 2011 and the second quarter of 2012, with a 4-quarter daily average of approximately 2,040 construction workers and 310 truck deliveries. The revised construction schedule with the proposed project modifications indicates that the highest level of construction activities would take place during the last three quarters of 2012, with a 4-quarter daily average of 1,922 construction workers and 349 truck deliveries. A summary of the FEIS and revised construction workforce and truck delivery projections is presented in Table 13 and shown in Figure 7.

In comparison to the construction schedule analyzed in the FEIS, the revised construction schedule would result in maximum construction activities shifting from 2008-2009 to 2012, with fewer deliveries and approximately 40 percent fewer estimated daily workers. However, peak construction under the revised schedule would take place after the completion of the arena and Building 2, whereas peak construction under the FEIS schedule was projected to occur prior to completion of any building. Hence, prior to any buildings having been completed, the revised schedule would generate less peak construction traffic than analyzed in the FEIS. For the new construction peak in 2012, projected construction traffic levels would be comparable to those projected for the FEIS Phase II peak construction analysis. In that analysis, the entire arena block (the arena and Buildings 1, 2, 3, and 4) was assumed to be completed, whereas for the new construction peak in 2012, only the arena and Building 2 would be completed. Therefore, operational traffic attributed to the

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completed components of the arena block would be less with the project modifications. Overall, the cumulative peak conditions resulting from the revised construction schedule would fall within the maximum envelopes analyzed in the FEIS.

Table 13
Summary of Construction Workers and Delivery Trucks

	Year	2006				2007				2008				2009				2010			
		Quarter	1st	2nd	3rd	4th	1st	2nd	3rd												
FEIS	Workers				565	635	460	588	1,140	1,575	2,220	2,920	3,540	3,710	3,505	2,325	1,250	745	665	620	340
	Deliveries				155	270	240	410	305	265	375	355	430	470	405	360	280	140	150	160	165
Cur.	Workers					26	56	75	151	175	184	184	184	180	171	337	459	563	742	1,055	1,476
	Deliveries					75	90	110	106	106	106	126	126	96	96	166	231	191	374	266	231
	Year	2011				2012				2013				2014				2015			
		Quarter	1st	2nd	3rd	4th	1st	2nd	3rd												
FEIS	Workers	490	1,035	1,760	2,105	2,215	2,090	1,450	810	595	570	820	845	440	420	705	870	870	855	855	805
	Deliveries	255	255	335	360	320	235	195	115	90	120	40	40	85	70	130	100	65	155	150	155
Cur.	Workers	1,681	1,728	1,620	1,597	1,615	1,904	1,949	1,954	1,880	1,706	1,352	873	721	833	1,089	1,369	1,465	1,440	1,246	1,234
	Deliveries	265	314	310	409	447	404	283	367	341	358	298	240	299	278	325	310	280	255	225	210
	Year	2016				2017				2018				2019							
		Quarter	1st	2nd	3rd	4th															
FEIS	Workers	1,225	1,420	1,070	655																
	Deliveries	155	55	80	50																
Cur.	Workers	1,323	1,509	1,494	1,197	783	601	756	968	936	819	757	1,019	1,380	1,389	1,145	649				
	Deliveries	200	75	70	65	110	95	130	80	45	155	150	170	155	65	90	50				

Sources: Atlantic Yards Arena and Redevelopment Project FEIS (2006)
Revised schedule (April 2009)

As discussed in the FEIS, construction trips typically peak at the 6 to 7 AM arrival hour and the 3:30 to 4:30 PM departure hour, with minimal overlap with operational trips, which typically peak at 8 to 9 AM and 5 to 6 PM. Since peak construction activities under the revised construction schedule would take place after the completion of the arena, roadway improvements, traffic mitigation measures, traffic circulation plans, and updated curbside parking regulations described in the FEIS would already be in place to accommodate operational traffic from the arena and other to be completed buildings. Hence, the magnitude of temporary significant adverse traffic impacts generated by the construction activities under the revised construction schedule is expected to be similar to or lower than estimated in the FEIS. Similarly, after all buildings in the arena block are completed by the 4th quarter of 2014, the projected number of construction workers and truck deliveries would be lower under the revised construction schedule than the levels projected for FEIS Phase II peak construction. Therefore, the revised construction schedule is not expected to result in additional or new significant adverse construction traffic impacts or required mitigation measures that were not identified in the FEIS. With overall lower levels of construction worker trips, there would not be a potential for significant adverse transit and pedestrian impacts during construction.

Air Quality

The construction air quality analysis in the FEIS was revisited to determine if the revised construction schedule would have the potential to cause new significant adverse impacts not identified in the FEIS. The conclusion of the construction air quality analysis in the FEIS was that no significant adverse air quality impacts would occur during the project's construction period.

The general means and methods used for construction, as presented in the FEIS, are not expected to change as a result of the revised construction schedule. In order to assess the potential change in the impact on air pollutant concentrations associated with the revised schedule, the emissions assumptions prepared for the FEIS were applied to the revised schedule, resulting in new estimates ('emissions profiles') of 24-hour and annual average fine particulate matter (PM_{2.5}) emissions

throughout the duration of construction. These emissions profiles were then compared with the profiles presented in the FEIS. The new 24-hour and annual average ground-level emissions profiles with the revised construction schedule, together with the previous profiles presented in the FEIS, are presented in Figures 8 and 9, respectively. Ground-level emissions are emissions from activities that do not occur at elevated locations in the constructed buildings. Since most emissions would be near ground level, and the nearest receptors are at ground level, the highest impacts were predicted to be at ground level and are affected mostly by emissions at or near ground level.

As presented in the figures, the level of intensity during the peak construction period with the revised schedule would be lower than that analyzed in the FEIS. With the revised schedule, a peak 24-hour average ground-level emissions of 5.1 pounds per day (lb/day) was predicted, whereas a peak of 7.4 lb/day was predicted in the FEIS. Similarly, the peak annual average ground level emissions with the revised schedule were predicted to be 2.3 lb/day, whereas an annual peak of 2.8 lb/day was predicted in the FEIS. The revised schedule would therefore result in lower peak emission levels than those predicted in the FEIS, and would therefore generally result in lower concentration increments.

Therefore, the revised construction schedule is not expected to result in any significant adverse impacts on air quality.

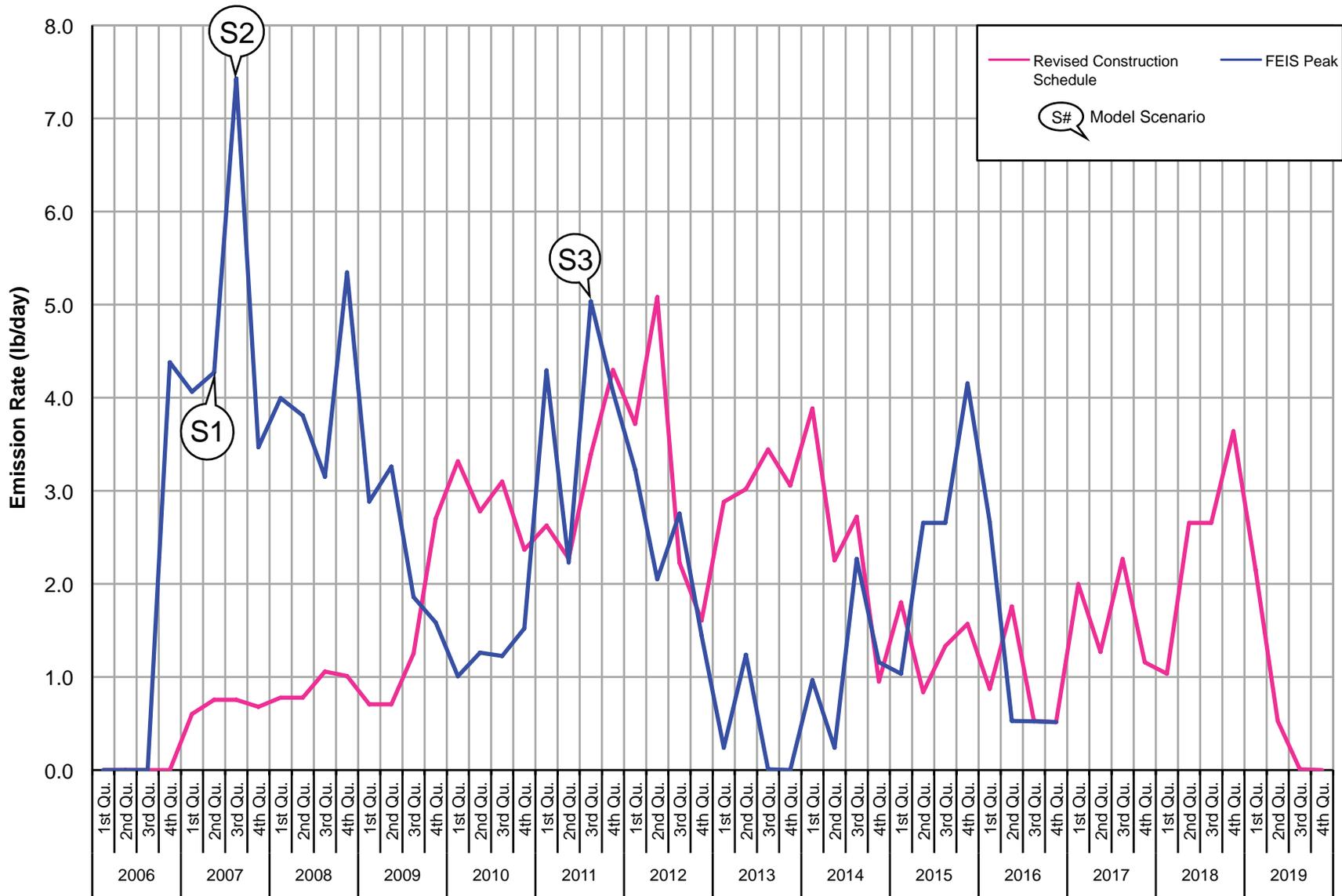
Noise

The construction noise analysis presented in the FEIS was revisited to determine if the revised schedule would have the potential to result in significant adverse impacts not previously identified in the FEIS and/or change any of the conclusions presented in the FEIS. The construction noise analysis presented in the FEIS concluded that at a number of specific locations near the project site, for specific periods of time, significant adverse noise impacts would occur as a result of the construction of the approved project. In addition, the FEIS identified measures, which the project sponsor committed to implement, to mitigate these impacts.

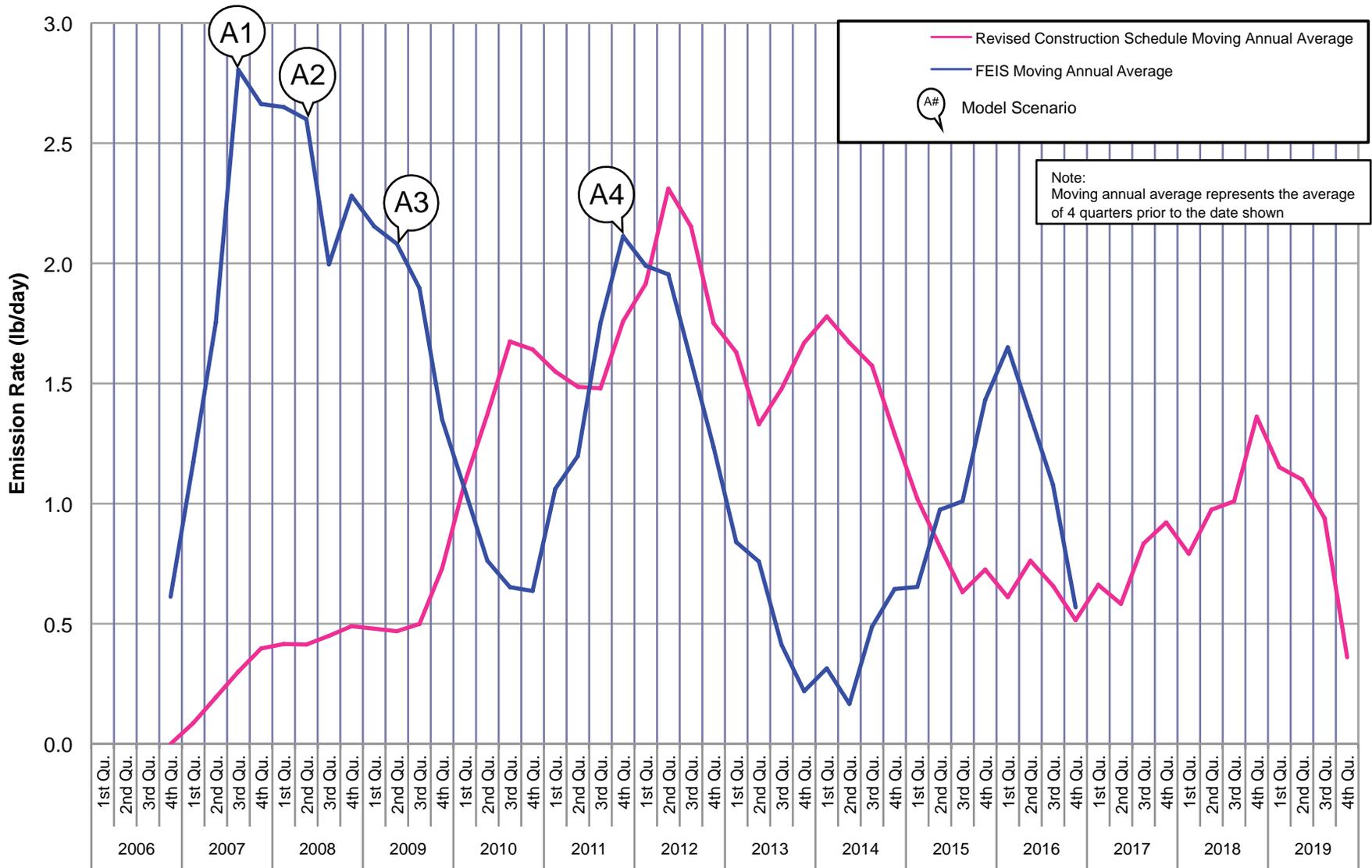
In order to assess the change in the potential impact on noise associated with the revised construction schedule, the revised construction schedule, including equipment usage, was examined to determine whether there would be any significant increase in the number of pieces of equipment operating on-site. In addition, the numbers of workers and truck trips were examined.

The revised construction schedule, when compared to the construction schedule presented in the FEIS, contains comparable construction activities. There are two primary differences between the FEIS construction schedule and the revised construction schedule. The first difference is that with the revised construction schedule, certain construction activities would occur at a later date. The second difference concerns the number of pieces of construction equipment simultaneously operating at the project site at any time period. In peak periods the number of pieces of construction equipment simultaneously operating on the project site at any time period with the revised construction schedule would be either the same or less than was assumed at a comparable period of construction for the FEIS construction analysis. Therefore, with the revised construction schedule, noise levels produced by construction activities would be expected to be comparable to the noise levels predicted to occur with the FEIS construction schedule, and impacts of comparable intensity would be expected with the revised construction schedule.

The project sponsor has and will continue to implement a monitoring program to ensure that vibration levels at buildings within this area are kept below the 0.50 inches/second PPV limit and that no architectural or structural damage would be expected to occur. As a result, there would be no new significant vibration impacts as a result of the revised construction schedule.



Peak (24-hr) Construction PM_{2.5} Ground-Level Emissions Profile



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Consequently, no significant noise or vibration impacts would be expected to occur that were not already identified previously in the FEIS.

Neighborhood Character

As described in the FEIS, construction activity associated with the Atlantic Yards project would have significant adverse localized neighborhood character impacts in the immediate vicinity of the project site during construction. The project site and the immediately surrounding area would be subject to added traffic from construction trucks and worker vehicles, partial and complete street closures, and bridge reconstruction, resulting in changes in area travel patterns and the resultant significant adverse traffic impacts. Construction traffic and noise would change the quiet character of Dean Street and Pacific Street in the immediate vicinity of the project site. With the schedule change to 2019, there would be an additional three years during which the project would be an active construction area. Therefore, the localized, significant adverse neighborhood character impacts at Dean and Pacific Streets would continue through the 2019 construction period.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not result in significant adverse environmental impacts with respect to construction impacts that were not addressed in the FEIS. Increases in the study area's population in the future without the project would not affect construction practices or the potential for significant adverse construction impacts, and no changes have been made since the FEIS to the *CEQR Technical Manual* methodologies for analyzing the potential for construction impacts.

PUBLIC HEALTH

GENERAL PROJECT PLAN MODIFICATION

The proposed modification to the GPP would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to public health. The proposed GPP modification would affect the timing of property acquisition but would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, the GPP modification would not result in any changes that would affect the public health analysis as described in the FEIS.

DESIGN DEVELOPMENT

As discussed above, the design development would not change the FEIS conclusions with respect to the project's impacts to air quality or noise. Therefore, the design development would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to public health.

SCHEDULE CHANGE TO 2019

The schedule change to 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to public health.

CHANGES IN BACKGROUND CONDITIONS AND METHODOLOGIES

The changes in background conditions described above would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to public health.

CONCLUSION

As a result of the analyses detailed in the various sections above, the proposed GPP modification, design development, schedule change to 2019, and changes in background conditions and analysis methodologies would not, considered either individually or together, result in any significant adverse environmental impacts not previously addressed in the FEIS.

F. POTENTIAL FOR DELAYED BUILD OUT

Since the FEIS, New York City has suffered a large loss in employment as a result of the global economic downturn. A recent analysis of the Mayor's Preliminary Budget for 2010 by the Independent Budget Office (IBO) indicated that the city's economy will continue to decline through 2010. Overall, the city is projected to lose about 254,300 jobs in 2009 and 2010, a decrease of about 6.8 percent from 2008. Although job growth is expected to resume at a slow pace in the latter half of 2010, IBO expects there to be 108,000 fewer jobs in the city by the end of 2013 (a decrease of 2.9 percent) compared to the first quarter of 2008. These estimates are similar to employment projections made by the New York City Office of Management and Budget.

Current economic conditions, including the employment losses described above, have led to decreases in demand for both residential and commercial real estate, while turmoil in the financial market has made it more difficult to obtain financing for development projects. Over the past year, these changes have resulted in delays and program changes for development projects citywide. It is anticipated that the Atlantic Yards Arena and Redevelopment Project will be completed in 2019. However, if current economic conditions persist beyond the timeframes of current projections, it is possible that future delays may occur.

These potential delays due to prolonged adverse economic conditions would not affect the timing of the development of the arena, the transit access improvements, the construction of the new LIRR rail yard, the reconstruction of the Carlton Avenue Bridge or the construction of Building 2. It could, however, delay the construction of some of the remaining buildings on the arena block as well as the Phase II sites. While the current construction plan calls for the continuous construction of the platform over the rail yard in Phase II, under this delayed build out condition, sections of the platform for Buildings 5 through 10 could be constructed as each of the buildings move forward in development. On the arena block, interim open space, urban plaza or other temporary public amenity use would be provided on the building footprints not under development.

This section of the memo considers a scenario in which full build out of the project would be delayed as a result of prolonged adverse economic conditions.

In the context of environmental review, the primary relevance of a build year is that it provides the baseline condition against which incremental changes from a project can be evaluated. Depending on general economic conditions and the particular geographic area being studied, pushing a build year further into the future can increase key baseline figures (e.g., population, employment, traffic) against which a project's effects are measured.

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To the extent that the current economic conditions continue to affect the city's employment base, the market-rate residential units and office components of the project and other No Build projects in the study area would be subject to the same market forces (e.g., reduced demand for housing and commercial space). Similarly, it is expected that the market-rate components of the project would be financed in the same general manner as other No Build projects, with each of the buildings in Atlantic Yards evaluated by lenders as an individual project. Therefore, delay in the project resulting from prolonged adverse economic conditions would be expected to be accompanied by a delay in other study area projects, and future conditions in a delayed post-2019 Build year would be fundamentally the same as those described in this technical memorandum for 2019. For most of the technical areas analyzed in the FEIS, future population, employment, and housing conditions are evaluated based on known development projects. Table 3 provides a detailed list of updated No Build projects anticipated for completion through 2019. As noted previously, the updated list includes projects that were planned prior to the economic slowdown and, although some of those projects are on hold, they are assumed to still be moving forward in the future when market conditions improve. Therefore, this list is conservatively inclusive since projects were not removed. Based on current information there are no substantial projects planned for completion after 2019 that would need to be added to the No Build list presented in Table 3 and used to evaluate future conditions. Therefore, it is expected that future conditions under a scenario of prolonged adverse economic conditions would be fundamentally the same as those described in this technical memorandum for 2019.

LAND USE, ZONING, AND PUBLIC POLICY

The potential delay in the construction of the proposed project beyond 2019 would not affect the project's compatibility with the surrounding area or alter the underlying zoning as the project development would need to conform with the GPP. Under this delayed build out scenario, the temporary surface parking lot used for arena parking would be in place for a longer period of time than described in the FEIS. Upon completion of the project, there would be no change in land use, underlying zoning, or public policy.

As described above, potential delays due to prolonged adverse economic conditions would not affect the development of the arena, the transit access improvements, the construction of the new LIRR rail yard, the reconstruction of the Carlton Avenue Bridge or the construction of Building 2; however, it could delay the construction of some of the remaining buildings on the arena block as well as the Phase II sites. While the current construction plan calls for the continuous development of the platform over the rail yard in Phase II, under this delayed build out scenario, sections of the platform for Buildings 5 through 10 would likely be constructed as each of the buildings move forward in development.

As described in the FEIS, although the arena use would result in localized adverse land use impacts to certain existing residential uses within 200 feet of the arena block. However, the arena use was not considered to be a significant adverse impact on land use because the arena activities would be flanked by and interspersed with new, compatible residential and local street-level retail uses. On the arena block, Building 2—located on the southwestern corner of the arena block facing the residential district to the south—would be constructed with a predominantly residential use with street-level retail frontages along Dean Street and Flatbush Avenue. Temporary open space and public amenity use such as retail kiosks, landscaped seating areas, and plantings would be provided on the building footprints not under development, particularly Buildings 3 and 4. These amenities would enliven the street-level environment and provide a buffer between the arena and residential district to the south.

As in the FEIS, the localized impacts associated with the arena would not result in a significant adverse land use impact, as this condition would be temporary and would be addressed by the construction of these buildings over time. Furthermore, the Dean Street corridor between Flatbush and Vanderbilt Avenues—which has a mix of commercial, industrial, institutional, parking, and residential uses—has historically functioned as a transition between the more commercial and industrial uses to the north and the residential uses to the south.

Under the delayed build out scenario, the temporary surface parking lot used for arena parking on Block 1129, which was predominantly characterized by large abandoned manufacturing buildings in the No Build condition studied in the FEIS, would be in place for a longer period of time than described in the FEIS. However, this would not result in a change to the conclusions of the FEIS because as the Phase II buildings come on line, the surface parking lot would be relocated below grade. Furthermore, the surface parking at this location would be compatible with the mix of light manufacturing, commercial, and residential uses that are adjacent to the project site south of Dean Street between Carlton and Vanderbilt Avenues, which are areas predominantly zoned for manufacturing uses.

Thus, the potential delay of the full build out of the project would not result in significant adverse environmental impacts with respect to land use, zoning and public policy that were not addressed in the FEIS.

SOCIOECONOMIC CONDITIONS

The delay of the full build out of the project would result in a delay in the realization of the full economic benefits of the project as disclosed in the FEIS. The project's potential for direct and indirect displacement and effects on specific industries at full build-out would remain the same as described in the FEIS. Therefore, the schedule delay to beyond 2019 would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to socioeconomic conditions.

COMMUNITY FACILITIES

In this scenario, the timing of construction of the project could be affected, but the proposed uses and program, which would remain the same as described in the FEIS, would not be affected. Thus, there would be no additional demand for police protection, fire protection, emergency services, public schools, libraries, hospitals and health care facilities, or daycare centers. Additional information on schools and day care facilities is discussed below.

As noted above, the overall number of dwelling units, as well as the total number of units in an affordable housing program, would remain the same as that considered in the FEIS. Space would still be made available for the anticipated on-site school, daycare, and intergenerational facility. In the event that the project's residential buildings are delayed, the deadline for the New York City School Construction Authority (SCA) to decide whether or not it wants to develop a school at the project site would be extended.

With respect to the availability of day care demand, the private market may respond to the additional demand by opening day care centers and increasing capacity in the study area as population increases. Under this delayed build scenario, the project sponsor will also continue to assess day care enrollment and capacity in the study area as the project is completed. If necessary, the project sponsor will work with ACS to develop appropriate measures to provide additional capacity on-site or off-site as the project is completed, as described elsewhere in this Technical Memorandum.

Atlantic Yards Arena and Redevelopment Project

In summary, the potential delay of the full build out of the project would not result in significant adverse environmental impacts with respect to community facilities that were not addressed in the FEIS.

OPEN SPACE

The conclusions of the FEIS analysis with respect to open space would not change if completion of the project were to be delayed beyond 2019. As described above, until the Buildings 1, 3 and 4 on the arena block are built, interim open space, urban plaza or other temporary public amenity use would be provided on those building footprints not under development.

The FEIS identified a temporary significant adverse open space impact between the completion of Phase I and the completion of Phase II. With the delayed build out scenario, this temporary impact would be extended, but would continue to be addressed by the Phase II completion of the 8 acres of publicly accessible open space. Moreover, as each of the buildings is completed, a certain amount of open space would be provided in conformance with the GPP's Design Guidelines, thereby offsetting some of this temporary open space impact.

SHADOWS

Further delay in the construction schedule due to prolonged adverse economic conditions would not result in significant adverse environmental impacts with respect to shadows that were not addressed in the FEIS.

HISTORIC RESOURCES

Further delay in the construction schedule due to prolonged adverse economic conditions would not result in significant adverse environmental impacts with respect to historic resources that were not addressed in the FEIS.

URBAN DESIGN

The potential delay in the construction of the proposed project would not affect the project's urban design as the project development would need to conform with the GPP's Design Guidelines. As described above, should prolonged adverse economic conditions result in delayed construction of Buildings 3 and 4 on the arena block, temporary open space and public amenities such as retail kiosks, landscaped seating areas, and plantings would be provided on these building footprints. These amenities would enliven the street-level environment and, along with Building 2, would provide a buffer between the arena and existing development to the north and south. Moreover, with the construction of Buildings 3 and 4, the condition of the arena block would be the same as that analyzed in the FEIS. Therefore, the potential delay in construction of Buildings 3 and 4 would not result in significant adverse environmental impacts with respect to urban design and visual resources that were not addressed in the FEIS.

Under the delayed build out scenario, the temporary surface parking lot used for arena parking would be in place for a longer duration than described in the FEIS and in this technical memorandum. However, this delayed schedule would not result in significant adverse environmental impacts with respect to urban design and visual resources that were not addressed in the FEIS, since upon full build out, the surface lot would be relocated below ground.

HAZARDOUS MATERIALS

Further delay in the construction schedule due to prolonged adverse economic conditions would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to hazardous materials.

INFRASTRUCTURE

Further delay in the construction schedule due to prolonged adverse economic conditions would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to infrastructure, including water supply, sanitary wastewater treatment, stormwater runoff and combined sewer overflows (CSOs), solid waste management, and energy because the delay would not materially affect these services or resources.

TRAFFIC AND PARKING

For traffic and transportation analyses in the vicinity of Downtown Brooklyn, background growth amounting to 0.5 percent per year is typically added onto existing conditions along with demand from specific No Build projects to develop a future No Build condition. However, under a scenario of prolonged adverse economic conditions that are assumed to delay development projects, the application of this level of background growth to the additional period of delay would not be appropriate. Such robust background growth is not consistent with this scenario, under which there would be a reduced demand for housing and commercial space and delays in development projects in the study area. As adverse economic conditions begin to abate and the economy begins to recover, transportation demand in the study area can once again be expected to experience some level of background growth. New demand from discrete No Build sites in the area will also be generated as these developments once again begin to advance. Although the characteristics of specific No Build projects may have changed in the interim, the inclusive list of No Build sites that has been compiled provides a conservative basis for projecting the magnitude of future development that can be expected as conditions improve. Overall, the total level of study area transportation demand expected at the time of project completion under a scenario of prolonged adverse economic conditions is unlikely to be greater than has been presented in this technical memorandum for 2019.

Moreover, even if a 0.5 percent per year background growth rate were to be applied, it is unlikely that conditions under a delayed scenario would be worse than analyzed in the FEIS. To conservatively illustrate the potential effects of an additional delay in the project, the sections below detail potential traffic and transportation conditions applying the 0.5 percent annual growth factor to a hypothetical delay of approximately five years, resulting for analytical purposes in a 2024 Build year.

As described above, the analysis of future traffic conditions in the FEIS utilized a 2006 baseline condition that was increased by a total of five percent to account for background growth through 2016 (0.5 percent per year) and to which was added travel demand from No Build developments. If the 0.5 percent annual growth factor were to be applied even in the scenario of prolonged adverse economic conditions, a Build year of 2024 would potentially represent an approximately four percent increase in background growth compared to the 2016 Build year analyzed in the FEIS. However, recent ATR data indicate that 2008 weekday and Saturday traffic volumes on the primary arteries serving the project site are actually lower by 7 to 12 percent than the 2006 baseline used for the FEIS. In addition, as noted previously, since issuance of the FEIS, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development. Based on the

conservatively inclusive No Build list of known developments, it is estimated that demand from No Build sites expected to occur under a scenario of prolonged adverse economic conditions would generate fewer vehicle trips in the weekday AM, midday, and PM peak hours than were assumed for 2016 in the FEIS. There would be a modest increase in the number of No Build site vehicle trips in the pre-game and post-game peak hours compared to the demand assumed in the FEIS; however, these trips would be widely dispersed throughout Downtown Brooklyn and its vicinity, and the number of additional vehicle trips occurring at any one intersection is expected to be relatively small. Overall, the anticipated demand from No Build development along with the potential four percent increase in study area background traffic associated with a 2024 Build year would not be expected to result in total traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year, especially in the context of the 7 to 12 percent decline in weekday and Saturday traffic volumes that occurred from 2005 to 2008. Moreover, under a scenario of prolonged adverse economic conditions, it would be unrealistic to assume that housing and employment growth—the principal factors driving traffic volumes—would continue to result in a 0.5 percent annual increase in background growth. The recovery that follows a pronounced economic downturn typically ramps up over an extended period of time, and thus the rebound in employment and associated traffic activities does not occur immediately, since growth starts from the lower base established by the job losses and associated traffic conditions during the recession.

A Build year of 2024 would not be expected to result in greater demand for off-street public parking in the vicinity of the project site than was analyzed in the FEIS. Overall, the FEIS assumed a five percent increase in existing parking demand due to background growth from 2006 through 2016. However, as discussed above, recent ATR data indicate that weekday and Saturday traffic volumes on the primary arteries serving the project site have actually declined by approximately 7 to 12 percent since 2005. Given these ATR data and the current economic downturn, it is expected that parking demand in the vicinity of Downtown Brooklyn has also declined during this period. In addition, based on known No Build developments there would be substantially less new office space developed by 2024 compared to the development program assumed for the 2016 No Build analysis in the FEIS. Future office parking demand would therefore also be substantially lower than what was assumed in the FEIS. Although the anticipated residential development would be greater than what was assumed for the 2016 No Build scenario, this additional residential development is not expected to substantially increase the demand for public parking. It is anticipated that residential parking demand would be generally accommodated in accessory parking, as zoning in the area typically imposes minimum parking requirements for new residential developments that are designed to accommodate the development's parking demand. As such, it is not expected that parking demand in the vicinity of the project site in the scenario of prolonged adverse economic conditions would be greater than what was analyzed in the FEIS for the 2016 Build year. In addition, it should be noted that in the 2016 Build condition analyzed in the FEIS, the parking study area would continue to operate with a surplus of between 624 and 2,919 off-street public parking spaces in the analyzed weekday AM, midday, evening, and Saturday midday peak hours under both project variations (see Tables 12-27 and 12-38 in the FEIS). Therefore, even if there were to be a small increase in parking demand by 2024 compared to the levels forecast for 2016, sufficient off-street public parking capacity would be expected to be available to accommodate this demand, and it would not result in new significant adverse parking impacts. Moreover, under a scenario of prolonged adverse economic conditions it would be unrealistic to assume that stagnating housing and employment growth—the principal factors driving parking demand—would continue to result in a 0.5 percent annual increase in background growth in parking demand.

TRANSIT AND PEDESTRIANS

Under a scenario of prolonged adverse economic conditions, in which the Atlantic Yards project and other No Build projects in the study area are delayed beyond 2019, transit and pedestrian conditions in the study area are expected to be similar to the conditions presented in this technical memorandum for 2019. The application of an annual growth factor beyond 2019 is not consistent with a scenario of prolonged adverse economic conditions. Nevertheless, if the 0.5 percent annual growth factor were to be applied even in the scenario of prolonged adverse economic conditions, a delay in the completion of the project to 2024 would potentially represent an approximately four percent increase in background growth compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. By contrast, the number of subway trips generated by No Build development through 2024 is expected to be less than what was forecast for 2016 in the analyzed weekday AM and PM peak hours, and comparable or only marginally more in the weekday pre-game peak hour. (As overall demand on the subway system is typically lower in the weekday post-game and Saturday pre- and post-game peak hours, these periods were not assessed for subway impacts in the FEIS.) As much of the demand at the new on-site entrance and associated circulation improvements planned for the Atlantic Avenue/Pacific Street subway station complex is expected to be generated by the development on the project site, these facilities would not be as sensitive to increases in general background growth (background growth would not apply to project-generated demand). At existing subway station stairways and fare arrays analyzed in the FEIS, future volumes would have to increase by 39 percent or more compared to what was forecast for the 2016 Build with Mitigation condition in the FEIS before reaching capacity. As the potential changes in No Build subway demand resulting from a shift in the Build year are not expected to result in an increase of this magnitude, new significant adverse subway station impacts are not expected under this scenario.

Under *CEQR Technical Manual* criteria, projected increases in subway load levels from a No Build condition to a Build condition that exceed practical capacity may be considered significant impacts if a proposed action generates five or more additional passengers per car. As shown in Table 13-48 in the FEIS, with full build-out, the proposed project would generate an average of no more than 4.2 additional passengers per car in the peak direction on all subway lines serving the project site. The proposed project would therefore not result in significant adverse impacts to subway line haul conditions under *CEQR Technical Manual* criteria, irrespective of any increase in background growth or demand from No Build site development.

Given the additional background growth and potential changes in No Build site bus demand under the scenario of prolonged adverse economic conditions, some additional local bus routes may be operating near capacity in the peak direction in a 2024 No Build compared to the FEIS 2016 No Build scenario. It is therefore possible that one or more additional bus routes could experience over-capacity conditions. As it is anticipated that the proposed project would generate from 2 to 38 new peak direction bus trips on any analyzed route—less than the 65-passenger capacity of a single bus—any over-capacity condition that may occur would be addressed by the addition of a single peak direction bus in the affected peak hour. NYCT routinely conducts—as standard practice—periodic ridership counts on its local bus routes and increases service where operationally warranted and fiscally feasible. Therefore, no additional measures would need to be proposed to address any potential over-capacity conditions.

Existing pedestrian volumes at the project site are relatively low; and all sidewalks, corner areas, and crosswalks analyzed in the FEIS are expected to operate at good levels of service (LOS A or B) in all peak hours under 2016 FEIS No Build conditions. If a background growth factor were to be applied to pedestrian volumes, the shift in the Build year under the scenario of prolonged adverse economic

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conditions would increase No Build volumes by approximately four percent (i.e., 0.5 percent/year). Given the low existing baseline volumes, this added background growth would result in no more than eight additional pedestrians at any analyzed facility in the peak 15-minutes in any peak hour (or roughly one person every two minutes). This small increase in volume compared to the volumes analyzed in the FEIS is not expected to result in any new significant adverse impacts at any analyzed sidewalk, corner area or crosswalk.

AIR QUALITY

Further delay in the construction schedule due to prolonged adverse economic conditions would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to air quality because the delay would not affect project-related emissions.

NOISE

Further delay in the construction schedule due to prolonged adverse economic conditions would not result in significant adverse noise impacts not addressed in the FEIS. The delay would not materially affect project-generated noise.

NEIGHBORHOOD CHARACTER

The schedule change would not result in significant adverse environmental impacts with respect to neighborhood character that were not addressed in the FEIS. Under this delayed build out scenario, the temporary surface parking lot used for arena parking would be in place for a longer period of time than described in the FEIS. However, this would not result in a change to the conclusions of the FEIS, which disclosed that traffic, noise, and other effects of the active uses on the project site upon completion of Phase I would have localized adverse neighborhood character impacts on Dean Street. As with the FEIS, these impacts would be experienced in a small area adjacent to the project site and would not affect the character of the larger Prospect Heights neighborhood. Moreover, as the Phase II buildings come on line, the surface parking lot would be relocated below grade.

As described in the FEIS and above, construction activity associated with the Atlantic Yards project would result in significant adverse localized neighborhood character impacts in the immediate vicinity of the project site during construction. The construction activities would be substantially the same. The extension of the schedule would result in an additional period of time during which portions of the project site would be undergoing active construction. Therefore, the localized, significant adverse neighborhood character impacts at Dean and Pacific Streets would continue through the prolonged construction period.

In the delayed build out scenario, the nearby residential uses may not have the buffer from the arena use provided by Buildings 1, 3, and 4; however, this condition would be temporary and would be addressed by the construction of these buildings over time. On the arena block, Building 2—located on the southwestern corner of the arena block facing the residential district to the south—would be constructed with a predominantly residential use with street-level retail frontages along Dean Street and Flatbush Avenue. Temporary open space and public amenity uses such as retail kiosks, landscaped seating areas, plantings would be provided on the building footprints not under development, particularly Buildings 3 and 4. These amenities would enliven the street-level environment and provide a buffer between the arena and residential district to the south and north.

In summary, the potential delay of the full build out of the project would not result in significant adverse environmental impacts with respect to neighborhood character that were not addressed in the FEIS.

CONSTRUCTION

Construction activities may be prolonged with the schedule change but would be similar to those of the approved project analyzed in the FEIS and be similar to the currently proposed project showing a 2019 completion date. These potential delays due to prolonged adverse economic conditions would not affect the development of the arena, the transit access improvements, the reconstruction of the LIRR rail yard, the reconstruction of the Carlton Avenue Bridge or the construction of Building 2. While the current construction plan calls for the continuous construction of the platform over the rail yard in Phase II, the delayed build out condition would likely result in sections of the platforms being constructed as each of the corresponding buildings move forward in development. As noted above, as each of the buildings is completed, a certain amount of landscaped open space would be provided in conformance with the GPP's Design Guidelines.

General construction practices, equipment, staging, maintenance and protection of traffic, and work hours would be similar to that described for the 2019 completion year. Certain activities that were expected to take place during the construction peaks on the arena block and Phase II sites would now be prolonged but the intensity of these activities would not increase. The effects of this delayed construction scenario on air quality and noise would be spread over a longer period of time but the level of impact would not be greater than that presented in the FEIS or for the revised 2019 construction schedule.

Should there be periods in which there are temporary cessations of site construction, there would be no major equipment stored on the site; however, the project sites would be maintained and secured. Overall, should the project be delayed beyond the 2019 schedule, construction effects—and the localized adverse impact on neighborhood character on Dean and Pacific Streets—would be prolonged but impacts associated with this construction activity would not be greater than that presented in the FEIS.

PUBLIC HEALTH

The schedule change would not change the FEIS conclusion that the project would not result in significant adverse environmental impacts with respect to public health.

CONCLUSION—POTENTIAL FOR DELAYED BUILD OUT

A delay in the full build out year for the Atlantic Yards Arena and Redevelopment Project as a result of prolonged adverse economic conditions would not result in any significant adverse environmental impacts that were not addressed in the FEIS. *

A. INTRODUCTION

This appendix analyzes a scenario in which the arena and Buildings 2, 3, and 4 would be completed as contemplated under the revised schedule discussed in the technical memorandum, but Building 1 would not be completed by the end of Phase I. This scenario is being analyzed to identify whether a potential delay in construction for Building 1 due to changes in market demand for office space or other circumstances would have the potential to result in significant adverse impacts not previously identified in the FEIS and/or change any of the conclusions presented in the FEIS.

In the revised construction schedule for the project, work on Building 1 would begin in November 2010 and would conclude in August 2013, a period of 35 months. The other buildings on the arena block would be constructed at roughly the same time, with the arena and Building 2 completed in 2012, Building 3 completed in 2013, and Building 4 completed in 2014. If the development of Building 1 were delayed, however, it is assumed for the purposes of analysis that construction of this building would begin after the other buildings on this block are completed. In this scenario, Building 1 construction would start in June 2014 and extend through March 2017 (see Table 1). The period of construction would remain the same, at 35 months. Although under this scenario Building 1 could be constructed at anytime during the project's Phase II build out, it was conservatively assumed in this discussion that construction of Building 1 would occur during the Phase II peak construction activity. Thus, Building 1 would be under construction at the same time as buildings are slated to come on line during Phase II of the project, specifically Buildings 5, 6, 7, 8, 14, and (for a short period) 15.

Table 1
Arena Block Construction Phasing

Project Component	Revised Project Schedule		Building 1 Delay Scenario	
	Duration	Time Period	Duration	Time Period
Arena	29 months	2009-2012	32 months	2009-2012
Building 1	35 months	2010-2013	35 months	2014-2017
Building 2	22 months	2010-2012	21 months	2010-2012
Building 3	32 months	2010-2013	32 months	2010-2013
Building 4	36 months	2011-2014	36 months	2011-2014

Until Building 1 construction commences, the future Urban Room area at the southeast corner of Flatbush and Atlantic Avenues would be occupied by an outdoor urban plaza. The urban plaza would follow the basic use and design principles of the Urban Room in order to create a significant public amenity. It is anticipated that the plaza would include the following elements:

- Trees in planters, to provide shade;
- Retail kiosks that incorporate stoop-like bleacher seating into their structure. These kiosks could provide food and beverages or other retail uses;

Atlantic Yards Arena and Redevelopment Project

- Social seating (benches and fixed tables) as well as loose seating;
- The new transit entrance, which will be provided even if there is a delay in the construction of Building 1;
- A prominent sculptural element, such as a large piece of public art; and
- A generously sized, flexible program space to allow for formal and informal public uses such as outdoor performances, temporary markets, art installations, and seating.

The program and design of the arena block buildings under this scenario would remain the same as described in the technical memorandum.

The potential delay in the completion of Building 1 would have certain implications for arena operations as well as for the construction-period uses of this building site. The uses identified for the Urban Room would still be provided; the urban plaza would still serve as a new access point to mass transit for the neighborhoods to the south, east and west of Atlantic Avenue, providing new escalators, an elevator, stairways, and passageways leading to the subway station below. As described above, the plaza also would include small kiosks for retail and café uses (see Figures A-1 and A-2). This interim use of the Urban Room area would be designed by the project sponsor to provide a usable, welcoming amenity for the surrounding neighborhood.

As detailed below, the analysis concludes that the project with the potential delay of construction for Building 1 would not result in any significant adverse environmental impacts not already identified in the FEIS.

B. ANALYSIS OF DELAYED CONSTRUCTION SCENARIO

The potential delay in the completion of Building 1 would not change the future build program or zoning of the arena block or the rest of the project site; it would not increase the number of workers, visitors, or residents expected to be generated by the project; it would not alter the proposed height or dimensions of any project buildings, which would continue to conform to the General Project Plan's Design Guidelines; it would not change the amount or timing of the project's anticipated affordable housing, or its direct displacement effects; it would not change any infrastructure needs, configurations, or proposed improvements in comparison to the project as described in the technical memorandum; and lastly, it would not change the stipulations of the Letter of Resolution among ESDC, the project sponsor, and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP).

The analysis provided below focuses on those technical areas—urban design, traffic and transportation and construction-related traffic, air quality, and noise—where the potential delay in construction of Building 1 could potentially have substantive effects that require further analysis.

URBAN DESIGN AND VISUAL RESOURCES

As described above, some elements of the arena block's proposed urban design would be temporarily postponed due to the delay of Building 1 construction. In this scenario, until the construction of Building 1 commences the site of the future Urban Room would be occupied by an open, urban plaza. The urban plaza would provide most of the uses identified for the Urban Room, including transit access and café kiosks. This interim use of the Urban Room area would be designed by the project sponsor to provide a usable, welcoming amenity for the surrounding neighborhood. In comparison to the Urban Room, the use of the urban plaza would occur outside of any project buildings. Some of the Urban Room's uses would be provided in different



Source: Field Operations

FOR ILLUSTRATIVE PURPOSES ONLY

0 100 FEET
SCALE



FOR ILLUSTRATIVE PURPOSES ONLY

Arena Entrance, Interim Condition, Delay of Building 1 Scenario
Figure A-2

locations—the main entrance to the arena, as well as a temporary box office and the team store, would be located on the arena’s western façade. However, these changes would not notably alter the urban design of the arena block, and would not be in place upon completion of the project. The project would still meet the GPP’s Design Guidelines. Therefore, the project in this scenario would not have any significant adverse impacts to urban design or visual resources that were not previously identified in the FEIS.

TRAFFIC AND TRANSPORTATION

As described above, if the construction of Building 1 is delayed, the proposed Urban Room area would be temporarily occupied by an urban plaza and surrounded by arena signage. Most uses identified for the Urban Room would be maintained. The arena’s main entrance, temporary box office, and team store would continue to be located on its western façade, facing the new subway entrance. The temporary urban plaza, like the Urban Room, would serve as a new access point to mass transit for the neighborhoods to the south, east and west of Atlantic Avenue, providing new escalators, an elevator, stairways, and passageways leading to the subway station below.

A delay in the construction of Building 1 would temporarily result in fewer traffic activities and less demand on parking and transit services due to the absence of the Building 1 operations. However, once Building 1 is completed and occupied, the resulting effects on traffic, parking, transit, and pedestrians would be the same as that assumed in the FEIS and is not likely to result in additional or new significant adverse impacts or require mitigation measures that were not identified in the FEIS.

CONSTRUCTION IMPACTS

As discussed above and shown in Table 1, under this scenario it is assumed that Building 1 construction would start in June 2014 and extend through March 2017, and its construction activities would overlap with other Phase II building construction elements. The period of construction for Building 1 would remain the same, at 35 months.

In this scenario, the operations of the arena would continue and adequate access to and from the arena would be maintained. However, during the construction of Building 1, the main entrance to the arena, as well as a temporary box office and the team store, would be located on the arena’s northern or eastern façades. During the construction of Building 1, subway riders would exit under construction bridges and travel along sidewalks to reach the alternate entrances to the arena, which would continue to operate until the completion of Building 1, at which time the Urban Room, main entrance, box office, and team store would be in place.

URBAN DESIGN AND VISUAL RESOURCES

While Building 1 is under development, the visual and pedestrian experience of the arena and Buildings 2, 3, and 4 would be lessened by the presence of construction fencing, sheds, materials, and equipment on this site; however, this effect would be temporary and would not last beyond the period of construction. Thus, the potential delay in construction is not expected to result in additional or new significant adverse impacts on urban design.

TRAFFIC AND TRANSPORTATION

During construction of Building 1, subway riders would exit under construction bridges and travel along sidewalks to reach the alternate entrances to the arena. The pedestrian sheds/corridors provided through the construction site would be sized to accommodate anticipated peak arena demand at acceptable levels of service. There would be directional

Atlantic Yards Arena and Redevelopment Project

signage at various points on the arena block, indicating routes to the arena's entrances and amenities.

In comparison to the potential construction traffic and transportation impacts described in the technical memorandum, the delay in construction of Building 1 would shift its related construction activities—specifically worker and truck delivery trips—to later years of the construction project. Figures A-3 and A-4 illustrate how these trips would differ in this scenario, compared to the FEIS and the project as described in the technical memorandum. While higher levels of construction worker and truck delivery trips during the latter years of construction are expected to result from the overlapping of construction activities for Building 1 with those of other Phase II buildings, the project's overall construction activities would be staggered and spread-out over time and would not be expected to exceed the peak conditions analyzed in the FEIS. Furthermore, with the proposed roadway improvements, traffic mitigation measures, traffic circulation plans, and updated curbside parking regulations already in place to accommodate the project's operational traffic during the construction of Building 1, the potential delay in construction is not expected to result in additional or new significant adverse construction traffic impacts and required mitigation measures that were not identified in the FEIS.

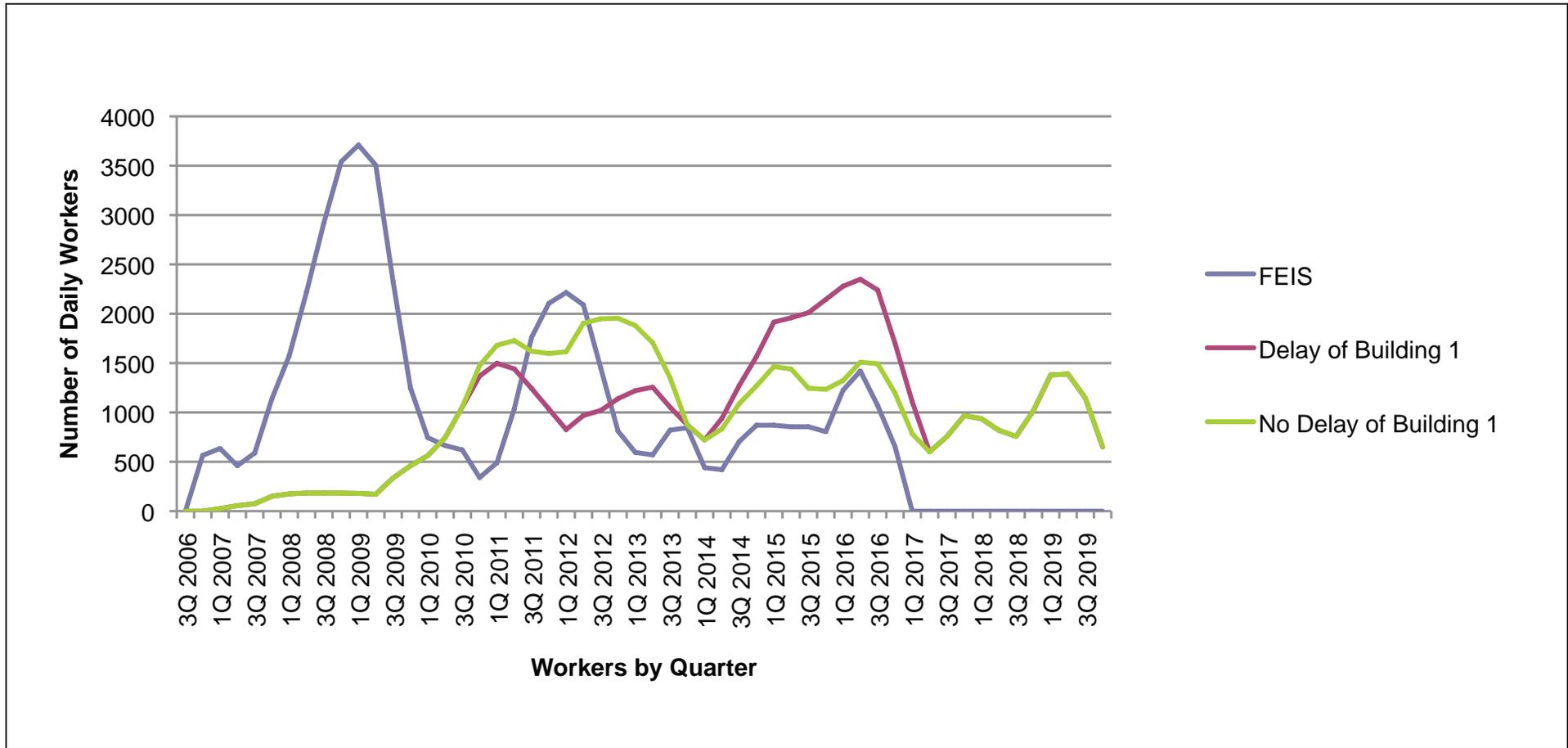
Furthermore, with the proposed roadway improvements, traffic mitigation measures, traffic circulation plans, and updated curbside parking regulations already in place to accommodate the project's operational traffic during the construction of Building 1, the potential delay in construction is not likely to result in additional or new significant adverse construction traffic impacts and required mitigation measures that were not identified in the FEIS.

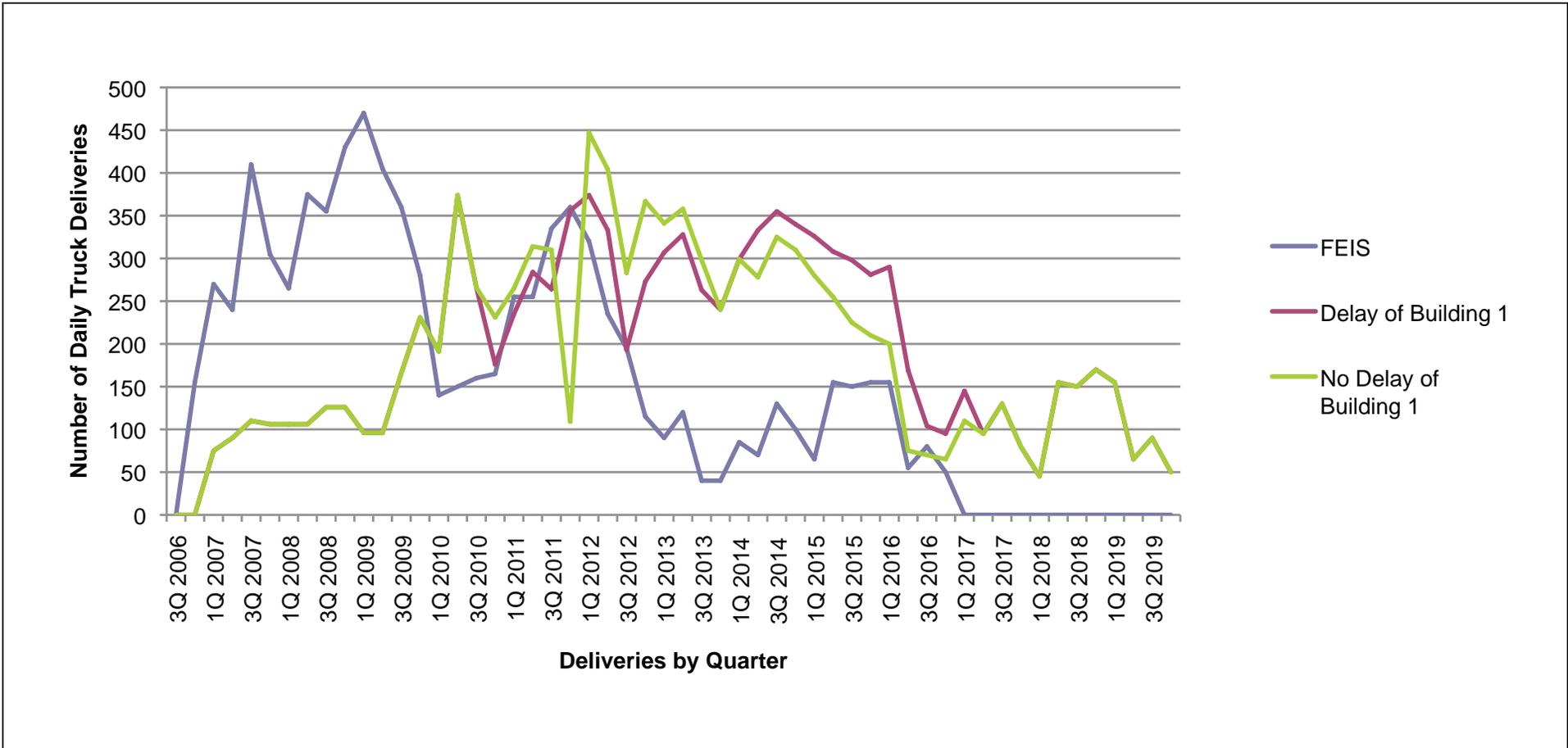
AIR QUALITY

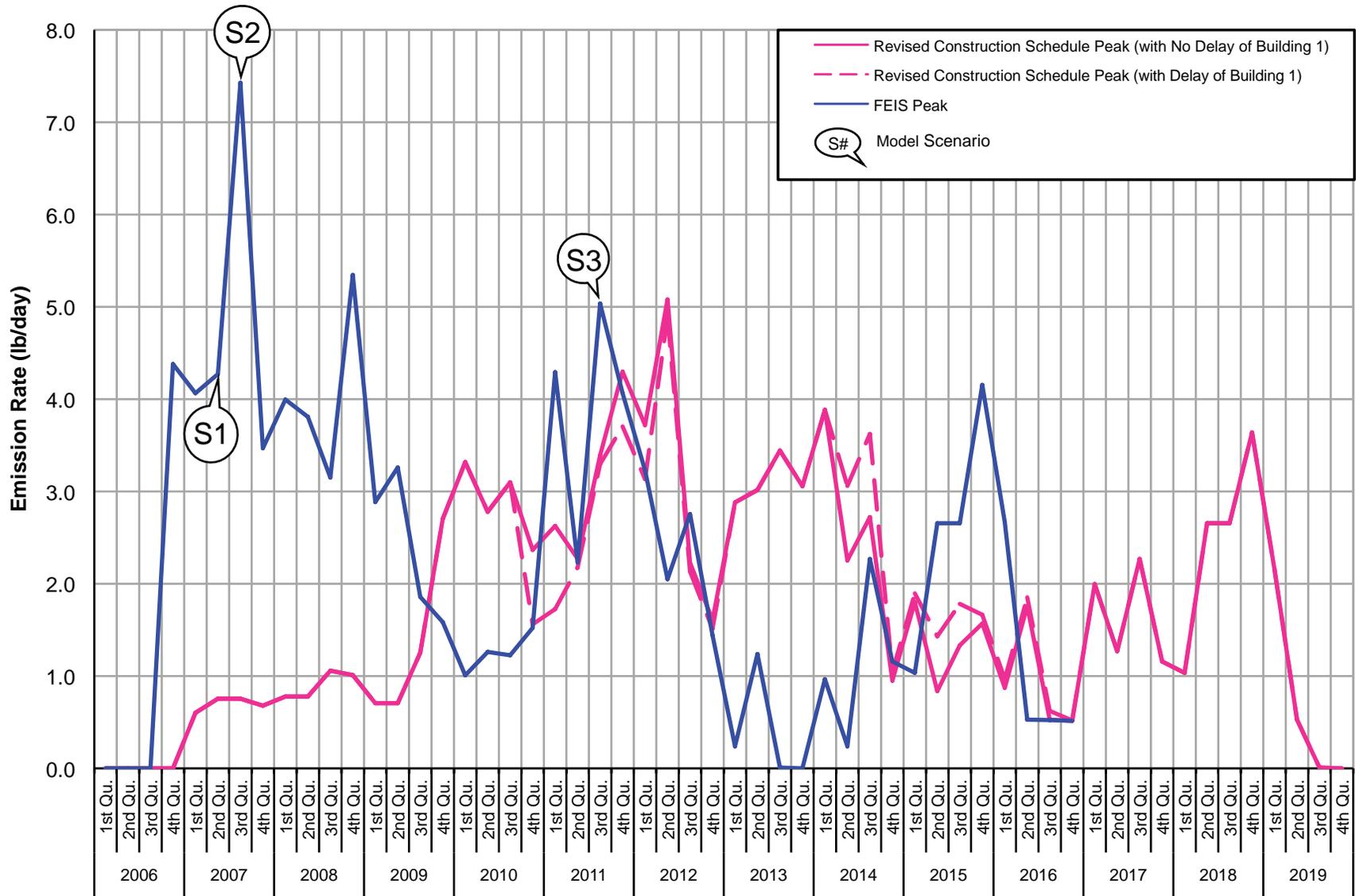
As shown in Figures A-5 and A-6, the short-term peak ground-level emissions and the annual average ground-level emissions for the Delay of Building 1 Scenario would be comparable to those described in the technical memorandum for the project. The main difference is that the delay of construction for Building 1 would shift some of the emissions predicted to occur during non-peak construction periods to a later date. The change in the construction schedule of Building 1 would not result in any significant adverse construction-period air quality impacts.

NOISE

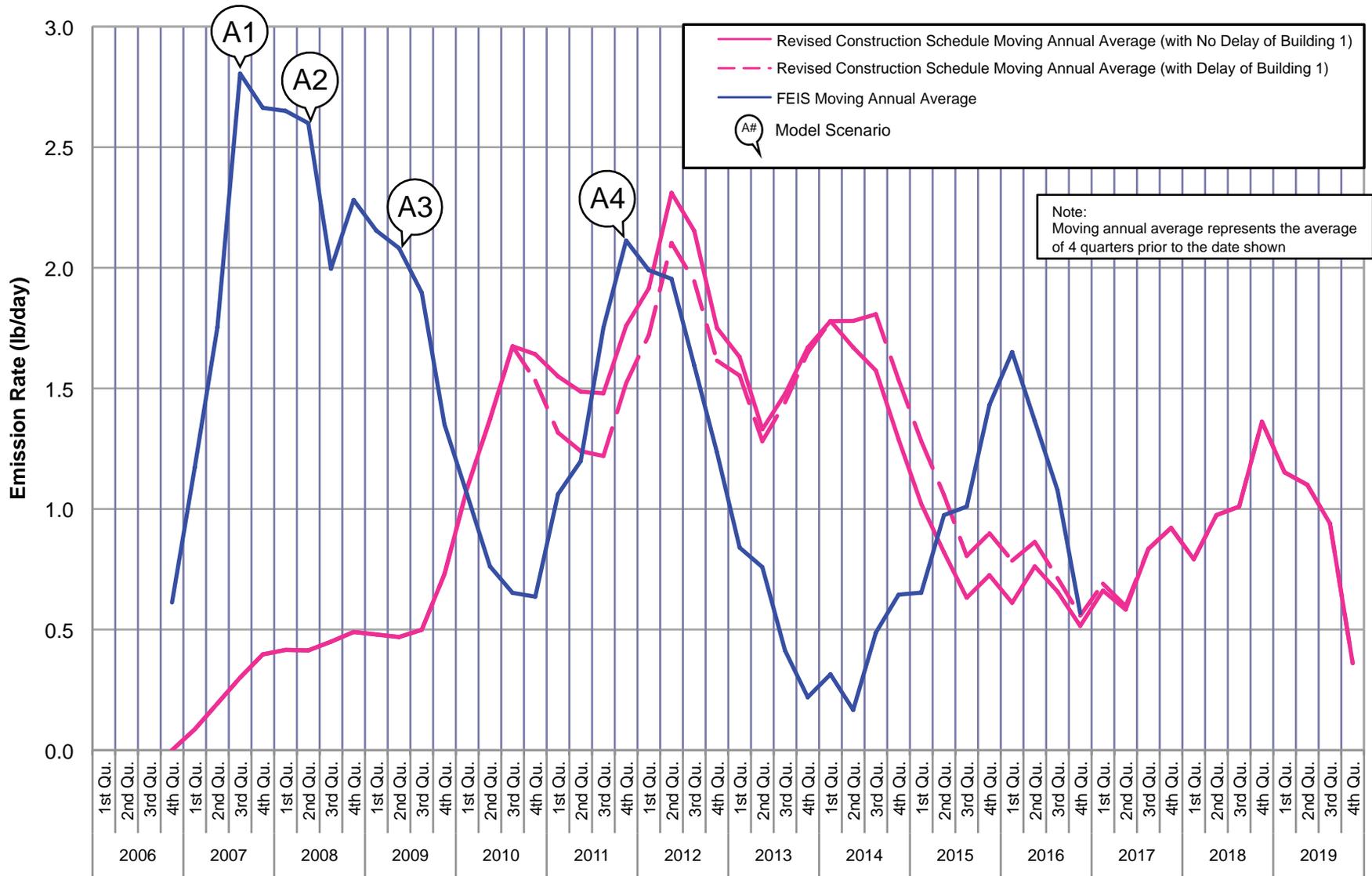
In this scenario, construction of Building 1 and the arena would not happen simultaneously, with construction of Building 1 commencing approximately two years after construction of the arena is complete. This change in construction scheduling could result in the noise impacts identified in the FEIS at sites 12 and 16 occurring not only during construction of the arena, but again during construction of Building 1, thus resulting in more time during which these locations are impacted by construction noise. No additional noise mitigation is required, as the FEIS identified significant adverse noise impacts at these receptor locations and imposed comprehensive noise mitigation measures that would also partially mitigate noise from the delayed construction of Building 1. *







Peak (24-hr) Construction PM_{2.5} Ground-Level Emissions Profile
 Delay of Building 1 Scenario



Annual Construction PM_{2.5} Ground-Level Emissions Profile
 Delay of Building 1 Scenario

Summary Conclusions

As a result of the analyses detailed in the various sections of this technical memorandum and appendix, the proposed General Project Plan (GPP) modification and changes related to the design development, schedule change, background conditions and analysis methodologies, and the potential for a change in the anticipated timing of Building 1 would not, considered either individually or together, result in any significant adverse environmental impact not previously addressed in the FEIS. Further delay due to prolonged adverse economic conditions would not change this conclusion. Therefore, no Supplemental Environmental Impact Statement would be required if the GPP modification were to be approved substantially in the form as proposed. *

EXHIBIT B

SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: MARCY S. FRIEDMAN, J.S.C.

PART 57

Index Number : 114631/2009
DEVELOP DON'T DESTROY
vs.
EMPIRE STATE DEVELOPMENT CORP
SEQUENCE NUMBER : 001
ARTICLE 78

INDEX NO. 114631/09
MOTION DATE _____
MOTION SEQ. NO. 001
MOTION CAL. NO. _____

Article 78
in this motion to/for Article 78

PAPERS NUMBERED
1-2-3-4
5-6
7-8

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits
Answering Affidavits — Exhibits
Replying Affidavits

Cross-Motion: Yes No

Memo of Law 11-11-09

Upon the foregoing papers, it is ordered that this motion

**DECIDED IN ACCORDANCE WITH
ACCOMPANYING DECISION/ORDER.**

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE FOR THE FOLLOWING REASON(S)

FILED

MAR 11 2010
NEW YORK
COUNTY CLERK'S OFFICE

RECEIVED
MAR 11 2010

MOTION SUPPORT OFFICE
NYS SUPREME COURT - CIVIL

Dated: 3-10-10

Marcy S. Friedman
MARCY S. FRIEDMAN, J.S.C.

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION
Check if appropriate: DO NOT POST REFERENCE

SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: MARCY S. FRIEDMAN, J.S.C.

PART 57

Index Number : 114631/2009
DEVELOP DON'T DESTROY
VS.
EMPIRE STATE DEVELOPMENT CORP
SEQUENCE NUMBER : 001
ARTICLE 78

INDEX NO. 114631/09
MOTION DATE _____
MOTION SEQ. NO. 001
MOTION CAL. NO. _____

petition
in this motion to/for Article 78

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits ...
Answering Affidavits — Exhibits _____
Replying Affidavits _____

PAPERS NUMBERED

1st seq.
23
4-5

Cross-Motion: Yes No

Memo of Law M1-M4

Upon the foregoing papers, it is ordered that this ~~motion~~

petition is

**DECIDED IN ACCORDANCE WITH
ACCOMPANYING DECISION/ORDER.**

UNFILED JUDGMENT
This judgment has not been entered by the County Clerk and notice of entry cannot be served based hereon. To obtain entry, counsel or authorized representative must appear in person at the Judgment Clerk's Desk (Room 4103).

Dated: 3-10-10


MARCY S. FRIEDMAN, J.S.C.

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION
Check if appropriate: DO NOT POST REFERENCE

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE _____ FOR THE FOLLOWING REASON(S):

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK - PART 57

PRESENT: Hon. Marcy S. Friedman, JSC

DEVELOP DON'T DESTROY (BROOKLYN),
INC., et al.,

Index No.: 114631/09

Petitioners,

DECISION/ORDER

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT CORPORA-
TION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

PROSPECT HEIGHTS NEIGHBORHOOD
DEVELOPMENT COUNCIL, INC., et al.,

Index No.: 116323/09

Petitioners,

DECISION/ORDER

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT CORPORA-
TION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

UNFILED JUDGMENT
This judgment has not been entered by the County Clerk
and notice of entry cannot be served hereon. To
obtain entry, counsel or authorized representatives must
appear in person at the Judgment Clerk's Desk (Room
4019).

In these Article 78 proceedings, petitioner Develop Don't Destroy (Brooklyn), Inc.

(DDDB) and petitioners Prospect Heights Neighborhood Development Council, Inc. and others (collectively PHND) challenge the affirmance, on September 17, 2009, by respondent New York State Urban Development Corp., doing business as the Empire State Development Corp. (ESDC), of a modified general project plan (MGPP) for the Atlantic Yards Project in Brooklyn, which is to be constructed by respondent Forest City Ratner Companies (FCRC). The Atlantic Yards Project is a massive, publicly subsidized, mixed-use development project, extending eastward over 22 acres from the junction of Atlantic and Flatbush Avenues. The Project is to be built in two phases: Phase I will include an 18,000 seat sports arena that is intended to serve as the new home of the New Jersey Nets, a professional basketball team, and construction of a new rail yard on the site of a rail yard that is owned by the Metropolitan Transportation Authority (MTA). The Project also calls for 16 high rise buildings that will contain commercial space as well as between 5,325 and 6,430 residential units, of which 2,250 will be affordable to low, moderate, and middle income persons. Four to five of these buildings in the vicinity of the arena are proposed for Phase I, with the remainder to be constructed in Phase II.

ESDC approved the first plan for the Atlantic Yards Project on July 18, 2006 and first modified the plan on December 8, 2006. The Project has been the subject of extensive litigation. The court refers to prior opinions for a detailed discussion of the scope of the Project and of petitioners' challenges to the prior regulatory findings and approvals. (See e.g. Develop Don't Destroy [Brooklyn] v Urban Dev. Corp., 59 AD3d 312 [1st Dept 2009] [DDDB I], lv denied 13 NY3d 713, rearg denied 2010 WL 520599 [2010] [holding, among other things, that the Project qualified as a Land Use Improvement Project pursuant to the Urban Development Corporation Act, based on ESDC's findings of blight at the site, and rejecting petitioners' challenges to

ESDC's environmental review under the State Environmental Quality Review Act]; Matter of Goldstein v New York State Urban Dev. Corp., 13 NY3d 511 [2009], rearg denied 2010 NY Slip Op 63486 [2010] [upholding the use of the eminent domain power under the State Constitution for takings of private property to be used for the Project]; Goldstein v Pataki, 516 F3d 50 [2d Cir 2008], cert denied 128 S Ct 2964 [same under the U.S. Constitution].)

On June 23, 2009, ESDC adopted a Modified General Project Plan (Record at 4684 et seq.) which ESDC affirmed by resolution on September 17, 2009 (Record at 7236). In the present proceedings, petitioners challenge ESDC's September 17, 2009 resolution on two main grounds: First, they argue that ESDC violated the State Environmental Quality Review Act (SEQRA) (Environmental Conservation Law § 8-0101 et seq.) by not preparing a Supplemental Environmental Impact Statement (SEIS) as a result of changes to the Project. Second, they argue that ESDC violated the New York Urban Development Corporation Act (UDCA) (L 1968, ch 174, § 1, as amended) (McKinney's Uncons Laws of NY § 6260[c]) by not assuring that a plan is in place to alleviate the blight that ESDC previously found to exist at the Project site.

Petitioners' challenge, in turn, rests on the MTA's renegotiation in June 2009 of its agreement with FCRC to sell FCRC the air rights to the rail yards that the MTA currently owns.¹ It is undisputed that these air rights are necessary to develop six of the eleven buildings that are to be constructed in Phase II. Under the agreement between the MTA and FCRC that was in effect at the time of ESDC's 2006 approval of the Project plan, FCRC was required to pay \$100 million to the MTA, at the inception of the Project, for the air rights and related real property

¹ The 2009 MGPP abandons the design for the arena facade by prominent architect Frank Gehry, which was described in the FEIS, and replaces it with "a more traditional design." (Technical Memorandum at 4 [Record at 4749].) This design change is not the subject of challenge in the DDDB proceeding and is mentioned only in passing in the PHND proceeding.

interests necessary to construct the arena as well as six Phase II buildings to be located above the rail yard platform. Under the 2009 MGPP, FCRC will pay the sum of \$20 million for acquisition of the property interests necessary for the development of the arena block, will provide the MTA with an \$86 million letter of credit to secure the obligation to build the upgraded rail yard, and will pay the balance of the \$100 million on an installment schedule. (See Memo. of Marisa Lago to ESDC Board of Directors, dated June 23, 2009, at 4 [Record at 4678] [June 23, 2009 Memo.].) According to the MTA's summary of the renegotiated agreement, the remaining \$80 million, discounted to present value, will be paid in installments of \$2 million each in the years 2012 through 2015, and installments of \$11 million per year for 15 years beginning in 2016. MTA will convey the parcel necessary for construction of the arena at the closing for the \$20 million purchase price, while the air rights parcel will "be conveyed only after substantial completion of the new permanent rail yard and only upon payment in full of the price of a development parcel." (MTA Staff Summary, dated June 22, 2009, at 2-3 [Record at 4667-4668].) The air rights parcel consists of six development sites, and the installment payments for the air rights parcel are "allocated proportionally to each Development Parcel." (MTA Staff Summary, Attachment at 2 [Record at 4671].) A Development Parcel is "conveyable (to ESDC or FCR) only upon payment to MTA of the full Development Parcel Purchase Price." (Id.)

Based on the renegotiated MTA agreement, petitioners argue that FCRC does not have the financial incentive to complete the project in a timely manner, that it has until 2030 to complete acquisition of the air rights necessary for construction of six of the Phase II buildings, and that it could "abandon" the project completely. (See DDDDB Memo. of Law in Support at 14-

15 [DDDB Memo.].) Petitioners also claim that ESDC ignored the MTA agreement and its impact on the expected time frame for the project (*id.* at 10) and improperly used a 10 year build-out for the project, with a 2019 completion date. (*Id.* at 12-13.) Respondents deny that ESDC staff did not make the ESDC Board aware of the MTA agreement. (ESDC Memo. of Law in Opp. to DDDB Pet. at 22.) They also counter that there is no inconsistency between the renegotiated MTA agreement and the 2009 MGPP, that the dates for FCRC's acquisition of the air rights necessary for construction are "outside dates," and that the Phase II buildings will be constructed on a parcel-by-parcel basis. (*Id.* at 18-20.) Respondents emphasize that a separate agreement between ESDC and FCRC will require FCRC to use "commercially reasonable efforts" to complete the entire Project by 2019. (*Id.* at 22.)

Petitioner DDDB's argument that ESDC violated the UDCA by not assuring that a plan is in place to eliminate blight reduces, in effect, to the argument that the 2009 MGPP is not a "plan" because it lacks guarantees that the Project will be completed. Governing legal authority does not support this contention. (See generally *Neville v Koch*, 79 NY2d 416 [1992].) Authority is similarly lacking for petitioner PHND's claim that ESDC unlawfully delegated control to FCRC over the schedule for the Project. The court is also unpersuaded by petitioners' contention that the development agreement with FCRC illegally conditions the development of affordable housing on the availability of public subsidies. The remainder of this opinion accordingly addresses petitioners' SEQRA claim.

The standard for SEQRA review of an ESDC determination is well settled. The regulations which implement SEQRA provide: "The lead agency [here, ESDC] may require a supplemental EIS, limited to the specific significant adverse environmental impacts not

addressed or inadequately addressed in the EIS that arise from: [a] changes proposed for the project; or [b] newly discovered information; or [c] a change in circumstances related to the project.” (6 NYCRR 617.9[a][7][i][a]-[c].) A lead agency’s determination whether to require an SEIS is “discretionary.” (Matter of Riverkeeper, Inc. v Planning Bd. of Town of Southeast, 9 NY3d 219, 231 [2007].) The court’s review is limited to whether the lead agency “took the requisite hard look at project and regulatory changes that arose after the filing of a SEQRA findings statement, and made a reasoned elaboration that [an SEIS] was not necessary to address those changes.” (*Id.* at 228-229, 231-232, citing Matter of Jackson v New York State Urban Dev. Corp., 67 NY2d 400, 417 [1986].) As the Court of Appeals has emphasized: The courts may not “second-guess” agency decision making. “[A]ccordingly, an agency decision should be annulled only if it is arbitrary, capricious or unsupported by the evidence. The lead agency [in this case, ESDC] . . . has the responsibility to comb through reports, analyses and other documents before making a determination; it is not for a reviewing court to duplicate these efforts. . . . While judicial review must be meaningful, the courts may not substitute their judgment for that of the agency for it is not their role to weigh the desirability of any action or to choose among alternatives.” (Riverkeeper, Inc., 9 NY3d at 232 [internal quotation marks, citations, and brackets omitted].)

Applying this limited or deferential standard of review, the court must deny petitioners’ challenge to ESDC’s determination not to require an SEIS. Contrary to petitioners’ contention, ESDC did not ignore the renegotiated MTA agreement. There is no question that ESDC knew that the MTA agreement extended FCRC’s time to acquire the air rights needed for development of the six Phase II sites. Each agency was aware of the other’s proceedings. It appears that the

MTA's own approval of its agreement with FCRC was conditioned on ESDC's approval of the 2009 MGPP. (See MTA Staff Summary, Recommendation at 3 [Record at 4668].) ESDC staff noted the existence of the MTA agreement in the memoranda that were submitted to the ESDC Board prior to its June 23, 2009 adoption of the MGPP and its September 17, 2009 resolution affirming the MGPP and determining that an SEIS was not "warranted" in connection with the modified plan. The June 23, 2009 Memorandum categorized the "MTA Site Acquisition" as a "major change" to the 2006 plan. It noted that the air rights for the development of the non-arena stages of the Project would be acquired by FCRC on an installment schedule and that "[t]he conveyance of MTA air rights is essential for the development of the [railway] platform and improvements thereon." (June 23, 2009 Memo. at 3-4 [Record at 4677-4678].) The September 17, 2009 Memorandum included, among its description of the changes to the 2006 plan, "a phased acquisition of the MTA air rights necessary to complete development of the Project site." (Memo. of Dennis Mullen to ESDC Board of Directors at 2 [Record at 7022].)

In connection with its initial review and approval of the MGPP in June 2009, ESDC worked with consultants to prepare a Technical Memorandum, dated June 2009 (Record at 4744 et seq.), which was used to determine whether an SEIS was necessary. As set forth in both the June 23, 2009 Memorandum and the Technical Memorandum, the purpose of the Technical Memorandum was to assess whether the proposed modifications to the 2006 plan, design development, changes to the Project schedule, changes in background conditions and analysis methodologies since the FEIS [Final Environmental Impact Statement], and the potential for delay due to prolonged adverse economic conditions would result in "any new or substantially different significant adverse impacts than those addressed in the FEIS" that was prepared in

connection with ESDC's approval of the 2006 plan. (See June 23, 2009 Memo. at 6 [Record at 4680]; Technical Memorandum at 9 [Record at 4759].) The Technical Memorandum discussed each of these changes, and concluded that the changes "would not, considered either individually or together, result in any significant adverse environmental impacts not previously addressed in the FEIS." (Technical Memorandum at 55 [Record at 4808].)

The Technical Memorandum and the ESDC staff memoranda recommending approval of the 2009 MGPP without an SEIS, assumed a 10 year build-out for the Project with an expected completion date of 2019. The FEIS had also used a 10 year build-out, with an expected completion date of 2016. In extending the FEIS build-out for three years from 2016 to 2019, the Technical Memorandum stated: "The anticipated year of completion for Phase I of the project has been extended from 2010 to 2014 due to delays in the commencement of construction on the arena block. The anticipated date of the full build-out of the project -- Phase II -- has been extended from 2016 to 2019 for the same reason." (Technical Memorandum at 5-6 [Record at 4752, 4755].) The Technical Memorandum also undertook an analysis of the potential for a delayed build-out based on "prolonged adverse economic conditions," and recognized that such conditions could cause delays of some of the buildings on the arena block and on Phase II sites. It concluded that the delay would not result in significant adverse environmental impacts that had not previously been considered in the FEIS. (Technical Memorandum at 55, 63 [Record at 4808, 4816].) The Technical Memorandum analyzed environmental impacts on traffic and parking as well as transit and pedestrian conditions over an additional five year period until 2024. While it did not provide a specific number of years for its analysis of other environmental impacts, including delays in the development of open space and extensions of time during which above

ground parking lots would remain in existence, it anticipated that the Phase II buildings would be constructed on a parcel-by-parcel basis and that, as each of the buildings was completed, these impacts would be lessened or eliminated. (See *id.* at 58, 62 [Record at 4811, 4815].)

ESDC's staff's September 17, 2009 Memorandum concluded that the Project remained "viable" and that the Project schedule was "achievable based on existing and projected economic conditions" and on the report of KPMG, a real estate consulting firm that ESDC retained to perform an analysis of whether, taking into account the severe recession, the market can absorb the residential units called for by the Project over the 10 year period. (See Sept. 17, 2009 Memo. at 5 [Record at 7025].) KPMG concluded that FCRC's residential absorption rate estimates were supported by current market data for condominiums and were "not unreasonable" for market rate rental units, and that, given the need for low income housing in New York City, low income units would be absorbed as soon as they were brought onto the market. (KPMG Analysis, dated Aug. 31, 2009, at 38, 36 [Record at 7117, 7115].)

As petitioners acknowledge, public comments were made about the potential delays that the MTA agreement would cause and the 2030 date for FCRC to complete the acquisition of all of the air rights necessary to complete the construction of the Phase II buildings. (See Summary of Comments and Responses, dated Sept. 2009, esp. Comments 10, 13, 14, 16, 24-31 [Record at 7030 *et seq.*]. See Testimony of Daniel Goldstein at Sept. 17, 2009 ESDC Board Meeting [Record at 7179-7180].) In responding to the public's questions about the feasibility of completing the Project by 2019, ESDC's staff stated that the assumption of the 10 year schedule in the Technical Memorandum was reasonable because 1) FCRC has made a substantial investment to date in acquisition costs and has an incentive to recognize a return on its

investment as soon as possible; and 2) it is reasonable to expect that the market will absorb the units called for by the Project. (Comment 10 [Record at 7036].) ESDC's staff also noted that "[t]he Project documentation will obligate the developer to complete the entire Project in accordance with the MGPP." (Comment 26 [Record at 7043].) This reference was to a provision in the 2009 MGPP which states that "[t]he Project documentation to be negotiated between ESDC and the Project Sponsor [FCRC] will require the Project Sponsors to use commercially reasonable efforts to achieve this schedule [for Phase I construction] and to complete the entire Project by 2019. The failure to commence construction of each building would result in, inter alia, monetary penalties being imposed on the Project Sponsors." (2009 MGPP [Record at 4692-4693].) In addition, ESDC's staff summarized a number of public comments about the environmental impacts that would occur – e.g., on open space, air quality, and traffic – as a result of prolonged delays in completing the Project, and noted requests from the public that an SEIS be prepared to study such impacts. ESDC's staff responded that it "anticipated that the full build-out of the Project would be completed by 2019." (Comment 29 [Record at 7044]. See e.g. Comments 30, 37, 39 [Record at 7044, 7047-7048].) The response also noted that the Technical Memorandum had considered the potential for delay of the build-out due to prolonged adverse economic conditions. (See e.g. Comments 25, 27 [Record at 7042-7043].)

The ESDC Board's September 17, 2009 Resolution did not contain any independent analysis of the MGPP, and stated that the Board had "considered the Technical Memorandum, the comments received during the public comment period for the Modified General Project Plan and the view of the Corporation's staff that the preparation of a Supplemental Environmental

Impact Statement would not provide information useful to the determination whether to affirm the Modified General Project Plan.” (Resolution [Record at 7236].)

Petitioners’ challenge in these proceedings focuses on the ESDC’s continuing use of the assumption of a 10 year build-out, or 2019 completion date for the Project, in the face of the MTA agreement under which FCRC is not required to acquire all of the air rights needed to complete the construction of six of the Phase II buildings until 2030. ESDC contends that it has a rational basis for its use of the 10 year build-out and its consequent finding that adverse environmental impacts were adequately addressed in the FEIS that had also used a 10 year build-out. ESDC grounds the rationality of its determination in the opinion of its consultant that the market can absorb the planned units over a 10 year build-out; its intent to obtain a commitment from FCRC to use commercially reasonable efforts to complete the Project in 10 years; and FCRC’s financial incentive to do so – all factors that were articulated and relied on by ESDC in the documents discussed above. (See ESDC Memo. of Law in Opp. to DDDDB Pet. at 22-27.)

Under the limited standard for SEQRA review, the court is constrained to hold that ESDC’s elaboration of its reasons for using the 10 year build-out and for not requiring an SEIS was not irrational as a matter of law. ESDC’s continuing use of the 10 year build-out was supported – albeit, in this court’s opinion, only minimally – by the factors articulated by ESDC. ESDC did not, for reasons that are unexplained to this date, expressly state, in the documentation prepared in connection with its review of the 2009 plan, that the MTA agreement permitted FCRC to defer acquisition until 2030 of air rights necessary to complete construction of various buildings called for in Phase II of the Project. Contrary to petitioners’ contention, however, the documentation of ESDC’s review unquestionably demonstrates, as found above, that ESDC

categorized the MTA agreement as a "major change" to the Project (June 23, 2009 Memo. at 3-4 [Record at 4677-4678]), and was aware of the MTA installment through 2030. ESDC determined, however, to continue to use the 10 year build-out, based on its intent to require FCRC to commit to use commercially reasonable efforts to build-out the Project within 10 years, and based on its real estate consultant's opinion that, notwithstanding the economic downturn, the market could reasonably be expected to absorb the units over the 10 year period. In analyzing the environmental impacts of the delayed Project, ESDC also assumed that Phase II buildings would be constructed on a parcel-by-parcel basis, with attendant mitigating effects on the environmental impacts.

ESDC's assumptions were consistent with the MTA agreement. In approving the agreement, the MTA noted that changes in the acquisition of the air rights were made due to the tightening of financial and credit markets, and "[i]n recognition of the impact that the financial and real estate downturn has had upon the economics of the original FCR proposal." (MTA Staff Summary at 2 [Record 4667].) Although the MTA agreement permits FCRC to acquire the development rights for construction of the arena up front, and to defer until 2030 acquisition of air rights necessary to complete construction of certain Phase II buildings, the MTA agreement also permits FCRC to acquire the necessary air rights for these Phase II buildings on a parcel-by-parcel basis. (See MTA Staff Summary Attachment at 2 [Record at 4671].) Thus, the MTA agreement is not inconsistent with the development scenario posited by ESDC in which the Project would proceed incrementally within the 10 year period rather than stall until all of the air rights were acquired in 2030.

Significantly, petitioners do not make any showing, or indeed, even claim that it is not

financially feasible for FCRC to acquire the Phase II parcels on an incremental basis. Petitioners also do not submit any financial analysis to show that ESDC lacked a rational basis for its finding that FCRC has the financial incentive, based on the investment it has made in the Project to date, to acquire the Phase II sites on a parcel-by-parcel basis. Under these circumstances, petitioners do not demonstrate that ESDC lacked a rational basis for its intent to require FCRC to make a separate commitment, notwithstanding the MTA agreement, to use commercially reasonable efforts to complete the Project within 10 years.²

SEQRA review of the financial feasibility of a Project may be appropriate where there is a showing that the financial feasibility is a "sham." (See Matter of Tudor City Assn., Inc. v City of New York, 225 AD2d 367 [1st Dept 1996]; Matter of Nixbot Realty Assocs. v New York State Urban Dev. Corp., 193 AD2d 381 [1st Dept 1993], lv denied 82 NY2d 659.) Here, petitioners stop far short of leveling the serious charge that FCRC's financial ability to construct the Project is a sham. At most, petitioners submit a report from their real estate consultant, Joshua Kahr, opining generally that the Project is not financially feasible within the 10 year period. However, petitioners' expert's opinion is highly qualified and does not question the feasibility of FCRC's acquisition of the air rights for the Phase II buildings on a parcel-by-parcel basis.³ In any event,

² Documentation of this commitment was not in existence at the time of ESDC's June 23, 2009 approval of, and September 17, 2009 resolution affirming, the 2009 MGPP. To the extent that petitioners now claim that the documentation that was subsequently negotiated does not provide adequate guarantees that the Project will be built within the 10 year period, that issue is not before this court. Under long settled authority, a court reviewing an agency's determination is confined to the facts and record adduced before the agency. (See generally Matter of Featherstone v Franco, 95 NY2d 550, 554 [2000].)

³ The Kahr report summarizes its conclusion as follows: "Based on our analysis, we do not feel that the project is financially feasible within a ten year development period. We feel that it is much more likely that the development will take 20 or more years to complete." The report summarizes the bases for this conclusion as follows:

"- The current state of the capital markets will make it extremely difficult to obtain financing for a project of this size within the next 36 months.

in a SEQRA review, it is not the province of the court to resolve disagreements between petitioners' and ESDC's experts. (See Matter of Fisher v Giuliani, 280 AD2d 13, 19-20 [1st Dept 2001].)

ESDC's use of the 10 year build-out meets the minimal threshold for rationality of a build year articulated in DDDB I. In DDDB I, petitioner argued that the 10 year build-out in the FEIS and the 2006 plan was intentionally underestimated and skewed the FEIS' findings as to the environmental impacts of the Project. The Appellate Division of this Department explained the standard for judicial review of the rationality of the build year as follows: "[T]he ultimate accuracy of the estimates [of the build-out periods] is neither within our competence to judge nor dispositive of the issue properly before us, which is simply whether the lead agency's selection of build-dates based on its independent review of the extensive construction scheduling data obtained from the project contractor may be deemed irrational or arbitrary and capricious. . . . The build dates having been rationally selected, there can be no viable legal claim that the EIS was vitiated simply by their use." (DDDB I, 59 AD3d at 318.) In reviewing the 2009 MGPP, ESDC did not take the position, nor could it have reasonably done so given the changes to the

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- The projected residential market rate rental and condominium prices that the developer relied on when they originally underwrote the deal are substantially above the current market. . .
 - The demand for housing units is most likely not sufficient to support a project of this scale over the next ten years.
 - The developer recently restructured its original agreement with the MTA to enable it to exit the purchase of the Phase II properties for a minimal or no breakup fee depending on timing. Based on the timing of the payments, we believe that the developer is concerned about its ability to complete the project within the stated 10 year frame."

(Kahr Report, dated Aug. 31, 2009 [Ex. D to Baker Aff. In Support of DDDB Pet.].)

As this summary shows, although the report cites the difficulty in obtaining financing as a basis for the conclusion that the 10 year build-out is not financially feasible, the report projects such difficulty only over a 36 month period. The report also cites the MTA agreement as evidence of FCRC's concern about its ability to complete the project within the 10 years, but does not engage in any analysis of the FCRC's ability to acquire Phase II air rights on an incremental basis.

2006 plan, that it was required only to look at construction scheduling data to determine the continuing feasibility of the 10 year build-out. Rather, it looked at additional factors including, as discussed above, the report of its real estate expert and its expectation that the buildings would be completed on a parcel-by-parcel basis. For the reasons also discussed above, these bases for ESDC's use of the 10 year build-out may not be deemed irrational under the governing legal standard.

In conducting a SEQRA review, a court is precluded from making substantive judgments on the evidence or "evaluat[ing] de novo the data presented to the agency." (Akpan v Koch, 75 NY2d 561, 571 1990.) This court may not make any independent findings of fact or any independent determination on the impact of the changes in the plan for the Project and therefore may not, and does not, make its own evaluation of the effect of the MTA agreement on the build-out of the Project, the likelihood of the potential for delay as a result of the agreement, or the need for an SEIS; its role is restricted to determining whether ESDC had a rational basis for its determination.

While the court cannot find that ESDC lacked any rational basis for its use of the 10 year build-out for the Project, the court cannot ignore the deplorable lack of transparency that characterized ESDC's review of the 2009 MGPP. Although the MTA agreement was identified as a major change in ESDC's staff's June 23, 2009 and September 17, 2009 memoranda, these memoranda did not contain any explicit discussion of the impact of the installment schedule on the build-out of the Project. Neither ESDC's Technical Memorandum nor its Summary and Responses to the public comments mentioned the MTA agreement by name. The MTA agreement was the elephant in the room. Although ESDC articulated reasons for its continued use of

the 10 year build-out that are marginally sufficient to survive judicial scrutiny under the limited SEQRA standard of review, ESDC's consideration of the modification of the plan lacked the candor that the public was entitled to expect, particularly in light of the scale of the Project and its impact on the community.

This court is not the first to criticize the process by which ESDC has made environmental findings for the Atlantic Yards Project. In DDDB I, Justice Catterson concurred with the majority, based on his finding that ESDC had sufficient evidence of blight, but only "by the barest minimum," to satisfy the limited review standard. (59 AD3d 333.) However, he sharply criticized the "less than admirable sleight of hand" with which ESDC's blight study had been prepared (id. at 331), as well as ESDC's rush through the review process (id. at 327-328), and concluded by "deplor[ing] the destruction of the neighborhood in this fashion." (id. at 333.) The Court of Appeals upheld the use of the power of eminent domain to take property for the Project, but observed that "[i]t is quite possible to differ with ESDC's findings that the blocks in question are affected by numerous conditions indicative of blight." While reiterating that the remedy must come from the legislature, the Court noted that "[i]t may be that the bar has now been set too low -- that what will now pass as 'blight' . . . should not be permitted to constitute a predicate for the invasion of property rights." (Goldstein, 13 NY3d at 526.)

Here, too, it is quite possible, as petitioners have done, to dispute ESDC's assumption of a 10 year build-out for the Project, to disapprove its failure to address more directly the impact of the MTA agreement on the completion of the Project, and to disagree strongly with ESDC's decision, as a quasi-public agency, to permit construction to proceed on the arena without greater certainty that the surrounding Brooklyn neighborhoods will not be subjected to the

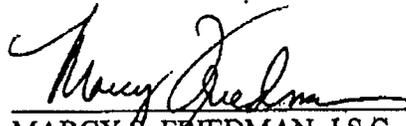
deleterious, if not blighting, effects of significantly prolonged construction. As of the date petitioners filed this current environmental challenge, however, the Project was already well underway: The Appellate Division of this Department had affirmed ESDC's 2006 approval of the Project plan, and the Court of Appeals has recently declined to review the case. During this litigation, ESDC has expended or approved disbursements of \$75 million of the \$100 million State-appropriated monies for the Project, and has received \$85 million of \$100 million that the City has committed to the Project. (Sept. 17, 2009 Memo. at 4 [Record at 7024].) FCRC has expended over \$350 million in acquiring properties for the Project and in demolishing over 30 vacant buildings on the site. FCRC has also already performed extensive work on the infrastructure of the Project (e.g., relocation of sewers and utilities) and on construction of a temporary rail yard. At this late juncture, petitioners' redress is a matter for the political will, and not for this court which is constrained, under the limited standard for SEQRA review, to reject petitioners' challenge.

It is accordingly hereby ORDERED that the petitions of Develop Don't Destroy (Brooklyn), Inc. and of Prospect Heights Neighborhood Development Council, Inc. are denied; and it is further

ORDERED that petitioner Develop Don't Destroy (Brooklyn), Inc.'s motion for a preliminary injunction is denied.

This constitutes the decision, order, and judgment of the court.

Dated: New York, New York
March 10, 2010


MARCY S. FRIEDMAN, J.S.C.

UNFILED JUDGMENT

This judgment has not been entered by the County Clerk and notice of entry cannot be served based hereon. To obtain entry, counsel or authorized representatives must appear in person at the Judgment Clerk's Desk (Room 147B).

deleterious, if not blighting, effects of significantly prolonged construction. As of the date petitioners filed this current environmental challenge, however, the Project was already well underway: The Appellate Division of this Department had affirmed ESDC's 2006 approval of the Project plan, and the Court of Appeals has recently declined to review the case. During this litigation, ESDC has expended or approved disbursements of \$75 million of the \$100 million State-appropriated monies for the Project, and has received \$85 million of \$100 million that the City has committed to the Project. (Sept. 17, 2009 Memo. at 4 [Record at 7024].) FCRC has expended over \$350 million in acquiring properties for the Project and in demolishing over 30 vacant buildings on the site. FCRC has also already performed extensive work on the infrastructure of the Project (e.g., relocation of sewers and utilities) and on construction of a temporary rail yard. At this late juncture, petitioners' redress is a matter for the political will, and not for this court which is constrained, under the limited standard for SEQRA review, to reject petitioners' challenge.

It is accordingly hereby ORDERED that the petitions of Develop Don't Destroy (Brooklyn), Inc. and of Prospect Heights Neighborhood Development Council, Inc. are denied; and it is further

ORDERED that petitioner Develop Don't Destroy (Brooklyn), Inc.'s motion for a preliminary injunction is denied.

This constitutes the decision, order, and judgment of the court.

Dated: New York, New York
March 10, 2010.

FILED
MAR 11 2010
NEW YORK
COUNTY CLERK'S OFFICE


MARCY S. FRIEDMAN, J.S.C.

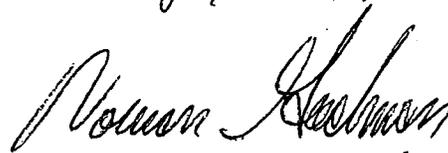

CLERK

EXHIBIT C

SCANNED ON 11/10/2010
SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: MARCY S. FRIEDMAN
Justice

PART 57

Index Number : 114631/2009
DEVELOP DON'T DESTROY
VS.
EMPIRE STATE DEVELOPMENT CORP
SEQUENCE NUMBER : 003
REARGUMENT/RECONSIDERATION

INDEX NO. 114631/09
MOTION DATE _____
MOTION SEQ. NO. 003
MOTION CAL. NO. _____

this motion to/for reargue/renew

PAPERS NUMBERED
1, 10
2
3

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits ...
Answering Affidavits — Exhibits _____
Replying Affidavits _____

Memo of Law M1, M2

Cross-Motion: Yes No

Upon the foregoing papers, it is ordered that this motion *is*

FILED

NOV 10 2010

NEW YORK
COUNTY CLERK'S OFFICE

**DECIDED IN ACCORDANCE WITH
ACCOMPANYING DECISION/ORDER.**

Dated: 11-9-10

[Signature]
MARCY S. FRIEDMAN

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION
Check if appropriate: DO NOT POST REFERENCE

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE
FOR THE FOLLOWING REASON(S):

SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: **MARCY S. FRIEDMAN**
Justice

PART 57

Index Number : 116323/2009

PROSPECT HEIGHTS

VS.

EMPIRE STATE DEVELOPMENT CORP.

SEQUENCE NUMBER : 002

REARGUMENT/RECONSIDERATION

INDEX NO. 116323/09

MOTION DATE _____

MOTION SEQ. NO. 002

MOTION CAL. NO. _____

this motion to/for reargue/renew

PAPERS NUMBERED

1, 1A

2

3

Memorandum M1, M2

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits ...

Answering Affidavits — Exhibits _____

Replying Affidavits _____

Cross-Motion: Yes No

Upon the foregoing papers, it is ordered that this motion is

**DECIDED IN ACCORDANCE WITH
ACCOMPANYING DECISION/ORDER,**

*filed under
the action entitled Develop Don't Destroy (Brooklyn)
v. Empire State Development Corp., index #
114631/09, Motion Sequence #003.*

FILED

NOV 10 2010

NEW YORK
COUNTY CLERK'S OFFICE

Dated: 11-9-10

[Signature]
MARCY S. FRIEDMAN *J.S.C.*

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION

Check if appropriate: DO NOT POST REFERENCE

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE
FOR THE FOLLOWING REASON(S):

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK – PART 57

PRESENT: Hon. Marcy S. Friedman, JSC

_____ x

DEVELOP DON'T DESTROY (BROOKLYN),
INC., et al.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT
CORPORATION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

Index No.: 114631/09

DECISION/ORDER

FILED
NOV 10 2010
NEW YORK
COUNTY CLERK'S OFFICE

_____ x
PROSPECT HEIGHTS NEIGHBORHOOD
DEVELOPMENT COUNCIL, INC., et al.,

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT
CORPORATION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

Index No.: 116323/09

DECISION/ORDER

_____ x

In these Article 78 proceedings, petitioner Develop Don't Destroy (Brooklyn), Inc. (DDDB) and petitioners Prospect Heights Neighborhood Development Council, Inc. and others (collectively PHND) challenged the affirmance, on September 17, 2009, by respondent New York State Urban Development Corp., doing business as the Empire State Development Corp. (ESDC), of a modified general project plan (2009 MGPP) for the Atlantic Yards Project in Brooklyn, to be constructed by respondent Forest City Ratner Companies (FCRC). By decision dated March 10, 2010 (prior decision), this court denied the petitions. Petitioners now move for leave to reargue and renew the petitions.

On these motions, petitioners argue that the court erred in rejecting petitioners' claim that ESDC violated the State Environmental Quality Review Act (SEQRA) (Environmental Conservation Law § 8-0101 et seq.) by approving the 2009 MGPP without preparing a Supplemental Environmental Impact Statement (SEIS) as a result of changes to the Project. Petitioners also argue that the court erred in rejecting petitioners' claim that ESDC violated the Urban Development Corporation Act (UDCA) by finding that the Project is a plan within the meaning of § 6260(c). Petitioners' motions are based on the terms of a master Development Agreement, entered into between ESDC and FCRC on December 23, 2009 (fn 1) which, according to petitioners, shows that the Project will be built-out over a 25 year period, not the 10 year period that ESDC assumed in reviewing the 2009 MGPP.

The Prior Decision

The court refers to the prior decision for a detailed discussion of the parties' claims in these proceedings. In brief, petitioners' challenge rested primarily on the renegotiation in June 2009 by the Metropolitan Transit Authority (MTA) of its agreement with FCRC to sell FCRC air

rights necessary for development of 6 of the 11 residential buildings to be constructed in Phase II of the Project. In particular, petitioners cited MTA's agreement to permit FCRC to acquire the air rights over a 15 year period extending until 2030, rather than to require FCRC to purchase all of the air rights at the inception of the Project, as had been the case when the original Project Plan was approved in 2006. Petitioners argued that ESDC ignored the impact of the renegotiated MTA agreement on the time frame for construction, and improperly continued to use the 10 year build-out for the Project that had been used in the Final Environmental Impact Statement (FEIS) prepared in connection with the original Plan.

The prior decision set forth the court's reasons for rejecting petitioners' UDCA claim. The court is not persuaded that it misapprehended applicable facts or law governing this claim. The remainder of this opinion will accordingly address petitioners' SEQRA claim.

In the prior decision, the court found that ESDC based its use of a 10 year build-out on three main factors: the opinion of its consultant that the market can absorb the planned units over a 10 year period; ESDC's intent to obtain a commitment from FCRC to use commercially reasonable efforts to complete the Project in 10 years; and FCRC's financial incentive to do so. (Prior Decision at 11.) The decision reasoned that, under the limited standard for SEQRA review, the court was "constrained to hold that ESDC's elaboration of its reasons for using the 10 year build-out and for not requiring an SEIS was not irrational as a matter of law. ESDC's continuing use of the 10 year build-out was supported – albeit, . . . only minimally – by the factors articulated by ESDC." (*Id.*)

Evidence of the Terms of the Development Agreement in the Prior Papers and in the Reargument Motions

At the time the petitions and ESDC's opposition papers were filed, ESDC had not yet entered into a formal agreement with FCRC for development of the Project. However, in arguing that the renegotiated MTA agreement did not extend the build-out until 2030, ESDC emphasized that the MTA agreement would be subject to a set of development agreements, to be entered into between ESDC and FCRC, in which FCRC would be contractually committed to implementing the 2009 MGPP, and would be required to use commercially reasonable efforts to complete the Project within 10 years, by 2019. (See e.g. ESDC Memo. In Opp. To DDDDB Pet. at 22.) (fn 2) ESDC supported this claim with a citation to the MGPP as well as to a summary of the Development Agreement. (Id., citing AR 4692, 7070.) (fn 3) The MGPP provision that ESDC cited stated in full: "The Project documentation to be negotiated between ESDC and the Project Sponsor will require the Project Sponsors to use commercially reasonable efforts to achieve this schedule and to complete the entire Project by 2019. The failure to commence construction of each building would result in, inter alia, monetary penalties being imposed upon the Project Sponsors." (MGPP [AR 4692-4693].) The summary of the Development Agreement that ESDC cited was a one-page document that described the "Development Obligation" as: "To construct the project described in the Modified General Project Plan," including enumerated improvements. (AR 7070.) (fn 4)

It is undisputed that at the time ESDC approved the 2009 MGPP, the above MGPP provision and summary were the sole documents in the record before ESDC that summarized the terms of the Development Agreement. (June 29, 2010 Transcript of Oral Argument of Reargument Motions [Reargument Tr.] at 34.) As of the time ESDC filed its opposition papers to the petitions, the Development Agreement was in the process of being negotiated. (ESDC

Answer to DDDDB Pet., Fact Statement ¶ 39.) However, ESDC cited no evidence of any terms of the Development Agreement other than the above MGPP provision and summary. Rather, in discussing the terms of the Development Agreement in its papers in opposition to the petitions, ESDC repeatedly cited only the MGPP provision and summary. (fn 5) By the time the oral argument of the petitions was held on January 19, 2010, the Development Agreement had been executed. However, ESDC continued to represent that the terms of the Development Agreement were those contained in the MGPP provision and summary. (See e.g. Jan. 19, 2010 Tr. at 44-46, 51, 81.)

On the reargument motions, ESDC for the first time acknowledged the existence in the Development Agreement of a 25 year outside date for substantial completion of Phase II of the Project. The reargument motions also mark the first time ESDC admitted that, at the time of its review of the 2009 MGPP, ESDC knew of the 25 year outside date and “anticipated” its inclusion in the Development Agreement. (Reargument Tr. at 35-36.) (fn 6)

Prior to these reargument motions, the above MGPP provision and summary were also the sole documents containing the terms of the Development Agreement that were furnished to this court. In seeking leave to renew, petitioners offer the full master Development Agreement. This Agreement distinguishes between construction of the Arena and Phase I buildings on the Arena block, and construction of Phase II buildings which constitute 11 of the 16 residential hi-rise buildings to be constructed on the Project site. The former are required to be substantially completed within or reasonably soon after the 10 year build date, and are the subject of heavy penalties in the event of delays. The latter are required to be substantially completed in 25 years or by 2035, and are apparently the subject of less stringent penalties in the event of failure to

meet that deadline.

Development Agreement

As the issue before this court is the impact of the Development Agreement on ESDC's determination to use the 10 year build-out and to approve the 2009 MGPP without requiring an SEIS, the detailed provisions of the Development Agreement regarding scheduling of the construction must be reviewed: The Agreement provides for commencement and construction of the Arena well within the 10 year period. (§ 8.4; Appendix A [requiring the Arena to be the first or second building for which construction is commenced, and requiring the substantial completion of the Arena by the Outside Arena Substantial Completion Date, defined as the sixth anniversary of the Project Effective Date or by 2016].) (fn 7) It also provides for commencement of the Phase I buildings on the Arena Block well within the 10 year period (§ 8.6[d] [providing, subject to certain exceptions, for commencement of Phase I buildings within 3 to 10 years of the Project Effective Date or from 2013 to 2020]), and for substantial completion of the Phase I buildings within a 12 year period. (§8.6 [providing for substantial completion of the Phase I construction within 12 years of the Project Effective Date or by 2022, subject to Unavoidable Delays].) (fn 8) The Agreement defines as Events of Default failure to commence or substantially complete the Arena within the preceding deadlines (§ 17.1[b], [d]) and failure to commence or substantially complete the Phase I construction within such deadlines. (§ 17.1[i], [l].) Upon the occurrence of these Events of Default, FCRC is required to pay substantial liquidated damages (Schedule 3 liquidated damages). For the Arena, these damages are set at \$75 million for failure to timely commence construction. (Schedule 3 at 1.) They may amount to as much as \$341 million for failure to meet the outside substantial completion deadline,

depending on the length of the default. (Id. at 2-3.) For Phase I, the damages for failure to timely commence construction may reach \$5 million per building per year. (Id. at 4-5.) The damages for failure to meet the outside substantial completion date are based on a formula that takes into account the length of the default and the Phase I square footage that has been completed. The Phase I damages shown in the example range from \$586,000 per year to \$5.5 million. (See § 17.2[a][ii]; Schedule 3 at 8-10.)

In contrast, the Development Agreement does not provide for dates for commencement of Phase II construction other than for commencement of the platform which is needed to support the construction of certain Phase II buildings. The commencement of the platform is not required until the 15th anniversary of the Project Effective Date or 2025 (§ 8.5.) While failure to commence construction of the platform is defined as an Event of Default (§17.1[g]), the significant Schedule 3 liquidated damages are not a remedy for such default. (§ 17.2[a][ii].) The Development Agreement requires Phase II Construction to be substantially complete, subject to Unavoidable Delays, by the Outside Phase II Substantial Completion Date, which is defined as 25 years following the Project Effective Date or 2035. (§ 8.7.) Failure to substantially complete the Phase II construction is defined as an Event of Default (§ 17.1[m]), but is not a basis for the payment of Schedule 3 liquidated damages. (§ 17.2[a][ii].) Rather, the remedy for such default is ESDC's option to terminate the applicable Project Lease for any portion of the Project site on which construction of improvements has not commenced. (§ 17.2[a][vi].)

The Development Agreement contains the following provision requiring FCRC to use commercially reasonable efforts to complete the project by December 31, 2019: “[The FCRC developer entities] agree to use commercially reasonable effort 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 [defined in § 8.7 as 25 years following the Project Effective Date], in each case as extended on a day-for-day basis for any Unavoidable Delays.” (§ 2.2.) The Development Agreement provides that the Article VIII deadlines for the performance of Phase I and II work shall not “modify, limit or otherwise impair” FCRC’s obligations under the preceding provision. (§ 8.1[d].) However, the remedies provided for failure to use commercially reasonable efforts to complete the Project by 2019 are uncertain or appear to be significantly less stringent than the remedies provided for FCRC’s failure to meet the deadlines for Phase I work.

The Development Agreement provides that in the event of FCRC’s failure to use commercially reasonable efforts, ESDC may resort to remedies available through litigation – i.e., “any and all remedies available to ESDC at law or in equity under or in connection with this Agreement,” including specific performance and damages. (§ 17.2[d].) If ESDC were to claim a breach of the commercially reasonable efforts provision, a mixed issue of fact and law would be presented. While courts are adept at interpreting legal standards, determination of this issue would be complicated by the absence of settled authority. There is a substantial body of case law, under UCC 9-627, interpreting the term commercially reasonable manner in connection with dispositions of collateral. (See e.g. Bankers Trust Co. v J.V. Dowler & Co., 47 NY2d 128 [1979].) However, this authority is not factually relevant to the construction context. The parties have not cited, and the court’s research has not located, case law articulating standards for awarding damages or equitable relief for failure to use commercially reasonable efforts to meet construction deadlines. (Cf. 330 Hudson Owner, LLC v The Rector, Church-Wardens &

Vestrymen of Trinity Church, 2009 NY Slip Op 51018[U], 23 Misc 3d 1131[A] [Sup Ct, New York County].)

The Development Agreement also does not define the failure to use commercially reasonable efforts as an Event of Default for which Schedule 3 liquidated damages are available. (§ 17.2[a][ii].) It does appear that such failure would qualify as an Event of Default for which a notice to cure is required under a catch-all provision for not otherwise specified defaults. (§ 17.1 [r].) For these unspecified defaults, the Development Agreement provides for liquidated damages in the amount of \$10,000 per day until the defaults are cured, or the reduced amount of \$1,000 per day if, in ESDC's "reasonable determination," the default would not have a material adverse effect on the value or use of the Project site, or result in a condition hazardous to human health, or put the Project site in danger of being forfeited, or subject ESDC to criminal or civil liability or penalties. (§ 17.2[a][x].) (fn 9) These damages are significantly lower than the Schedule 3 damages available for other specified Events of Default. In addition, imposition of these damages would require a predicate finding, subject to the legal uncertainties discussed above, that the commercially reasonable efforts provision had been breached.

Discussion

As close reading of the Development Agreement shows, the Agreement plainly contemplates an outside build date of 25 years for completion of the 11 Phase II buildings which constitute the substantial majority of the residential buildings at the Project. It provides detailed timetables, firm commencement dates for the Arena and Phase I work, no commencement dates (other than for the platform) for the Phase II residential construction, and apparently far stricter penalties for failure to meet the deadlines for the Arena and Phase I work than for failure to meet

the 2035 outside deadline for substantial completion of the Phase II buildings or for failure to use commercially reasonable efforts to complete the Project by 2019.

In its papers in opposition to the Article 78 petitions, ESDC repeatedly cited, as the basis for its continuing use of the 10 year build-out, the MGPP provision stating ESDC's intent to require FCRC to use commercially reasonable efforts to complete the Project by 2019, and the summary of the Development Agreement (AR 7070). Neither of these documents gave any indication that the Development Agreement would include a 25 year substantial completion date for the Phase II construction. While ESDC's papers acknowledged that there were mandatory commencement dates for construction of the first few buildings on the Arena Block, the papers did not discuss the absence of any deadlines for commencement of the Phase II buildings, were completely silent as to the 2035 outside date, and contained no discussion of the disparate penalties provided for failure to meet the deadlines for Phase I and II construction. ESDC's papers left the inaccurate impression that the commercially reasonable efforts provision was the focus of the Development Agreement, whereas the Agreement in fact contained numerous far more detailed construction deadlines for the Project which cannot be ignored in addressing the rationality of the build-date.

In opposing the petitions, ESDC argued that the master closing documents could not have been included in the record because they did not exist at the time of ESDC's approval of the 20009 MGPP. (Jan. 19, 2010 Tr. at 67.) Significantly, although the Development Agreement had been executed as of the date the petitions were heard, ESDC did not then claim that it was unaware, at the time of the approval, that the Development Agreement would provide the 2035 outside completion date for Phase II rather than a 2019 completion date for the entire Project.

Rather, at the oral argument, ESDC continued to represent that the terms of the Development Agreement were described in the summary (AR 7070) that was in the record before ESDC at the time of the approval. (Jan. 19, 2010 Tr. at 45.) ESDC went so far as to state that this document “summarizes many of the salient elements of the general project plan.” (Id.) This summary, of course, said nothing about the 2035 outside substantial completion date for the Phase II construction, and merely stated that FCRC was obligated to construct the Project in accord with the MGPP which, in turn, contained the provision that FCRC would be required to use commercially reasonable efforts to complete the Project by 2019.

As noted above, on the reargument motions, ESDC acknowledged for the first time that it was aware, when it reviewed the 2009 MGPP, that a provision for a 2035 substantial completion date for the Phase II construction would be included in the Development Agreement that was to be negotiated. (Reargument Tr. at 35-36.) However, ESDC never discussed this provision in its review of the MGPP, and ESDC never disclosed the provision to this court in these Article 78 proceedings for review of ESDC’s determination.

ESDC had an obligation to furnish the court in these Article 78 proceedings with a complete and accurate record of the proceedings before ESDC. (See generally 7804[e]; Bellman v McGuire, 140 AD2d 262, 265 [1st Dept 1988] [holding that “CPLR 7804[e] requires the respondent in an Article 78 proceeding to submit a complete record of all evidentiary facts.” [emphasis in original].) It is axiomatic that ESDC also had an obligation to accurately summarize the bases for its determination in the proceedings before this court. Thus, once the Development Agreement was executed, ESDC had an obligation to bring it to the attention of this court in order to correct the totally incomplete representations, made in the summary of the

Development Agreement and in ESDC's papers in opposition to the Article 78 petitions, as to the terms that were included in Development Agreement regarding the imposition and enforcement of deadlines for completion of the Project. Given ESDC's failure to do so, leave to reargue and renew is warranted. (See Bellman, 140 AD2d at 265.)

In granting reargument and renewal, the court rejects ESDC's contention that consideration of the Development Agreement would violate the well-settled tenet of Article 78 review that the court is bound by the facts and record before the agency. (See generally Matter of Featherstone v Franco, 95 NY2d 550, 554 [2000].) Nor would consideration of the Development Agreement violate the precept that updating of the information to be considered by the agency is "rarely warrant[ed]," given the interest in the finality of administrative proceedings. (Matter of Jackson v New York State Urban Dev. Corp., 67 NY2d 400, 425 [1986].) The Development Agreement is not accepted to show changed circumstances since ESDC's determination or to supplement the record that was before ESDC. Rather, although the Development Agreement was executed after ESDC's determination, ESDC repeatedly stated that it relied on its terms in approving the MGPP. In fact, at the oral argument of the petitions, ESDC represented that the Development Agreement was the "main thing" ESDC was relying on to get the Project built in conformance with the plan. (Jan. 19, 2010 Tr. at 45-47.) The Development Agreement is therefore accepted to correct ESDC's incomplete representations concerning the Agreement's terms regarding construction deadlines and their enforcement. Put another way, the Development Agreement is needed to enable the court to undertake meaningful review of ESDC's representation that its use of the 10 year build-out in assessing environmental impacts of the MGPP was reasonable, based on its intent to require FCRC to make a contractual

commitment to use commercially reasonable efforts to complete the Project by 2019. (fn 10)

The court also rejects ESDC's contention that reargument and renewal is unnecessary because the 25 year outside date for completion of the Project is "nothing new," and that the documents that were in the record before ESDC – in particular, the summary of Project leases showing 25 year terms (see AR 7068-70) – gave notice of the 25 year outside date. (ESDC Memo. In Opp. To Reargument Motions at 21.) ESDC took a completely contrary position in opposing the petitions. It dismissed petitioners' reliance on the 25 year term leases to show that the Project would take 25 years to build, stating: "[A] sunset provision establishing the date on which the relationship between the developer and ESDC would come to an end with respect to a specific development parcel, whether or not a Project building has been successfully constructed on that parcel, sheds no light on the schedule for construction anticipated by the parties. [¶] Outer 'drop dead' dates do not supersede FCRC's contractual obligation to use commercially reasonable efforts to develop the Project by 2019." (ESDC Memo. In Opp. To PHND Pet. at 35 [internal citations omitted].)

To the extent that ESDC argues that reargument and renewal is unnecessary because ESDC has already taken a hard look at the impacts of delays in the construction of the Project, this contention is also unavailing. For this argument, ESDC relies on the Technical Memorandum (AR 4744 et seq.), prepared at the time of ESDC's review of the 2009 MGPP, in which ESDC concluded that an extended schedule would not result in significant impacts not identified in the FEIS, and that preparation of an SEIS was not needed. (ESDC Memo. In Opp. To PHND Pet. at 39.) While the Technical Memorandum reached this conclusion (AR 4808), it treated the change in the Project schedule as a change from 2016 to 2019. It assumed a 10 year

build-out, stating: “The anticipated year of completion for Phase I of the project has been extended from 2010 to 2014 due to delays in the commencement of construction on the arena block. The anticipated date of the full build-out of the project – Phase II – has been extended from 2016 to 2019 for the same reason.” (AR 4752, 4755.) While the Technical Memorandum also undertook an analysis of the potential for delayed build-out, it did so on the basis of the potential for “prolonged adverse economic conditions” (*id.* at 4808), and not on the basis of a change in the Project schedule to provide for construction beyond 2019, much less over a 25 year period, as to which the Technical Memorandum was silent. Moreover, in considering delays due to economic conditions, the Technical Memorandum analyzed environmental impacts on traffic and parking, as well as transit and pedestrian conditions, over a five year period beyond 2019 or until 2024, not an additional 16 year period to 2035. (*Id.* at 4812-4815.) It did not provide a specific number of years for its analysis of other environmental impacts, including delays in the development of open space, extensions of time during which above ground parking lots would remain in existence, impacts on neighborhood character, and effects of prolonged construction. With respect to all impacts, the Technical Memorandum concluded that a delay in the build-out due to prolonged adverse economic conditions “would not result in any significant adverse environmental impacts that were not addressed in the FEIS.” (*Id.* at 4816.)

ESDC now suggests that the construction impacts of a 10 year build-out would be the same or even more severe than the construction impacts of a 25 year build-out because, if construction were delayed, “the intensity of the construction would be greatly reduced.” (ESDC Memo. In Opp. To Reargument Motions at 14-15. See also FCRC Memo. In Opp. To Reargument Motions at 11.) However, the Technical Memorandum did not compare the

environmental impacts of intense construction over a 10 year period with the impacts of ongoing construction over a 25 year period. It did not address, and the record thus lacks any expert opinion or analysis of, the impact of a potential 25 year delay in completion of the Project.

Conclusion

ESDC argues, and the court agrees, that SEQRA does not require guarantees that a Project will be completed by the build date or exactitude in the agency's selection of a build date. However, ESDC itself acknowledges that "ESDC had the responsibility to determine whether the proposed schedule was reasonable for purposes of conducting the requisite assessment of environmental impacts." (ESDC Memo. In Opp. To Reargument Motions at 5.) As the Appellate Division held in a prior litigation involving the Atlantic Yards Project, a mere inaccuracy in the build date will not invalidate the basic data used in the agency's environmental assessment. (See Develop Don't Destroy [Brooklyn] v Urban Dev. Corp., 59 AD3d 312, 318 [1st Dept 2009] [DDDB I], lv denied 13 NY3d 713, rearg denied 14 NY3d 748 [2010]. See also Committee to Preserve Brighton Beach v Council of City of New York, 214 AD2d 335 [1st Dept 1995], lv denied 87 NY2d 802.) As the Court also held, ESDC's choice of the build year is not immune to judicial review. Rather, it is subject to review under the arbitrary and capricious or rational basis standard that is applicable to judicial scrutiny of any agency action in an Article 78 proceeding. (DDDB I at 318.)

Under this standard, as applied to a SEQRA determination in particular, the court's review "is limited to whether the agency identified the relevant areas of environmental concern, took a 'hard look' at them, and made a 'reasoned elaboration' of the basis for its determination." (Riverkeeper, Inc. v Planning Bd. of Town of Southeast, 9 NY3d 219, 231-232 [2007] [citing

Matter of Jackson, 67 NY2d at 417.) “[T]he courts may not substitute their judgment for that of the agency for it is not their role to weigh the desirability of any action or to choose among alternatives.” (Riverkeeper, Inc., 9 NY3d at 232 [internal quotation marks, citations, and brackets omitted].) However, judicial review must be “meaningful.” (Id. at 232.) It is the court’s responsibility to “ensure that, in light of the circumstances of a particular case, the agency has given due consideration to the pertinent environmental factors.” (Akpan v Koch, 75 NY2d 561, 571 [1990].)

In the prior decision, this court criticized ESDC’s lack of transparency and its failure even to mention the MTA agreement by name, but found, based on its review of the record, that ESDC was aware that the MTA agreement had made a “major change” in the Project, and had articulated reasons for its continued use of the 10 year build-out that were marginally sufficient to survive scrutiny under the limited standard for judicial review of a SEQRA determination. (Prior Decision at 15-16.) Now, in what appears to be yet another failure of transparency on ESDC’s part in reviewing the 2009 MGPP, ESDC never directly acknowledged or addressed the impact of the Development Agreement on the build-out; and, in these Article 78 proceedings, ESDC never brought to the court’s attention the extended construction schedule that the Development Agreement contemplates.

The Development Agreement has cast a completely different light on the Project build date. Its 25 year outside substantial completion date for Phase II and its disparate enforcement provisions for failure to meet Phase I and II deadlines, read together with the renegotiated MTA Agreement giving FCRC until 2030 to complete acquisition of the air rights necessary to construct 6 of the 11 Phase II buildings, raise a substantial question as to whether ESDC’s

continuing use of the 10 year build-out has a rational basis.

In the prior decision, this court accepted ESDC's claim that because the MTA agreement permitted FCRC to acquire the air rights on a parcel-by-parcel basis, it was not inconsistent with the development scenario posited by ESDC, in which the Project would proceed incrementally within the 10 year build date rather than stall until the 2030 outside date for acquisition of the air rights. (Prior Decision at 12.) This rationale for continuing use of the 10 year build date was, in turn, dependent on ESDC's assertion that it would require a contractual commitment from FCRC to use commercially reasonable efforts to complete the Project by 2019. (See fn 2, supra.) As such, it is also called into question by the Development Agreement that was actually negotiated.

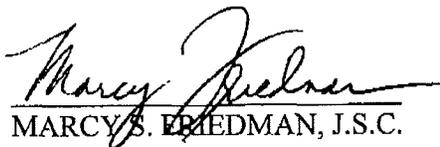
The court makes no finding, at this juncture, as to the rationality of the 10 year build-out. Its reading of the Development Agreement was undertaken not for the purpose of making a final determination as to the proper construction of the Agreement but for the purpose of determining whether the provisions of the Agreement have relevance to the rationality of ESDC's decision to continue to use the 10 year build date. The court has concluded that these provisions unquestionably must be addressed. Under the limited standard for SEQRA review, it is for ESDC to do so in the first instance. Where, as here, an agency action involves a specific project, "environmental effects that can reasonably be anticipated must be considered." (Matter of Neville v Koch, 79 NY2d 416, 427 [1992] [emphasis in original].) If ESDC concludes, in the face of the Development Agreement and the renegotiated MTA agreement, that a 10 year build-out continues to be reasonable, and that it need not examine environmental impacts of construction over a 25 year period on neighborhood character, air quality, noise, and traffic, among other issues, then it must expressly make such findings and provide a detailed, reasoned

basis for the findings.

In sum, the court holds that ESDC did not provide a "reasoned elaboration" for its determination not to require an SEIS, based on its wholesale failure to address the impact of the complete terms of the Development Agreement and of the renegotiated MTA agreement on the build-out of the Project. The matter should accordingly be remanded to ESDC for additional findings on this issue. (fn 11)

It is accordingly hereby ORDERED that the motions of petitioners DDDDB and PHND are granted to the following extent: Leave to reargue and renew is granted, and the proceedings are remanded to ESDC for findings on the impact of the Development Agreement and of the renegotiated MTA agreement on its continued use of a 10 year build-out for the Project, and on whether a Supplemental Environmental Impact Statement is required or warranted.

Dated: New York, New York
November 9, 2010


MARCY S. FRIEDMAN, J.S.C.

FILED
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NEW YORK
COUNTY CLERK'S OFFICE

Footnotes

Footnotes

fn 1 While the copy of the Development Agreement that is annexed to the petitions is undated, ESDC's counsel confirmed at the oral argument of the petitions that it was executed on December 23, 2009. (Jan. 19, 2010 Tr. Of Oral Argument Of Petitions [Jan. 19, 2010 Tr.] at 46.)

fn 2 ESDC also argued that the MTA agreement set outside deadlines for FCRC to acquire the air rights needed to construct 6 of the Phase II buildings, but that FCRC had the option to purchase the air rights on a parcel-by-parcel basis. ESDC further argued that it expected that FCRC would exercise the option because it would be obligated to use commercially reasonable efforts to complete the Project within the 10 year deadline. (Jan. 19, 2010 Tr. at 51.)

fn 3 AR refers to the record before ESDC in connection with its approval of the 2009 MGPP.

fn 4 The enumerated improvements are improvements of 4,470,000 gross square feet, exclusive of the Arena; no less than 2,250 units of affordable housing, subject to the availability of subsidies; a completed Arena for basketball and other events; at least 8 acres of open space; a completed Urban Room; a completed upgraded railyard; a completed subway entrance; and a completed Carlton Avenue Bridge.

fn 5 Thus, for example, ESDC represented: "With respect to schedule, the MGPP describes the anticipated timetable (AR 4687), and establishes mandatory commencement dates for construction of the first few buildings on the Arena Block (AR 4692); it then dictates that 'the Project documentation to be negotiated between ESDC and the Project Sponsor is to require the Project Sponsors to use commercially reasonable efforts to . . . complete the entire Project by 2019.' (*Id.*)" (ESDC Memo. In Opp. To DDDDB Pet. at 17.) AR 4687 is also a citation to a portion of the MGPP stating that the "[t]he build-out of the Project is likely to occur in two phases," with Phase I anticipated to completed by 2014 and Phase II by 2019. AR 4692 refers to a portion of the MGPP which states that the Arena is expected to open in 2011-2012, sets forth dates for commencement of construction on three other Phase I non-Arena buildings, and contains the much-referenced statement: "The Project documentation to be negotiated between ESDC and the Project Sponsor will require the Project Sponsors to use commercially reasonable efforts to achieve this schedule and to complete the entire Project by 2019."

Another statement typical of ESDC's representations as to the terms of the Development Agreement is as follows: "Petitioners' errors in describing the purpose and effect of the MTA term sheet are compounded by the fact that they look only to the transaction with MTA to discern FCRC's obligations. What they apparently fail to apprehend . . . is that there will be an entirely separate set of agreements between FCRC and ESDC, and that under those agreements FCRC will be contractually committed to implementing the 2009 MGPP. (Fact Statement ¶ 39.) Among other things, FCRC will be required to use 'commercially reasonable efforts' to complete the Arena and certain Phase I buildings in accordance with a specified schedule, and to bring the

Project to completion by 2019, with sanctions imposed for any failure to do so. (Fact Statement ¶ 39; AR 4692, 7070.)” (ESDC Memo. In Opp. To DDDDB Pet. at 22.) The Fact Statement is contained in ESDC’s Answer to the Petition. Paragraph 39 refers to the commercially reasonable efforts provision of the MGPP (AR 4692); to AR 7067-7069 which is a description of the Project Leases; and to AR 7070 which is the summary of the Development Agreement referred to in the text above.

Other substantially similar representations as to the terms of the Development Agreement are made in ESDC’s Memorandum In Opposition To DDDDB Petition at 40, and in ESDC’s Memorandum In Opposition To PHND’s Petition at 34 and 57.

fn 6 At the oral argument of the reargument motions, ESDC stated that the 25 year terms of the Project leases “match[ed] up with what was actually in the development agreement, which is that there was the outside date [of] 25 years from project effective date. . . . So what we have in the development agreement is really from a contractual standpoint, that which was anticipated. There is a schedule. There is a commercially reasonable efforts provision. And then there is the outside dates that is kind of a drop-dead date, no matter what you have to complete by that date.” (Rearg. Tr. at 35-36.)

As discussed in the text (infra at 12-13), this argument is contrary to the position taken by ESDC at the time the petitions were first heard.

fn 7 It is undisputed that the Project Effective Date, based on which the Development Agreement imposes deadlines, is May 12, 2010. (ESDC Letter to Court, dated July 2, 2010.)

fn 8 Unavoidable Delays, as defined in the Development Agreement (Appendix A) include typical force majeure conditions and litigation which delays construction, but not inability to obtain financing.

fn 9 ESDC argued that the liquidated damages provision set forth in § 17.2(a)(x) would apply to failure to complete the Phase II construction work by the 25 year outside date, but only if FCRC was not using commercially reasonable efforts to complete the Project within 10 years. As stated at the oral argument:

“If the reason why phase two was not progressing was that Forest City had walked away from the project or failed to use adequate efforts to complete the project, then that would be a breach of the covenant to use commercially reasonable efforts to complete the entire project within a ten-year period. And that would implicate the penalties set forth in x. [§17.2[a][x]]. However, if Forest City was using commercially reasonable efforts to proceed with the project on a ten-year schedule and notwithstanding its use of commercially reasonable efforts it was falling behind the ten-year schedule, then that would not be subject to the penalties set forth in x because there would be no breach of the commercial reasonable efforts covenant.” (Reargument Tr. at 31.)

fn 10 The court notes that petitioners, not ESDC, brought the Development Agreement to this court’s attention after submission but before decision of the Article 78 petitions. The court

rejected the proffer based on its misapprehension that petitioners were raising a new argument, not before ESDC at the time of its approval of the MGPP, that the Development Agreement that was subsequently negotiated did not provide adequate guarantees that the Project would be built within the 10 year period. (See Prior Decision at 13, n 2.) As held above, the Development Agreement is not received on that issue but in order to correct the incomplete record furnished to this court as to the terms regarding deadlines that would be included in the Development Agreement and, hence, the reasonableness of ESDC's use of a 10 year build-out in approving the MGPP.

fn 11 This decision should not be construed as staying construction of the Project. Petitioners' prior challenges to the original Plan and in condemnation proceedings have not been successful. Thus, as of the date of the prior decision, substantial public and private expenditures had already been made and the Project was already well underway. (Prior Decision at 17.) While petitioners seek a stay in the event of a favorable decision on the reargument motions, they have not moved for reargument or renewal of their prior motion for a stay. The record is not factually developed on the current state of the construction. Nor have the parties addressed the legal issues regarding the propriety of a stay at this stage of the construction. Any decision on a stay would therefore not be proper on this record. The court notes, moreover, that while the DDDDB petitioners oppose continued work on the arena (DDDB Reply Aff., ¶ 23), the PHND petitioners represent that their greatest concern is over the disruptions that would occur during extended construction of Phase II, and appear to acknowledge that the Arena could be permitted to proceed. As they also note, the Phase II work is not scheduled to begin for years. (PHND Reply Aff., ¶ 15.)

EXHIBIT D

Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project

A. INTRODUCTION

In November 2006, the Empire State Development Corporation (ESDC), in cooperation with the Metropolitan Transportation Authority (MTA) and the City of New York (the City), prepared the Final Environmental Impact Statement (FEIS) for the Atlantic Yards Arena and Redevelopment Project (the “Project”). The approved Project was subject to environmental review under the State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR), with ESDC as the lead agency. A Modified General Project Plan (2006 MGPP) for the Project was affirmed by the New York State Urban Development Corporation (UDC), a public benefit corporation of New York State, doing business as ESDC. In December 2006, ESDC adopted its SEQRA findings, pursuant to New York Environmental Conservation Law Article 8, and its implementing regulations adopted by the New York State Department of Environmental Conservation (NYSDEC) and codified at Title 6 of the New York Code of Rules and Regulations (N.Y.C.R.R.) Part 617 (the SEQRA Regulations).

In June 2009, ESDC approved a resolution adopting certain modifications to the 2006 MGPP as set forth in a second Modified General Project Plan (2009 MGPP). A Technical Memorandum (2009 Technical Memorandum) was prepared that described the proposed modifications, changes related to design development, changes to the Project’s schedule, and changes in background conditions and analysis methodologies under the *CEQR Technical Manual* and assessed whether the Project as envisioned would result in any new or different significant adverse environmental impacts not previously identified in the FEIS. The 2009 Technical Memorandum discussed shifts in 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 full build-out scenario, for which 2024 was selected as a hypothetical completion year. As presented in the 2009 Technical Memorandum, the potential environmental impacts related to the program modifications, schedule changes, and other updates would be substantially the same as that approved in 2006.

At ESDC’s request, AKRF, Inc., ESDC’s environmental consultant (AKRF), has prepared this technical analysis in connection with ESDC’s compliance with an Order of the Supreme Court for New York County dated November 9, 2010. The discussion that follows evaluates the potential for any new significant adverse environmental impacts not previously disclosed in the FEIS from a prolonged delay beyond the 2024 hypothetical completion year assessed in the 2009 Technical Memorandum. At ESDC’s direction, it has been assumed for analysis purposes that the potential post-2024 condition could extend to 2035. This delay scenario is referred to as the Extended Build-Out Scenario in this document. In 2009, ESDC determined that the potential delay of the Project’s 10-year construction schedule would not require or warrant a Supplemental Environmental Impact Statement (SEIS), based on the construction delay scenario

presented in the 2009 Technical Memorandum. The delay scenario in the 2009 Technical Memorandum assumed a hypothetical 2024 build year for certain analyses. This examination of the Extended Build-Out Scenario provides an analysis to allow a determination as to whether the 2024 Build year assumption in the 2009 Technical Memorandum was critical to that document's conclusion that a delay in the Project's 10-year construction schedule would not result in significant adverse environmental impacts not identified in the FEIS. Accordingly, the analysis below uses the same analysis methodologies and criteria employed in the FEIS and the 2009 Technical Memorandum. It provides a discussion of updates to background conditions to account for anticipated changes to a hypothetical completion year of 2035; assesses the environmental impacts of the Extended Build-Out Scenario; and compares those impacts to the impacts disclosed in the FEIS and 2009 Technical Memorandum. Section E, "Construction Period Impacts," discusses the construction sequencing and impacts from the Extended Build-Out Scenario.

B. DESCRIPTION OF THE EXTENDED BUILD-OUT SCENARIO

Under the Extended Build-Out Scenario, the Project upon completion would remain unchanged from that approved in 2009. Development of the Project—regardless of the completion year—would need to be consistent with the approved 2009 Modified General Project Plan (MGPP), 2006 Design Guidelines, and Amended Memorandum of Environmental Commitments (December 2009). Any future modifications of those documents would be subject to review under SEQRA.

The 2009 MGPP anticipates the development of the arena block in Phase I followed by development of the Phase II parcels. In order to assess whether significant construction-related impacts not previously addressed in the FEIS and 2009 Technical Memorandum would result from a hypothetical delay in Project construction extending beyond 2024, an illustrative construction sequencing for the Extended Build-Out Scenario has been prepared and is described in detail in Section E. This Extended Build-Out Scenario illustrative construction sequencing has been designed to illustrate the general sequence that could be followed in implementing the Project over an extended period. However, it does not identify a specific schedule with fixed years for each Project element given the market-related and other uncertainties inherent in making long-term predictions concerning a construction schedule under the Extended Build-Out Scenario. Moreover, the Project sponsors have not developed a date-specific schedule for individual Project elements under the Extended Build-Out Scenario because it is obligated to use commercially reasonable efforts to construct the Project on an expedited schedule.

The Extended Build-Out Scenario would not materially affect the timing of completion of the arena and Building 2, the transit access improvements, construction of the new MTA/LIRR permanent rail yard, and the reconstruction of the Carlton Avenue Bridge. Development of each site is still generally expected to occur from west to east in a clockwise direction, starting with the arena block. As each building is completed, irrespective of its actual sequencing, it must conform with the 2006 Design Guidelines for that site and provide the necessary permanent facilities such as public access, open space, below-grade parking, infrastructure retention/detention capacity, and other commitments. As an example, publicly accessible open space would be constructed incrementally as each building is completed, as required by the Design Guidelines. Completion and permanent occupancy would be at a slower pace under the Extended Build-Out Scenario but would still represent an incremental transformation of the site, albeit over a longer time period.

The sequence of development assumed for the Extended Build-Out Scenario accounts for certain constraints that have been put into place since the preparation of the FEIS, Conceptual Master Plan Phasing contained in the 2006 Design Guidelines, and the 2009 Technical Memorandum. For example, subsequent to the 2009 Technical Memorandum, the MTA agreements were executed, which stipulate that air space acquisition and platform construction on Blocks 1120 and 1121 may only occur after the completion of improvements to the new permanent MTA/LIRR rail yard. As stipulated by the MTA agreements, the outside date for completion of the rail yard improvement is 2016, thus, this analysis conservatively assumes that platform construction would not start until 2016 and may be completed in up to three contiguous segments. This would delay the start of construction on Block 1120 to 2016. Another constraint imposed on Project sequencing is a requirement by ESDC that a building on Block 1129 be initiated by 2020. The requirement to have a building on Block 1129 initiated by 2020 would start the transition of Block 1129 from an interim surface lot and staging area to permanent use. Construction on the eastern end of the Project site would entail development in a north-south pattern that encompasses portions of Block 1121 and Block 1129. Because of the permanent rail yard beneath Block 1121, buildings on that block would not include below-grade parking; thus construction of those sites is expected to proceed together with construction of permanent below-grade parking on portions of Block 1129. Should there be further delay of construction, temporary open space and public amenities such as retail kiosks, landscaped seating areas, and plantings would be provided, where feasible.

The Extended Build-Out Scenario would result in prolonged, albeit less intense, construction activities at the sites since fewer buildings would be under concurrent construction. For a portion of the Extended Build-Out Scenario, there would be a prolonged use of one area of Block 1129 for construction staging and other areas of Block 1129 for surface parking for construction workers and arena patrons during events.

C. CHANGES TO BACKGROUND CONDITIONS

Background conditions and the status of known development projects anticipated for completion through 2035 have been updated for the FEIS study area. Updates to the No Build list (See **Table 1** and **Figure 1**) were made through review of New York City Department of Buildings permits, identification of construction sites, and review of project lists compiled by various organizations and agencies including Downtown Brooklyn Council, New York City Economic Development Corporation, New York City Department of City Planning, New York City Department of Housing Preservation and Development, and Forest City Ratner Companies.

The updated No Build list includes projects that were planned prior to the recent economic slowdown. Although some of these projects are now on hold, they are assumed to still be moving forward in the future when market conditions improve. Therefore, since projects were not removed, this list is conservatively inclusive.

Since the FEIS was completed in 2006, the 2009 Technical Memorandum identified development projects that were completed in the surrounding area; were on hold, due to changes in market conditions and financing availability; and were under development or proposed. As anticipated in the FEIS and described in the 2009 Technical Memorandum, a substantial amount of new development in and around Downtown Brooklyn had been completed or was under construction—although a number of anticipated commercial office projects had been changed to residential projects—due in part to the rezoning of this area in 2004. In the FEIS, 35 projects were included in the No Build list, six of which were listed as recently completed. Ten additional

Atlantic Yards Arena and Redevelopment Project

projects noted in the FEIS were completed at the time of the 2009 Technical Memorandum. Several of the projects that were completed, as well as others on the FEIS list, were modified since the FEIS. Specifically, the projects that were modified would create over 600 additional residential units compared to the No Build projections utilized in the FEIS. In general, the demand for office space has not been as high as anticipated in the FEIS and the overall amount of projected commercial development in the study area is less than assumed in the FEIS, whereas the demand for residential and hotel uses has been less adversely affected by current market conditions. As noted in the 2009 Technical Memorandum, there are also 28 new projects in the study area that were not identified in the FEIS list, and which had either been completed or were anticipated to be complete by 2019. Most of those projects are predominantly residential uses.

Since the 2009 Technical Memorandum, 16 projects described in the FEIS and the 2009 Technical Memorandum have been completed. Eight new projects planned, proposed, or under construction have been identified and are shown in Table 1—projects with 20 or fewer residential units were not included. As shown in Table 1, most of the development projects added since the 2009 Technical Memorandum will introduce new residential units. As shown in Figure 1, most of the new development sites identified since the 2009 Technical Memorandum are located in the Prospect Heights neighborhood with one project located in each of the the Bedford-Stuyvesant, Fort Greene, Boerum Hill, and Downtown Brooklyn neighborhoods, as well as one project along Fourth Avenue. Table 1 provides updated information on developments in the study area. Information that has changed since the 2009 Technical Memorandum and FEIS is noted in bold, italicized, and/or bracketed text (see Table 1 notes).

Overall, the development programs for some of the projects listed in the FEIS have changed and several new projects have been added to the No Build list. These changes are modest in relation to the overall land use development anticipated within the study area and notwithstanding these changes, the overall land use profile of the primary and secondary study areas will remain the same in the future without the proposed Project as described in the FEIS. There are no specific developments proposed to be completed 20 and 25 years from now, and it would be speculative to project what discrete growth will take place that far in the future. It is anticipated that development of new residential and commercial uses would continue 20 and 25 years in the future with small to medium size projects, similar to those identified on Table 1.

Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project

**Table 1
Development in the Study Area Recently Completed or Anticipated to be
Complete by 2035**

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ⁸
1	LIU Recreation and Wellness Center (site of present Goldner Building and LIU tennis courts)	10,000 sf for Brooklyn Hospital Center/athletic staff; 117,000 sf wellness/recreation center with natatorium, tennis courts, track, 3,500 seating for athletic events	Primary	Completed
2	The Greene House, 383 Carlton Avenue between Lafayette and Greene Avenues	27 dwelling units	Primary	Completed
3	Atlantic Terminal	425,000 sf office, 470,000 sf retail, rehabilitated LIRR station ³	Primary	Completed
4	One Hanson Place (Williamsburgh Savings Bank Building)	178 [189] dwelling units; 30,000 sf dental offices; 23,000 sf retail	Primary	Completed
5	South Portland Avenue at Atlantic Avenue (Block 2004)	32 3-family houses	Primary	Completed
6	Atlantic Terrace (aka 669 Atlantic Avenue), Atlantic Ave. between South Portland Ave. and South Oxford St.	80 dwelling units; 12,100 [11,960] sf ground-floor retail, 87 subgrade parking spaces Rezoning: C6-1 to C6-2 ²	Primary	2011
7	567 Warren Street between Third and Fourth Avenues	20 dwelling units	Primary	Completed
8	The Washington, 35 Underhill Avenue between Pacific and Dean Streets	39 dwelling units	Primary	Completed
9	On Prospect Park, 1 Grand Army Plaza [17 Eastern Parkway]	102 [200] dwelling units	Primary	Completed
10	Bond Street Garage	14,000 sf retail; 4,000 sf community facility	Primary	Completed
11	State Renaissance Court [Schermerhorn between Hoyt and Bond Streets (Block 171)]	158 [135] units, 14,700 sf ground-floor retail and 50 parking spaces, 14 townhouses ⁵	Primary	Completed
12	80 DeKalb Avenue between Hudson Avenue and Rockwell Place	335,000 [430,000] sf residential (365 residential units)	Primary	Completed
13	BAM LDC South (Block 2108 bounded by Ashland Place and Lafayette and Flatbush Avenues) ²	180 housing units, 187,000 sf rehearsal studio, cinema, visual arts space ⁹ [140,000 sf visual and performing arts library, 40,000 sf theater, 15,000 sf commercial, 466 car public parking facility]	Primary	2035
14	BAM LDC North (Block 2107 bounded by Ashland and Rockwell Places, Lafayette Avenue, and Fulton Streets)	299 seat/30,000 sf [50,000 sf] theater, office/rehearsal space, public outdoor space, 187 [570,000 sf] residential units, 4,000 [10,000] sf retail space [7,000 sf open space, 43,000 sf dance center, 160,000 sf museum/gallery, 465-space parking facility]	Primary	2035
15	395 Flatbush Avenue Ext. ²	12,000 sf retail/office expansion	Primary	2035
16	Atlantic Center	850,000 sf residential, 500,000 [550,000] sf commercial, 395,000 sf retail on lower levels (same as in existing conditions)	Primary	2035
17	254 Livingston Street ²	186,000 sf residential, 21,000 sf commercial	Primary	2035
18	230 Livingston Street at the southwest corner of Bond Street (Block 165, Lots 17-19 and 58) ²	271 unit/260,000 sf [163,000 sf] residential [18,000 sf commercial]	Primary	2013
19	Fulton Street/Rockwell Place (aka 29 Flatbush Avenue)	333 [140] dwelling units	Primary	2035
20	The Forte: Fulton Street/Ashland Place	108 [100] dwelling units	Primary	Completed
21	BAM LDC East: 620-622 Fulton Street	150 [80] residential units (100,000 sf), 60,000 sf community facility [7,200 sf retail]	Primary	2035
22	Ingersoll Community Center	18,250 sf community center (replaces former 9,000 sf center)	Secondary	Completed
23	City Point: Flatbush Avenue at Albee Square West (Block 149, Lots 1 and 49) ²	360,000 [1,233,000] sf office, 520,000 [415,000] sf retail, 650 unit/900,000 sf residential, 404 parking spaces (113,962 sf) ⁶	Secondary	2013
24-A	Sheraton Hotel: 222-228 Duffield Street: Willoughby Street between Gold and Duffield Streets (Block 146, Lots 2, 7, 11-18, 23, 29, 34-37, 41-43, and 46-52)	321 hotel rooms	Secondary	Completed
24-B	Hotel Indigo (237 Duffield Street) ²	182 hotel rooms, 1.25-acre [1.15-acre] public space (Willoughby Square), 700 -space [694-space] public parking facility [999,000 sf office, 48,000 sf retail]	Secondary	2013
24-C	Aloft Hotel (216 Duffield Street)	176 hotel rooms	Secondary	2013
24-D	Hotel (231 Duffield Street)	130 hotel rooms	Secondary	2035
25	505 Fulton Street: Willoughby Street between Duffield and Bridge Streets (Block 145, Lots 8, 10, 13-16, 18-22, 26, and 32) ²	544,000 sf residential [office], 50,000 sf retail	Secondary	2013
26	Red Hook Lane: Adams Street/Boerum Place at Fulton Street (Block 153, Lots 3, 14, and 15; Block 154, Lots 1, 5, 11, 12, and 36-40) ²	788,000 sf office, 70,000 sf retail	Secondary	2035
27	53 Boerum Place	99 dwelling units, 85 parking spaces	Secondary	Completed

Atlantic Yards Arena and Redevelopment Project

Table 1 (cont'd)
Development in the Study Area Recently Completed or Anticipated to be Complete by 2035

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ⁸
28	Schermerhorn House and Hoyt-Schermerhorn I and II: ESDC/HS (Block 170, south of Schermerhorn Street between Smith and Hoyt Streets)	440 dwelling units (including 217 [200] affordable)	Secondary	Completed
29	The Smith Condominiums and Hotel (75 Smith Street at Atlantic Avenue)	50 dwelling units, 93-unit hotel, 15,000 sf ground floor retail, 8,500 sf community facility, 130 space parking facility [31,500 sf commercial/office use]	Secondary	Completed
30	Toren, Myrtle Avenue at Flatbush Avenue (Block 2060, Lots 22-27, 32 [part], and 122; Block 2061, Lot 1 [part]; Block 2062, Lot 6 [part]) ²	280 residential units [300,000 sf], 60,000 sf retail; 457-space public parking facility	Secondary	Completed
31 - A	Catsimatidis Red Apple, Myrtle Avenue between Fleet Place and Ashland Place (Block 2061, Lot 1 [part]) ²	565 residential units [259,000 sf], 22,000 sf [86,000 sf] retail	Secondary	2035
31 - B	The Andrea - Catsimatidis Red Apple, 218 Myrtle Avenue between Fleet Place and Ashland Place (Block 2061, Lot 101)	95 Units	Secondary	Completed
32	The Collection 525 (525 Clinton Avenue)	30 dwelling units, 15,500 of medical office, 41 parking spaces	Primary	Completed
33	557 Atlantic Avenue	72 dwelling units	Primary	Completed
34	477 Atlantic Avenue	21 dwelling units	Primary	Completed
35	Waverly Avenue Charter School	Conversion of existing 80,000 sf building to a charter school	Primary	Completed
36	Park Slope Court (110 Fourth Avenue near Warren)	49 residential units	Primary	Completed
37	126 Fourth Avenue	50 residential units	Primary	Completed
38	255 Fourth Avenue	41 residential units	Secondary	2035
39	Elan Park Slope (255 1st Street)	21 residential units	Secondary	Completed
40	Crest (302 2nd Street at Fourth Avenue)	68 residential units	Secondary	Completed
41	159 Myrtle Avenue by Avalon Bay	650 residential units, 5,000 sf retail, parking	Secondary	Completed
42	470 Vanderbilt Avenue	376 residential units, 115,424 sf retail, 579,645 sf office, 397 accessory parking spaces ⁷	Primary	2035
43	Rockwell Place	37 residential units	Primary	Completed
44	111 Lawrence Street (Block 148, Lot 1)	500 residential units	Secondary	Completed
45	150 Fourth Avenue	95 residential units	Primary	2035
46	181 Third Avenue	130 room/65,785 sf hotel	Primary	2035
47	252 Atlantic Avenue/97 Boerum Place	65 residential units, ground floor retail, on-site parking	Secondary	2035
48	Brooklyn House of Detention (275 Atlantic Avenue)	Expansion of current jail from 815 to 1,478 beds (renovation and 40,000 sf of new construction)	Secondary	2035
49	Holiday Inn, 300 Schermerhorn Street (Block 174, Lot 24)	247 room/108,163 sf hotel	Primary	2035
50	307 Atlantic Avenue	26 residential units (27,462 sf)	Secondary	Completed
51	316 Bergen Street	39 residential units (63,434 sf)	Primary	2035
52	388 Bridge Street	360 residential units	Secondary	2035
53	462 Baltic Street	35,551 sf office, 61 parking spaces	Primary	2035
54	611 DeGraw Street	25 room/12,625 sf hotel	Primary	2035
55	675 Sackett Street	38 residential units	Primary	Completed
56	340-346 Bond Street	22 residential units	Secondary	Completed
57	265 Third Avenue	57-room hotel	Secondary	Completed
58	Consolidated Edison (block bounded by First and Third Streets)	52,000 sf office	Secondary	Completed
59	225 Fourth Avenue	40 residential units	Secondary	Completed
60	238 St. Marks Avenue	20 residential units	Primary	Completed
61	324 Grand Avenue	29 residential units	Primary	2035
62	76 Lexington Avenue	21 residential units	Secondary	2035
63	1122-1124 Bedford Avenue (aka 315 Gates Avenue)	68 dwelling units at 315 Gates Avenue; renovation of existing building at 1122 Bedford to include ground floor retail and an additional 5th floor (2 units) of residential	Secondary	2011
64	319 Schermerhorn Street	61 residential units	Primary	2035
65	610 Baltic Street	School Construction Authority - P.S. 124, 115,903 sf	Primary	2011
66	1122 Bedford Avenue (aka 315 Gates Avenue)	68 dwelling units at 315 Gates Avenue; renovation of existing building at 1122 Bedford to include ground floor retail and an additional 5th floor (2 units) of residential	Secondary	2035
67	346 Bergen Street	24 residential units	Primary	2035
68	892 Bergen Street	38 residential units	Primary	2035

Table 1 (cont'd)
Development in the Study Area Recently Completed or Anticipated to be
Complete by 2035

Map No. ¹	Project Name/Address	Development Proposal/Program	Study Area	Build Year ⁸
69	840 Bergen Street	67 residential units	Primary	2035
70	801 Bergen Street	31 residential units	Primary	2035
71	311 Ashland Place – BAM	Conversion and enlargement of 2-story building to 7-story arts/education/community facility building; 23,792 sf	Primary	2035
<p>Notes: Projects noted as complete (not bold text) were complete as of the 2009 Technical Memorandum. Projects noted as complete (bold text) have been finished since the 2009 Technical Memorandum. Changes in projects since the FEIS or 2009 Technical Memorandum are noted with bold text; the portions of these projects that are no longer accurate are noted [in brackets] and <i>in italics</i>.</p> <p>¹ See Figure 1</p> <p>² Projects anticipated as a result of the Downtown Brooklyn rezoning.</p> <p>³ The LIRR station rehabilitation is currently under construction.</p> <p>⁴ Rezoning to C6-2 completed.</p> <p>⁵ The townhouses are currently under construction.</p> <p>⁶ Includes 373,000 sf of existing retail; project will add 147,000 additional sf of retail.</p> <p>⁷ Includes 578,554 sf of existing office and 200 existing parking spaces; project will add 1,091 sf office and 197 accessory parking spaces.</p> <p>⁸ Projects for which completion dates were not available were assumed to be completed by a post-2024 hypothetical year of 2035.</p> <p>⁹ Development plan still being finalized.</p> <p>¹⁰ Projects with 20 or fewer residential units were not included.</p> <p>Sources: Downtown Brooklyn Council, New York City Economic Development Corporation, New York City Department of City Planning, New York City Department of Housing Preservation and Development, AKRF, Forest City Ratner Companies.</p>				

It is expected that these additional smaller projects and renovations—typically those allowable under the current zoning and not requiring environmental review—have occurred and will continue to occur throughout the study area. These small developments would be accounted for in the general growth rate. Many large projects proposed that far in the future would likely require a discretionary approval and therefore require an environmental analysis to evaluate its potential impacts on the area.

D. POTENTIAL IMPACTS OF THE EXTENDED BUILD-OUT SCENARIO

The purpose of the analysis that follows is to determine, with respect to each relevant technical area, whether the Extended Build-Out Scenario would result in significant adverse environmental impacts not addressed in the FEIS. The analysis of potential significant adverse construction period impacts resulting from the Extended Build-Out Scenario is provided in Section E. In the discussions below, for each of the environmental areas, the analysis is presented under individual headings for clarity of presentation. However, the evaluation and conclusions considered both the individual and collective effects of each component of the analysis.

LAND USE, ZONING AND PUBLIC POLICY

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to land use, zoning and public policy. The timing of building construction would not affect the Project’s land uses, building layout, density, the amount of affordable housing and publicly accessible open space, or the Project’s consistency with relevant public policies as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP. The Extended Build-Out Scenario would not affect the land use, zoning, and public policy analysis as described in the FEIS.

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The Extended Build-Out Scenario would not change the 2009 MGPP requirement for 2,250 units of affordable housing upon completion of the Project. Project documentation (e.g., Development Agreement, lease agreements, and related contractual documents) reflects the commitment made in the 2009 MGPP. As stipulated in the 2009 MGPP and Amended Memorandum of Environmental Commitments (compliance with which is required by the Development Agreement), at least 30 percent of the residential units on the arena block (but no less than 300) must be affordable housing. The remainder of the affordable units will be built in Phase II or on Site 5; however, no more than 50 percent of the Phase II units can be built without completion of at least 50 percent of the Phase II affordable units. The affordable units are expected to be financed under existing and proposed New York City and State housing programs.

The Extended Build-Out Scenario would not change the total amount of affordable housing to be developed, however, the timing of the construction of the units and when they would be available could be delayed or deferred. As in the FEIS, the exact timing for construction of the affordable units will depend on the demand and availability of financing from New York City and State housing programs, which would be the case for other affordable housing project in the area. Therefore, the Extended Build-Out Scenario would not diminish the Project's benefits of providing 2,250 units of affordable housing.

SOCIOECONOMIC CONDITIONS

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse socioeconomic impacts for any of the five areas of socioeconomic concern and that the Project would generate substantial economic benefits for New York City and State. Irrespective of the timing of construction, the Project would continue to directly displace a total of up to 410 residents, 27 businesses and 2 institutional uses, most of which has occurred. The potential effects of direct displacement was analyzed in the FEIS, and that analysis was not dependent upon the timing of the displacement. As stated in the FEIS, ESDC would provide relocation assistance to all directly displaced households, in accordance with all applicable laws and regulations. The Project sponsors have extended relocation offers to on-site rental tenants either through compensation or offers for comparable off-site housing with the opportunity to move back into the proposed development at rent levels comparable to their current rents. Moreover, the Project sponsors have agreed to pay the difference, if any, in rent between the tenant's current rent and the rent for the comparable interim unit until such time as the tenant has been offered a new unit in the proposed development. The agreement would terminate only if the Project were abandoned or the tenant breached its obligations. Thus, these relocation terms would remain unchanged under the Extended Build-Out Scenario.

The potential for indirect displacement due to the Project would not be expected to increase with an the Extended Build-Out Scenario. As detailed in the FEIS, there are existing trends toward increased residential and commercial rents in the study areas resulting in the indirect displacement of at-risk households and businesses independent of the Project. If there is a longer period before the Project is fully built, the number of at-risk households and businesses would continue to diminish as a result of trends unrelated to the Project.

As noted in the 2009 Technical Memorandum, delays in construction would postpone the full realization of the social and economic benefits of the completed Project identified in the FEIS. However, the quantified estimates of economic and fiscal benefits from the construction and operation of the Project reported in the FEIS would still be accurate because the values were

reported in 2006 dollars. Specifically, during construction the total employment (expressed in person-years), wages and salaries (expressed in 2006 dollars), total effect on the local economy (in constant 2006 dollars) and tax dollars (in 2006 dollars) would not be affected by the Extended Build-Out Scenario. During operation, the permanent employment, annual wages and salaries (in 2006 dollars), total effect on the local economy (in 2006 dollars), and tax dollars (in 2006 dollars) also would not be affected. The value of the dollar changes over time, but when expressed in constant dollars, the underlying values are unchanged. However, using this methodology some estimates may be overly conservative in not accounting for subsequent increases in the City's sales tax rate, and for real increases in costs over time. A delay in the Project, however, would postpone the social and economic benefits associated with any delayed buildings.

COMMUNITY FACILITIES

The FEIS analysis of community facilities concluded that the Project would not result in any significant adverse impacts to police and fire services, public libraries, child care facilities, or hospitals and health care facilities. With respect to public schools, the 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 an elementary and intermediate school in the base of one of the Phase II residential buildings. The FEIS stated that additional mitigation measures, such as shifting the boundaries of school catchment areas within the Community School Districts (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 FEIS.

The 2009 Technical Memorandum included a revised analysis to determine whether the changed background conditions (including new enrollment data and updated enrollment projections) and updated methodologies (i.e., a change to the CEQR generation rates for public school students and child care eligible children) would result in any new or different impacts than those previously identified in the FEIS. The revised analysis concluded that the Project would result in a significant adverse impact on elementary schools within the ½-mile study area but that it would no longer result in a significant adverse impact on intermediate schools in the ½-mile study area. The Project sponsors' obligation to provide space for an elementary and intermediate public school on the Project site was included in the Amended Memorandum of Environmental Commitments associated with the 2009 MGPP. 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 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. To meet the additional demand, the Project sponsors are obligated to construct on the Project site and arrange for the long-term operations of a licensed day care center that can accommodate at least 100 children with publicly funded vouchers and to assess child care enrollment and capacity in the study area as the Project progresses and, if necessary, work with the Administration for Children's Services 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. With these commitments, included in the Amended Memorandum of Environmental Commitments, the 2009 Technical

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Memorandum concluded that there would be no new significant adverse impacts on publicly funded child care facilities in the study area.

The Extended Build-Out Scenario would not affect the FEIS and 2009 Technical Memorandum conclusions with respect to community facilities and services. Although the final build-out would be delayed, the proposed uses and program would remain the same as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP. Thus, there would be no additional demand for police protection, fire protection, emergency services, public schools, libraries, hospitals and health care facilities, or daycare centers.

The Extended Build-Out Scenario could affect the timing of the public school and child care facilities significant adverse impacts. These impacts are directly related to the development of new residential units; any delay in the development of residential units would also delay Project demand for new public school and child care facilities. Furthermore, the Project sponsors remain obligated to providing space for the anticipated on-site school and child care facility. In the event that the Project's residential buildings are delayed, the deadline for the New York City School Construction Authority (SCA) to decide whether it wants to develop a school at the Project site would be extended, as set forth in the Amended Memorandum of Environmental Commitments. Under the Extended Build-Out Scenario, the Project sponsors would also continue to assess child care enrollment and capacity in the study area as the Project is completed, as set forth in the Amended Memorandum of Environmental Commitments.

School enrollment and capacity and publicly funded child care facilities will change over the course of the Extended Build-Out Scenario. To provide the most accurate baseline for evaluating Project effects, the most recent data on current public school enrollment and capacity, enrollment projections, and the Department of Education (DOE) capital plan, and publicly funded child care enrollment and capacity were consulted.

Compared to the data available for the 2009 Technical Memorandum, in the ½-mile study area elementary school capacity has decreased and intermediate school capacity has increased. Overall, in CSD 13 both elementary and intermediate school capacity decreased while in CSD 15, elementary school capacity decreased and intermediate school capacity increased.

Overall, the updated enrollment data would not alter the FEIS or 2009 Technical Memorandum conclusions with respect to elementary or intermediate schools. With the decrease in elementary school capacity in the ½-mile study area, the Project would continue to result in a significant adverse impact on elementary schools in this area, as disclosed in the FEIS and 2009 Technical Memorandum. The Project sponsors remain obligated to providing an on-site public school, if requested by the SCA. No additional mitigation measures—beyond those proposed in the FEIS—would be required to mitigate the impact on elementary schools in the ½-mile study area. Within CSD 13, elementary school capacity has decreased but it is expected that CSD 13 would operate with excess capacity in the future with the Project and, as in the FEIS and 2009 Technical Memorandum, the Project would not result in a significant adverse impact on elementary schools in CSD 13. Elementary school capacity has also decreased in CSD 15, although not to a level that would result in the Project-generated students exceeding the CEQR threshold of a 5 percentage point decrease in the utilization rate. Similarly, intermediate school capacity in CSD 15 would not decrease to the level that the Project-generated students would exceed the CEQR threshold of a 5 percentage point decrease in the utilization rate. Based on the updated enrollment data, it is further expected that Brooklyn high schools would operate with sufficient capacity in the future with the Project. Overall, the new data would not alter the 2009 Technical Memorandum conclusions with respect to public schools.

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The most recent enrollment projections project school enrollment to 2018; enrollment projections further into the future have not been developed at this time. This analysis follows standard CEQR practice and uses the latest available projection (2018) for the 2035 build year. As enrollment changes, new school capacity will be developed through future DOE five year capital plans. The most current capital plan is the “2010-2014 Five-Year Capital Plan – Proposed Amendment – November 2010,” which identifies one new school to be constructed in CSD 13 and six new schools in CSD 15. Future capital plans may include additional schools, if needed to service the area.

The latest enrollment and capacity data for publicly funded child care facilities indicate that the study area currently has a surplus of publicly funded child care slots, but overall the study area has approximately 200 fewer child care slots compared to the 2009 Technical Memorandum. It is expected that there would continue to be a shortfall of slots in the future with the Project. Future changes to child care enrollment and capacity will depend on a number of factors, including: the number of affordable housing units developed in the study area; how many parents elect to use group child care facilities rather than another option such as family child care facilities or private facilities; and whether the private market or ACS develops new child care facilities. It is expected that the private market may respond to additional demand by opening child care centers and increasing capacity in the study area as population increases. Likewise, ACS could respond to additional demand by creating new capacity as part of its public-private partnership initiatives. Despite changes to future conditions in publicly funded child care facilities, the project sponsors remain obligated to providing for child care, as set forth in the Amended Memorandum of Environmental Commitments. As noted above, the project sponsors will monitor child care enrollment and capacity in the study area and work with ACS to meet project-generated demand through the provision of an on-site child care facility as stipulated in the Amended Memorandum of Environmental Commitments. Therefore, the new data and the Extended Build-Out Scenario would not result in significant adverse impacts to child care facilities that were not addressed in the FEIS and 2009 Technical Memorandum.

Overall, the Extended Build-Out Scenario of the Project would not result in significant adverse environmental impacts with respect to community facilities that were not addressed in the FEIS and 2009 Technical Memorandum.

OPEN SPACE

With the Extended Build-Out Scenario, the temporary significant adverse open space impact in the non-residential (¼-mile) study area identified in the FEIS would be addressed by the completion of the Phase II open space. Moreover, as each of the Phase II buildings is completed, the adjacent open space would be provided in conformance with the 2006 Design Guidelines, thereby offsetting some of this temporary open space impact.

SHADOWS

As a result of the shadows cast by the Project’s buildings, the FEIS identified a significant adverse impact on the open space resource of the Atlantic Terminal Houses, a New York City Housing Authority (NYCHA) development. As stipulated in the Amended Memorandum of Environmental Commitments, the Project sponsors and NYCHA developed measures to improve the Atlantic Terminal Houses open space.

The FEIS identified the incremental shadows on the Church of the Redeemer (an S/NR-eligible historic resource) from the proposed building on Site 5 as a significant adverse impact because

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the shadows would reduce light to the stained glass windows on the church's east façade. The Extended Build-Out Scenario would delay the construction of the building on Site 5. Therefore, this would result in a delay of when the significant adverse shadow impact would occur on the Church of the Redeemer. The Project sponsors and the church reached an agreement with respect to these measures, as stipulated in the Amended Memorandum of Environmental Commitments, under which the Project sponsors provided the church with funding to undertake cleaning and other measures to address the shadows from Site 5.

The Extended Build-Out Scenario would not affect the proposed massing envelopes analyzed for shadow impacts, which would remain the same as analyzed in the FEIS, 2009 Technical Memorandum, and as specified in the 2009 MGPP and 2006 Design Guidelines, and therefore, the Extended Build-Out Scenario would not result in significant adverse environmental impacts with respect to shadows that were not addressed in the FEIS. The stipulations in the Amended Memorandum of Environmental Commitments to improve the Atlantic Terminal Houses open space and stained glass windows at the Church of the Redeemer would not be affected by the Extended Build-Out Scenario.

HISTORIC RESOURCES

The Extended Build-Out Scenario would not result in any effects to archaeological or architectural resources that were not previously identified in the FEIS; in addition, it would not change the stipulations of the Letter of Resolution among ESDC, the Project sponsor, and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). Therefore, the Extended Build-Out Scenario would not have any significant adverse impacts to historic resources that were not previously identified in the FEIS.

URBAN DESIGN AND VISUAL RESOURCES

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to urban design and visual resources. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not result in changes to the buildings' bulk, uses, the type or arrangement of the buildings, the layout of the open space, and other matters as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP and 2006 Design Guidelines. The Extended Build-Out Scenario would not affect the urban design and visual resources analysis for the full build-out as described in the FEIS. A discussion of impacts to urban design and visual resources during the construction period for the Extended Build-Out Scenario is provided in Section E, "Construction Period Impacts," below.

HAZARDOUS MATERIALS

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to hazardous materials. As set forth in the Amended Memorandum of Environmental Commitments, the Project sponsors are obligated to implement measures to prevent volatile organic compounds (VOCs) from infiltrating the interior of the buildings as well as measures to protect workers and the general public from adverse impacts associated with hazardous materials during construction. The stipulations in the Amended Memorandum of Environmental Commitments would not be affected by the Extended Build-Out Scenario. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not result in any changes to the footprint of

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the Project site, and therefore the Extended Build-Out Scenario would not affect the analysis of hazardous materials as described in the FEIS.

INFRASTRUCTURE

The Extended Build-Out Scenario would affect the timing of construction of the buildings but it would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, there would be no increase in project-generated demand for these services as a result of the Extended Build-Out Scenario. Therefore, the Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to infrastructure, including water supply, sanitary wastewater treatment, stormwater runoff and combined sewer overflows (CSOs), solid waste management, and energy.

Since the FEIS, the design for the arena roof changed such that it would not incorporate stormwater detention tanks or a green roof. Instead, detention tanks would be located in the base of the arena and enlarged to accommodate the additional stormwater load associated with the elimination of the green roof. As analyzed in the 2009 Technical Memorandum, these changes would not have a significant adverse effect. The Extended Build-Out Scenario would not affect this design change and therefore not affect the conclusions of the 2009 Technical Memorandum.

As set forth in the Amended Memorandum of Environmental Commitments, the Project sponsors are obligated to construct new water mains and new sewer improvements as well as implement measures to minimize stormwater and sewage. Since the 2009 Technical Memorandum, the infrastructure and utilities located within the 5th Avenue streetbed on the Project site have been relocated and replaced with new sewers and watermains in Dean Street, 6th Avenue, Atlantic Avenue, and Flatbush Avenue. In addition, a new trunk watermain in Atlantic and Flatbush Avenues is being designed and installed. These improvements would continue as construction progresses and new infrastructure is needed to service the new buildings. Water mains on Dean Street and Carlton Avenue would be installed to replace the existing water main in Pacific Street, which would be relocated as part of the Phase II construction. The Extended Build-Out Scenario would delay the construction of some of the infrastructure improvements stipulated in the Amended Memorandum of Environmental Commitments required for Phase II. However, the delay in new building construction would also result in a delay in the additional demand for water and sewer service and new stormwater management measures.

TRAFFIC AND PARKING

FEIS

To establish a future baseline condition (the No Build condition) from which to assess the potential transportation impacts of the Project, the FEIS assumed that traffic and parking demands in the study area would increase over the 10 year build-out period (i.e., through 2016) due to long-term background growth as well as the development of new office/commercial, residential, cultural, community facility, court, and retail space in Downtown Brooklyn. To forecast this future No Build demand, the principal land use study area development projects listed in Table 2-1 and shown in Figure 2-1 in Chapter 2, "Procedural and Analytical Framework," in the FEIS were considered, as were several large development projects that are located outside of the study area but that were expected to add trips to study area intersections by

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2016. These included the Brooklyn Cruise Terminal at Pier 12, the Federal Courthouse at Adams and Tillary Streets, the IKEA store in Red Hook, Brooklyn Bridge Park and all of the projected development sites for the Downtown Brooklyn Development project. Additional projects were also added as discrete No Build sites for the FEIS in response to agency and public comments on the DEIS. (A detailed discussion of all discrete No Build sites considered in the transportation analyses is provided in a technical memorandum entitled *Summary of No Build Sites Considered for the EIS Transportation Analyses* included in Appendix C of the FEIS.) Overall, the No Build traffic and parking analyses in the FEIS considered a total of approximately 5.2 million square feet of new office/commercial space, 6,254 new dwelling units, 1.2 million sf of new retail space, and more than 2.4 million square feet of other uses including new cultural and community facility space, new court space, 504 new hotel rooms, and 85 acres of new park space.

In addition to demand from new developments, an annual background growth rate of 0.5 percent per year was applied to the entire 2006 existing baseline traffic network for the 2006 through 2016 period. This background growth rate, recommended in the 2001 *CEQR Technical Manual* for projects in Downtown Brooklyn, was applied to account for smaller projects, as-of-right developments not reflected in the land use analyses, and general increases in travel demand not attributable to specific development projects. The background growth rate was conservatively applied to every intersection in the traffic study area in each peak hour, and is equivalent to an approximately five percent increase in traffic by 2016 compared to 2006 levels. In the AM peak hour alone, the amount of background growth assumed for the 2006 through 2016 period would account for roughly 2,000 additional vehicle trips entering and exiting the study area, equivalent to the travel demand generated by 19,000 new dwelling units or nine million square feet of new office space in Downtown Brooklyn.

For the FEIS analyses of conditions in the 2016 future with the Project, the traffic and parking demands generated by the full build-out of the Project were added onto this No Build baseline condition. Significant adverse traffic impacts were then identified, and a detailed traffic mitigation plan incorporating physical and operation changes to the street system and an array of demand management strategies was developed.

2009 TECHNICAL MEMORANDUM

The 2009 Technical Memorandum was prepared that described changes to the Project's schedule and background conditions and assessed whether the Project as contemplated would result in any new or different significant adverse environmental impacts not previously identified in the FEIS. The 2009 Technical Memorandum included an analysis of a three-year extension to 2019 for the full build-out of the Project to determine whether there would be any effect on the conclusions of the FEIS, as well as an assessment of the potential effects of a delayed build-out due to prolonged adverse economic conditions based on a hypothetical delay of approximately five years, resulting for analytical purposes in a 2024 Build year.

Schedule Change to 2019

In order to determine future background conditions, the analyses in the 2009 Technical Memorandum employed the same methodology with respect to background growth (i.e., 0.5 percent per year) and identifying discrete No Build development sites as was used for the analyses in the FEIS described above. The list of potential No Build sites was updated to reflect conditions since issuance of the FEIS, with some development projects having been completed in the surrounding area; some put on hold due to changes in market conditions and financing availability; and some under development. Overall, development totaling approximately 675

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dwelling units, 16,000 sf of office space, 511,800 sf of retail space, 373 hotel rooms and 854,700 sf of courthouse and other space was found to have been completed since issuance of the FEIS. The analysis further identified a total of approximately 9,610 dwelling units; 2,554,491 sf of office space; 747,724 sf of retail space, 1,151 hotel rooms, and 850,000 sf of other space that could potentially be developed in Downtown Brooklyn and its vicinity by 2019.

A travel demand forecast was prepared for this updated No Build development scenario. Overall, it was found that there would be up to 337 fewer vehicle trips generated by new development in the weekday AM, midday and PM peak hours compared to the development assumed for the FEIS No Build scenario, and up to 292 more vehicle trips in the pre-game and post-game peak hours. It was noted, however, that the additional vehicle trips forecasted for the pre-game and post-game peak hours would be widely dispersed throughout Downtown Brooklyn and its vicinity, and that the number of additional trips from changes in No Build developments occurring at any one intersection would be relatively small.

Data on bridge and tunnel crossings were also collected as well as automatic traffic recorder (ATR) count data for two of the primary arteries serving the Project site (Atlantic and Flatbush Avenues). Overall, traffic volumes in the vicinity of the Project site were found to have declined since the data collection effort for the FEIS traffic analysis in 2005. The ATR data indicated that there had been a 7 to 12 percent decline in weekday and Saturday traffic volumes on Atlantic and Flatbush from 2005 to 2008.

Based on these data, the 2009 Technical Memorandum concluded that the potential 1.5 percent increase in study area background traffic associated with the three-year shift in the Build year and the changes in anticipated No Build development expected to occur by 2019 would not be expected to result in total traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.

Similarly, it was concluded that a shift in the Build year from 2016 to 2019 would also not result in greater demand for off-street public parking in the vicinity of the Project site than was analyzed in the FEIS. The basis for this conclusion was that study area parking demand had likely declined commensurate with the overall decline in study area traffic volumes noted above; that there had been an increase in unemployment city-wide since issuance of the FEIS; and that there had been a net decrease in new office space (and therefore substantially lower office-related parking demand) projected for development under the updated No Build development scenario compared to the FEIS No Build scenario. In addition, it was noted that the FEIS analysis showed that the parking study area would continue to operate with a surplus of between 624 and 2,919 off-street public parking spaces in the analyzed weekday AM, midday, evening and Saturday midday peak hours in the 2016 future with the proposed Project (see Tables 12-27 and 12-38 in the FEIS), and therefore, even if there were to be a small increase in parking demand by 2019 compared to the levels forecast for 2016, sufficient off-street public parking capacity would be expected to be available to accommodate this demand, and it would not result in new significant adverse parking impacts.

Delayed Build-Out (2024)

The 2009 Technical Memorandum also assessed the potential effects on the conclusions of the FEIS from a delayed build-out due to prolonged adverse economic conditions. A hypothetical delay of approximately five additional years was assumed, resulting for analytical purposes in a 2024 Build year. If the 0.5 percent annual growth factor were to be applied to a Build year of 2024, it would potentially represent an approximately four percent increase in background growth compared to the 2016 Build year analyzed in the FEIS. However, as was noted in the

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2009 Technical Memorandum, under a scenario of prolonged adverse economic conditions that are assumed to delay development projects, the application of this level of background growth to the additional period of delay would not be appropriate. Such robust background growth is not consistent with this scenario, under which there would be a reduced demand for housing and commercial space and delays in development projects in the study area.

The 2009 Technical Memorandum found that once adverse economic conditions begin to abate and the economy begins to recover, transportation demand in the study area would once again be expected to experience some level of background growth. New demand from discrete No Build sites in the area would also be generated as these developments once again begin to advance. Although the characteristics of specific No Build projects may have changed in the interim, it was determined that the inclusive list of No Build sites compiled for the 2019 No Build scenario provided a conservative basis for projecting the magnitude of future development that could be expected as conditions improve. Overall, the 2009 Technical Memorandum concluded that the anticipated traffic and parking demand from background growth and No Build development associated with a 2024 Build year would be unlikely to result in total traffic volumes or parking demand greater than what was analyzed in the FEIS for the 2016 Build year, especially in the context of the 7 to 12 percent decline in weekday and Saturday traffic volumes that occurred from 2005 to 2008. Moreover, under a scenario of prolonged adverse economic conditions, it would be unrealistic to assume that housing and employment growth—the principal factors driving traffic volumes and parking demand—would continue to result in a 0.5 percent annual increase in background growth.

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The discussion below evaluates the potential for new significant adverse traffic and parking impacts not previously disclosed in the FEIS under the Extended Build-Out Scenario.

An additional 9.9 percent of background growth over 2016 levels (based on a background growth of 0.5 percent per year) would potentially be represented under the Extended Build-Out Scenario. However, it is important to note that overall traffic volumes in New York City have generally declined in recent years due to the economic downturn, and recent data suggest that they have not yet recovered to the levels assumed as the 2006 baseline for the FEIS traffic analysis. For example, May 2010 traffic volumes at two of Brooklyn's primary gateway facilities—the Brooklyn-Battery Tunnel and the Verrazano-Narrows Bridge—were eight percent and one percent below May 2006 volumes at these facilities, respectively.¹ At two other primary gateway facilities in closer proximity to the Project site—the Brooklyn Bridge and the Manhattan Bridge—average weekday two-way traffic volumes in 2009 were 1.4 percent and 3.6 percent below the average weekday volumes in 2006, respectively.²

Notable decreases in traffic volumes are also evident along both Flatbush Avenue and Atlantic Avenue, two of the primary arterials providing access to the Project site. A comparison of automatic traffic recorder (ATR) count data collected adjacent to the Project site in September 2008 and May 2010 with similar data collected for the FEIS traffic analysis in June 2005 is presented in **Table 2**. As noted previously and shown in Table 2, the 2008 ATR data indicate that average weekday two-way traffic volumes on Atlantic Avenue declined by approximately

¹ Source: MTA Bridges and Tunnels

² Source: NYCDOT

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11.5 percent during the 2005 to 2008 period, while Saturday volumes declined by approximately 7.3 percent. Two-way traffic volumes on Flatbush Avenue were found to have declined by approximately 9 percent on weekdays and 10.7 percent on Saturdays over the same three-year period. The 2010 ATR data indicate that average weekday two-way traffic volumes on Flatbush Avenue have declined by approximately 17.7 percent on weekdays and 17.9 percent on Saturdays since 2005, and that weekday two-way traffic volumes on Atlantic Avenue have declined by approximately 19.1 percent over the same period. (Saturday 2010 data for Atlantic Avenue were not available.) It should be noted that the 2008 data were collected prior to street closures on the Project site while the 2010 data were collected subsequent to the closures of segments of 5th Avenue and Pacific Street and the Carlton Avenue Bridge on the Project site. However, given the 7 to 12 percent declines in traffic shown in the 2008 data, it is unlikely that the localized traffic diversions associated with the recent street closures would account for all of the substantial reductions in daily traffic volumes on Atlantic and Flatbush Avenues compared to the 2005 data used to establish the baseline for the FEIS traffic analysis.

**Table 2
Comparison of 2005, 2008, and 2010 Daily Two-Way Traffic Volumes**

	2005		2008		2010		Percent Change: 2005 to 2008		Percent Change: 2005 to 2010	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Atlantic Avenue	46,445	45,898	41,087	42,570	37,568	n/a	-11.5%	-7.3%	-19.1%	n/a
Flatbush Avenue	44,848	48,700	40,801	43,481	36,908	39,998	-9.0%	-10.7%	-17.7%	-17.9%

Notes:
1. June 2005 and September 2008 ATR counts conducted on Atlantic Avenue east of South Oxford Street and on Flatbush Avenue south of Dean Street. Source: PHA.
2. May 2010 ATR counts conducted on Atlantic Avenue at 6th Avenue and on Flatbush Avenue at 6th Avenue.
n/a – data not available.
Source: Sam Schwartz Engineering.

It is also important to note that the City has recently revisited the subject of annual background growth rates to be used for transportation analysis purposes, and acknowledged that a 0.5 percent per year background growth rate for Downtown Brooklyn was overly conservative (i.e., overestimated likely growth) over the long term. Based on general trends in traffic and growth over a number of years, the City now recommends that for transportation analyses in the vicinity of Downtown Brooklyn, an annual background growth rate of 0.25 percent be applied for the first five years and an annual rate of 0.125 percent be applied for the sixth year and beyond. These rates would result in a substantially smaller increase in travel demand associated with background growth than was assumed in the FEIS analysis. For example, based on the rates now recommended by the City, transportation demand in the vicinity of Downtown Brooklyn is expected to increase by an estimated 3.8 percent for the 25-year period from 2010 through 2035. By contrast, the FEIS analysis assumed that transportation demand would increase by a total of 5.1 percent due to background growth during the 10-year period from 2006 through 2016.

In addition to new traffic demand due to background growth, the future No Build baseline for the FEIS traffic analysis also reflected the traffic likely to be generated by potential No Build development sites. These included developments located within the ¾-mile secondary land use study area, developments outside of the secondary study area that were included in the FEIS at the request of DOT, and developments located in proximity to corridors analyzed for the traffic analysis. All of the projected development sites for the Downtown Brooklyn Development project were also included. Projects with programs less than the minimum development thresholds for Downtown Brooklyn identified in Table 3O-1 in the 2001 *CEQR Technical*

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Manual as potentially requiring traffic, parking, transit, and/or pedestrian analyses were not included.¹ (Exceptions were made if a development program included a mix of uses that in aggregate were expected to generate 50 or more vehicle trips or 200 or more transit or pedestrian trips in a peak hour.)

As shown in **Table 3**, the discrete No Build sites accounted for in the FEIS traffic and parking analyses comprised a total of approximately 6,254 dwelling units; 5,185,400 sf of office space; 1,152,100 sf of retail space; and 504 hotel rooms. A total of 2,244,615 sf of “other” space (a mix of academic, performance, community facility, marina, and courthouse space) was also included.

Since the issuance of the FEIS, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development. Overall, as shown in Table 3, development totaling approximately 3,596 dwelling units, 16,000 sf of office space, 591,500 sf of retail space, 694 hotel rooms and 934,700 sf of courthouse and other space was completed by late-2010. As noted above, even with the additional travel demand generated by this completed development, 2010 traffic volumes in the vicinity of the Project site are actually lower than the 2006 baseline volumes for the FEIS analysis.

In order to determine the transportation demand that would be generated by new development now anticipated to occur post-2010, an updated No Build scenario for the transportation analyses was developed based on the same criteria used for identifying discrete No Build sites for the transportation analyses in the FEIS. As shown in Table 3, based on current data, it is anticipated that a total of approximately 6,676 dwelling units; 2,554,491 sf of office space; 668,024 sf of retail space, 959 hotel rooms, and 885,903 sf of other space is expected to be developed in the vicinity of the Project site by the hypothetical 2035 analysis year.

Table 4 shows the estimated travel demand generated by the No Build residential, office, retail and hotel development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from such new development now anticipated to occur by 2035. As shown in Table 4, the residential, office, retail and hotel uses in the FEIS No Build development scenario would generate an estimated 336 to 2,504 vehicle trips (auto, taxi and truck) in each analyzed peak hour. For the FEIS traffic analysis, the vehicle trips generated by No Build sites were added to the 2006 baseline network (along with a total of approximately five percent background growth—0.5 percent per year) to forecast 2016 No Build conditions. By comparison, new residential, office, retail and hotel development now anticipated to occur during the 2010 through 2035 period would generate an estimated 323 to 1,775 vehicle trips in each peak hour. There would be 513 fewer vehicle trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 505 fewer in the midday and 729 fewer in the weekday PM peak hour. In the weekday pre-game and post-game and Saturday pre-game and post-game peak hours, development now planned by 2035 would generate approximately 165, 13, 63 and 88 fewer vehicle trips, respectively, compared to the FEIS scenario.

¹ These minimums are: 200 residential dwelling units; 100,000-gsf office space; 20,000-gsf retail space; and 25,000-gsf community facility space.

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Table 3
Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with a 2035 No Build Development Scenario

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2035						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
1	LIU Recreation and Wellness Center	2005		10,000			117,000	2005		10,000			117,000	completed
2 [NA]	Federal Courthouse (Adams & Tillary Sts)	2005					700,000	2005					700,000	completed
3 [NA]	Pier 12	2006					23,200	2006					23,200	completed
4 [NA]	110 Livingston Street	2006	375				6,000	2006	300				6,000	completed
5 [NA]	Brooklyn Marriott Expansion	2006			8,500	280		2006			8,500	280		completed
6 [NA]	IKEA Red Hook	2006			346,000			2006			346,000			completed
7 [NA]	Fairway Supermarket	2006		91,500	119,300		19,200	2006	45	6,000	119,300			completed
8 [4]	Williamsburgh Savings Bank Building	2007	189		23,000			2007	178		23,000			completed; 30,000 sf of existing dental office space retained
9 [9]	17 Eastern Pkwy (Union Temple site)	2007	200					2007	102					completed
10 [29]	Atlantic Avenue & Smith Street	2007	50	31,500	15,000		8,500	2007	50		15,000	93	8,500	completed; "other" includes community facility space
11 [NA]	306 & 313 Gold Street	2015	517					2008	514					completed
12 [11]	Schermerhorn St btwn Hoyt and Bond Sts	2009	149		14,700			2009	172		14,700			completed

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**Table 3 (cont'd)
Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with a 2035 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2035						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
13 [24-A]	Sheraton Aloft Hotel 222-228 Duffield Street	2013		999,000	48,000			2009					321	completed
14 [28]	ESDC/HS Schermerhorn St Block 170	2008	440					2009	440					completed
15 [30]	Myrtle Ave & Flatbush Ave	2013	300		60,000			2009	280		60,000			completed
16 [35]	Waverly Avenue Charter School	2008					80,000	2009					80,000	completed
17 [41]	159 Myrtle Avenue by Avalon Bay		Not included in FEIS No Build Scenario					2009	650		5,000			completed
18 [12]	80 DeKalb Ave	2009	430					2010	365					completed
19 [44]	111 Lawrence Street		Not included in FEIS No Build Scenario					2010	500					completed
20 [49]	Holiday Inn: 300 Schermerhorn Street		Not included in FEIS No Build Scenario					TBD					247	cleared, no construction
21 [42]	470 Vanderbilt Avenue		Not included in FEIS No Build Scenario					2011	376	1,091	115,424			totals reflect the displacement of 578,554 sf of existing office uses on the site.
22 [31]	Myrtle Ave & Ashland Pl	2013	259		86,000				660		22,000			95 D.U. completed
23 [NA]	Brooklyn Bridge Park													"other" includes a 185-slip marina and 1,000-seat theater; park facilities partially completed
24 [48]	Brooklyn House of Detention													"other" includes expansion of current jail from 815 to 1,478 beds

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Table 3 (cont'd)
Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with a 2035 No Build Development Scenario

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2035						Notes
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	
25 [13]	BAM LDC (bounded by Ashland Pl and Lafayette & Flatbush Aves)	2013		15,000			180,000	2013	180				187,000	"other" includes rehearsal studio/cinema/visual arts space
26 [14]	BAM LDC North (bounded by Ashland Pl, Rockwell Pl, Lafayette Ave, & Fulton St)	2013	570		10,000		253,000	2013	187	0	4,000	0	74,000	"other" includes rehearsal/performance/arts space
27 [15]	395 Flatbush Avenue Ext.	2013			12,000			2013			12,000			
28 [17]	254 Livingston Street	2013	186	21,000				2013	186	21,000				
29 [18]	236 Livingston St (SW corner of Bond St)	2013	163	18,000				2013	271					under construction
30 [23]	Flatbush Ave at Albee Square W.	2013		1,233,000	42,000			2013	650	360,000	147,000			excludes 373,000 sf of existing retail that would be retained; under construction
31 [25]	505 Fulton St (Willoughby St btwn Duffield & Bridge Sts)	2013		544,000	50,000			2013	544		50,000			under construction
32 [26]	Adams St/Boerum Pl at Fulton St	2013		788,000	70,000			2013		788,000	70,000			
33 [NA]	Site C, Jay & Johnson Sts	2013		720,000			8,000	2013		720,000			8,000	
34 [NA]	Site G, Johnson & Gold Sts	2013	71		10,000			2013	71		10,000			
35 [19]	29 Flatbush Avenue		Not included in FEIS No Build Scenario					2013	333					

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**Table 3 (cont'd)
Comparison of the FEIS Transportation Analyses 2016 No Build Development Scenario
with a 2035 No Build Development Scenario**

No.	Project Name/Location	FEIS 2016 NO BUILD SCENARIO						DEVELOPMENT COMPLETED OR ANTICIPATED BY 2035						Notes	
		Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)	Build Year	Residential (D.U.)	Office (sf)	Retail (sf)	Hotel (rooms)	Other (sf)		
36 [21]	BAM LDC East		Not included in FEIS No Build Scenario						2013	150				60,000	"other" includes community facility space
37 [52]	388 Bridge Street		Not included in FEIS No Build Scenario						2019	360					under construction
38 [16]	Atlantic Center	2013	850	550,000				TBD	850	500,000					
39 [NA]	Bridge Plaza Rezoning	2004	295					TBD	648						
40 [NA]	City University (Site A)	TBD					590,777	TBD					244,000		
41 [NA]	City University (Site B)	TBD					258,938	TBD					157,000		
42 [24-B]	Hotel Indigo 237 Duffield Street		Not included in FEIS No Build Scenario						TBD				182	under construction	
43C [24-C]	Aloft Hotel 216 Duffield Street		Not included in FEIS No Build Scenario						TBD				176	under construction	
44 [24-D]	231 Duffield Street		Not included in FEIS No Build Scenario						TBD				130	under construction	
45 [66]	P.S. 124 4 th Avenue & Butler Street		Not included in FEIS No Build Scenario						TBD					under construction	
	Development 2006–2010		2,650	1,132,000	634,500	280	953,900		3,596	16,000	591,500	694	934,700		
	Development 2010–2016/2035		3,604	4,053,400	517,600	224	1,290,715		6,676	2,554,491	668,024	959	885,903		
	Total Development 2006–2016/2035		6,254	5,185,400	1,152,100	504	2,244,615		10,272	2,570,491	1,259,524	1,653	1,820,603		

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**Table 4
Travel Demand Comparison
FEIS 2016 No Build Scenario vs Anticipated Development 2010 - 2035**

	FEIS 2006 - 2016 NO BUILD SCENARIO					DEVELOPMENT ANTICIPATED 2010-2035					NET DIFFERENCE					
	Residential	Office	Retail	Hotel	Total	Residential	Office	Retail	Hotel	Total	Residential	Office	Retail	Hotel	Total	
Total Development	6,254 (D.U.)	5,185,400 (sf)	1,152,100 (sf)	504 (rooms)	----	6,676 (D.U.)	2,554,491 (sf)	668,024 (sf)	959 (rooms)	----	422 (D.U.)	(2,630,909) (sf)	(484,076) (sf)	455 (rooms)	----	
Peak Hour Vehicle Trips																
Auto+Taxi+Truck	Weekday AM	643	1,095	166	60	1,964	690	544	100	117	1,451	47	-551	-66	57	-513
	Weekday MD	348	392	926	80	1,746	368	192	532	149	1,241	20	-200	-394	69	-505
	Weekday PM	711	1,249	470	74	2,504	759	613	264	139	1,775	48	-636	-206	65	-729
	Weekday Pre-Game	543	371	138	63	1,115	577	181	76	116	950	34	-190	-62	53	-165
	Weekday Post-Game	214	62	44	16	336	232	30	26	35	323	18	-32	-18	19	-13
	Saturday Pre-game	610	24	431	103	1,168	652	9	250	194	1,105	42	-15	-181	91	-63
Saturday Post-Game	622	69	445	105	1,241	666	33	256	198	1,153	44	-36	-189	93	-88	
Peak Hour Transit Trips																
Subway Trips	Weekday AM	3,309	7,159	878	36	11,382	3,532	3,527	510	69	7,638	223	-3,632	-368	33	-3,744
	Weekday PM	3,891	8,312	2,720	42	14,965	4,154	4,095	1,578	81	9,908	263	-4,217	-1,142	39	-5,057
	Weekday Pre-Game	3,018	2,426	850	37	6,331	3,221	1,195	494	70	4,980	203	-1,231	-356	33	-1,351
Bus Trips	Weekday AM	138	660	220	10	1,028	147	326	128	20	621	9	-334	-92	10	-407
	Weekday PM	162	767	680	12	1,621	173	378	394	24	969	11	-389	-286	12	-652
	Weekday Pre-Game	126	224	212	10	572	134	110	124	20	388	8	-114	-88	10	-184

Note: In addition to the residential, office, retail and hotel uses shown in the table, the FEIS No Build scenario accounted for travel demand from approximately 2.2 million sf of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater and performing and visual arts space. As only 885,903 sf of such space is now planned for the 2010-2035 period, these uses are not expected to generate greater travel demand than was analyzed in the FEIS, and travel demand forecasts for these uses are not included in the table.

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In addition to residential, office, retail and hotel uses, the FEIS No Build scenario accounted for travel demand from the development of approximately 2,244,615 square feet of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater, and performing and visual arts space. By contrast, as shown in Table 3, it is now anticipated that a total of only 885,903 square feet of such space would be developed from 2010 through 2035. Given this decrease in projected development, it is not expected that these miscellaneous uses would generate greater travel demand than what was analyzed in the FEIS, and separate travel demand forecasts for these uses are not included in Table 4.

In summary, the analysis of future traffic conditions in the FEIS utilized a 2006 baseline condition that was increased by a total of approximately five percent to account for background growth through 2016 (0.5 percent per year) and to which was added travel demand from No Build developments. By contrast, 2008 ATR data indicate that weekday and Saturday traffic volumes on the primary arteries serving the Project site declined by 7 to 12 percent from 2005 to 2008, and more recent 2010 ATR data are consistent with a decline in traffic volumes in the vicinity of the Project site from the 2006 baseline for the FEIS traffic analysis. In addition, there would be from 513 to 729 fewer vehicle trips in the weekday AM, midday and PM peak hours generated by the No Build development now anticipated to occur by 2035, and from 13 to 165 fewer vehicle trips in the weekday and weekend pre- and post-game peak hours. In addition, there would be fewer vehicle trips from the reduction of approximately 1.3 million square feet of miscellaneous uses in the transportation study area. Therefore, the potential ten percent increase in study area background traffic associated with the Extended Build-Out Scenario (which assumes the conservative annual 0.5 percent background growth rate, reflecting the 2001 CEQR guidance), and the changes in anticipated No Build development now expected to occur during that time, would not be expected to result in total traffic volumes greater than what was analyzed in the FEIS for the 2016 Build year.

The Extended Build-Out Scenario is also not expected to result in a greater demand for off-street public parking in the vicinity of the Project site than was analyzed in the FEIS. Overall, the FEIS analysis assumed an approximately five percent increase in existing parking demand due to background growth from 2006 through 2016. However, as discussed above, ATR data collected in 2008 and 2010 indicate that weekday and Saturday traffic volumes on the primary arteries serving the Project site declined from 2005 to 2008 and remain below the 2006 baseline for the FEIS traffic analysis. Given these ATR data and the recent increase in unemployment city-wide, it is expected that parking demand in the vicinity of Downtown Brooklyn has also declined during this period. In addition, based on current data there would be a net decrease in new office space developed by 2035 compared to the development program assumed for the 2016 No Build analysis in the FEIS. Future office-related parking demand would therefore also be substantially lower than what was assumed in the FEIS. By contrast, the increase in residential development anticipated by 2035 compared to the 2016 scenario is not expected to substantially increase the demand for public parking. It is anticipated that residential parking demand would generally be accommodated in accessory parking, as zoning in the area typically imposes minimum parking requirements for new residential developments that are designed to accommodate the development's parking demand. As such, it is not expected that parking demand in the vicinity of the Project site in 2035 would be greater than what was analyzed in the FEIS for the 2016 Build year. In addition, it should be noted that the FEIS parking demand forecast for the 2016 future with the proposed Project showed that the parking study area would continue to operate with a surplus of between 624 and 2,919 off-street public parking spaces in the analyzed weekday AM, midday, evening and Saturday midday peak hours under both project variations (see Tables 12-27 and 12-38 in the FEIS). Therefore, even if there were to be a small increase in parking demand by 2035 compared to the levels forecast for 2016, sufficient off-street

public parking capacity would be expected to be available to accommodate this demand, and it would not result in new significant adverse parking impacts.

TRANSIT AND PEDESTRIANS

FEIS ANALYSIS

To establish a future baseline condition (the No Build condition) from which to assess the potential transit and pedestrian impacts of the proposed Project, the FEIS assumed that transit (subway and bus) and pedestrian demands in the study area would increase over the ten year build-out period (i.e., through 2016) due to long-term background growth as well as the development of new office/commercial, residential, cultural, community facility, court, and retail space in Downtown Brooklyn. To forecast this No Build demand, the principal land use study area development projects listed in Table 2-1 and shown in Figure 2-1 in Chapter 2, “Procedural and Analytical Framework,” in the FEIS were considered, as were several large development projects that are located outside of the study area but that were expected to add trips to study area subway and bus routes by 2016, including all of the projected development sites for the Downtown Brooklyn Development project. Additional projects were also added as discrete No Build sites for the FEIS in response to agency and public comments on the DEIS. (A detailed discussion of all discrete No Build sites considered in the transportation analyses is provided in a technical memorandum entitled *Summary of No Build Sites Considered for the EIS Transportation Analyses* included in Appendix C of the FEIS.)

In addition to demand from new developments, an annual background growth rate of 0.5 percent per year was applied to existing transit and pedestrian demand for the 2006 through 2016 period (a total of approximately five percent). This background growth rate, recommended in the 2001 *CEQR Technical Manual* for projects in Downtown Brooklyn, was applied to account for smaller projects, as-of-right developments not reflected in the land uses analyses, and general increases in travel demand not attributable to specific development projects.

For the FEIS analyses of conditions in the 2016 future with the proposed Project, the transit and pedestrian demands generated by the full build-out of the proposed Project were added onto this No Build baseline condition. No significant adverse subway station or subway line haul impacts were identified; however, one bus route, and two crosswalks on the Project site were found to be significantly adversely impacted with full build-out of the proposed Project in 2016. Widening of the affected crosswalks was proposed to mitigate the project-related impacts. As standard practice, New York City Transit (NYCT) routinely conducts ridership counts and adjusts bus service frequency to meet its service criteria, within fiscal and operating constraints. Therefore, no mitigation was proposed for the Project’s potential impact to bus service.

2009 TECHNICAL MEMORANDUM

The 2009 Technical Memorandum described changes to the Project’s schedule and background conditions and assessed whether the Project as modified would result in any new or different significant adverse environmental impacts not previously identified in the FEIS. The 2009 Technical Memorandum included an analysis of a three-year extension to 2019 for the full build-out of the Project to determine whether there would be any effect on the conclusions of the FEIS, as well as an assessment of the potential effects of a delayed build-out due to prolonged adverse economic conditions based on a hypothetical delay of approximately five years, resulting for analytical purposes in a 2024 Build year.

Schedule Change to 2019

In order to determine future background conditions, the analyses in the 2009 Technical Memorandum employed the same methodology with respect to background growth (i.e., 0.5 percent per year) and identifying discrete No Build development sites as was used for the analyses in the FEIS described above. The list of potential No Build sites was updated to reflect conditions since issuance of the FEIS, with some development projects having been completed in the surrounding area; some put on hold due to changes in market conditions and financing availability; and some under development. The analysis identified a total of approximately 9,610 dwelling units; 2,554,491 sf of office space; 747,724 sf of retail space, 1,151 hotel rooms, and 850,000 sf of other space that could potentially be developed in Downtown Brooklyn and its vicinity by 2019.

Transit—Subway

The 2009 Technical Memorandum analyzed stairways and fare arrays at existing subway stations serving the Project site to determine their sensitivity to future increases in peak hour demand above what was assumed in the FEIS analyses. A shift in the Build year from 2016 to 2019 would potentially represent a 1.5 percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the 2001 *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. However, it was determined that future 2019 volumes at existing subway station stairways and fare arrays analyzed in the FEIS would have to increase by 39 percent or more compared to what was forecast for the 2016 Build with Mitigation condition in the FEIS before reaching capacity. It was also noted that as much of the demand at the new on-site entrance and associated circulation improvements planned for the Atlantic Avenue/Pacific Street subway station complex would be generated by the development on the Project site, these facilities would not be as sensitive to increases in general background growth (background growth would not apply to project-generated demand). In addition, the number of subway trips generated by No Build development through 2019 was expected to be less than what was forecast for 2016 in the analyzed weekday AM and PM peak hours, and comparable or only marginally more in the weekday pre-game peak hour. Therefore, the Technical Memorandum concluded that the potential changes in No Build subway demand resulting from a shift in the Build year from 2016 to 2019 would not be expected to result in new significant adverse subway station impacts.

Under 2001 *CEQR Technical Manual* criteria, projected increases in subway load levels from a No Build condition to a Build condition that exceed practical capacity may be considered significant impacts if a proposed action generates five or more additional passengers per car. As shown in Table 13-48 in the FEIS, with full build-out, the Project would generate an average of no more than 4.2 additional passengers per car in the peak direction on all subway lines serving the Project site. The Technical Memorandum therefore concluded that the Project would not result in significant adverse impacts to subway line haul conditions based on 2001 *CEQR Technical Manual* criteria, irrespective of any increase in background growth or demand from No Build site development.

Transit—Buses

As with subway demand, the shift in the Build year from 2016 to 2019 assessed in the 2009 Technical Memorandum would potentially represent a 1.5 percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the 2001 *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through

2016 period. By contrast, overall New York City Transit bus ridership was found to have actually increased by only 0.7 percent from 2006 to 2008, less than the 1.0 percent (0.5 percent per year) assumed in the FEIS, and MTA data from 2009 indicated that bus ridership had started to decline, with 1.2 percent fewer riders in February 2009 compared to February 2008. In addition, the number of bus trips generated by the residential, office, retail and hotel development expected through 2019 under the updated No Build development scenario was found to be less than what was forecast for 2016 in the analyzed weekday AM, PM and pre-game peak hours. It was noted, however, that some bus routes might experience localized increases in No Build demand due to background growth and new No Build projects located in their proximity and/or changes in the directional distribution of peak hour trips due to changes in programmed uses (e.g., from an office travel pattern to a residential one). It was therefore considered possible that one or more additional bus routes could experience over-capacity conditions under a 2019 Build scenario. As it is anticipated that the Project would generate from 2 to 38 new peak direction bus trips on any analyzed route—less than the 65-passenger capacity of a single bus—any new over-capacity condition that may occur would be fully addressed by the addition of a single peak direction bus in the affected peak hour. As noted above, NYCT routinely conducts—as standard practice—periodic ridership counts on its local bus routes and increases service where operationally warranted and fiscally feasible. Therefore, the 2009 Technical Memorandum concluded that no additional measures would need to be proposed to address any new over-capacity conditions on local bus service under the analyzed schedule change to 2019.

Pedestrians

Existing 2006 pedestrian volumes at the Project site were relatively low; and all sidewalks, corner areas, and crosswalks analyzed in the FEIS were expected to operate at good levels of service (LOS A or B) in all peak hours under 2016 No Build conditions. The shift in the Project's Build year from 2016 to 2019 assessed in the 2009 Technical Memorandum would potentially increase No Build volumes by approximately 1.5 percent (i.e., 0.5 percent/year). Given the low existing baseline volumes, this added background growth would result in no more than three additional pedestrians at any analyzed facility in the peak 15-minutes in any peak hour. It was therefore concluded that this small increase in volume compared to the volumes analyzed in the FEIS would not result in any new significant adverse impacts at any analyzed sidewalk, corner area or crosswalk. In addition, as discussed above, peak hour transit demand from discrete No Build sites in the vicinity of Downtown Brooklyn for a 2019 Build year was expected to be lower than was forecast for 2016 in the FEIS due to changes in anticipated No Build development since the FEIS analyses were conducted. Overall, this would be expected to result in somewhat fewer pedestrian trips at analyzed pedestrian elements than was originally forecast.

Delayed Build-Out (2024)

The 2009 Technical Memorandum also assessed the potential effects on the conclusions of the FEIS from a delayed build-out due to prolonged adverse economic conditions. A hypothetical delay of approximately five years was assumed, resulting for analytical purposes in a 2024 Build year. If the 0.5 percent annual growth factor were to be applied to a Build year of 2024, it would potentially represent an approximately four percent increase in background growth compared to the 2016 Build year analyzed in the FEIS. However, as was noted in the Technical Memorandum, under a scenario of prolonged adverse economic conditions that are assumed to delay development projects, the application of this level of background growth to the additional period of delay would not be appropriate. Such robust background growth is not consistent with

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this scenario, under which there would be a reduced demand for housing and commercial space and delays in development projects in the study area.

The 2009 Technical Memorandum found that once adverse economic conditions begin to abate and the economy begins to recover, transportation demand in the study area would once again be expected to experience some level of background growth. New demand from discrete No Build sites in the area would also be generated as these developments once again begin to advance. Although the characteristics of specific No Build projects may have changed in the interim, it was determined that the inclusive list of No Build sites compiled for the 2019 No Build scenario provided a conservative basis for projecting the magnitude of future development that could be expected as conditions improve. Overall, the 2009 Technical Memorandum concluded that the anticipated transit and pedestrian demand from No Build development along with the potential four percent increase in study area background demand associated with a 2024 Build year would not be expected to result in total transit or pedestrian demand greater than what was analyzed in the FEIS for the 2016 Build year. Moreover, under a scenario of prolonged adverse economic conditions, it would be unrealistic to assume that housing and employment growth—the principal factors driving transportation demand—would continue to result in a 0.5 percent annual increase in background growth.

EXTENDED BUILD-OUT SCENARIO

The discussion below evaluates the potential for new significant adverse transit and pedestrian impacts not previously disclosed in the FEIS from the Extended Build-Out Scenario.

As discussed in Chapter 13, “Transit and Pedestrians,” of the FEIS, a total of approximately five percent background growth (0.5 percent per year) was applied to 2006 existing baseline transit (subway and bus) and pedestrian volumes for the 2006 through 2016 period. This background growth rate, recommended in the 2001 *CEQR Technical Manual* for projects in Downtown Brooklyn, was applied to account for travel demand from smaller developments, as-of-right developments not reflected in the land use analyses, and general increases in travel demand not attributable to specific development projects. The Extended Build-Out Scenario would potentially represent an additional ten percent of background growth over 2016 levels (based on a background growth of 0.5 percent per year, in line with the 2001 CEQR guidance).

Transit—Subway

Analyzed stairways and fare arrays at the Atlantic Avenue/Pacific Street subway station complex, and the Bergen Street (2, 3), Fulton Street (G), and Lafayette Avenue (C) subway stations were assessed to determine their sensitivity to future increases in peak hour demand above what was assumed in the FEIS analyses. As noted previously and demonstrated in Tables 13-45 through 13-47 and Tables 19-9 and 19-10 in the FEIS, existing stairways and fare arrays that would be utilized by Project-generated demand are all projected to operate at no more than 61 percent of capacity under 2016 Build with Mitigation conditions. Therefore, under the Extended Build-Out Scenario, future volumes at these existing facilities would have to increase by 39 percent or more from what was forecast in the FEIS before reaching capacity conditions. In addition, much of the future demand at the proposed new on-site entrance and associated circulation improvements at the Atlantic Avenue/Pacific Street subway station complex is expected to be generated by the development on the Project site. These facilities would therefore not be as sensitive to increases in general background growth (background growth would not apply to project-generated demand).

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In addition to background growth, the analyses of 2016 subway and bus conditions in the FEIS reflected the transit demand from No Build developments that were anticipated in Downtown Brooklyn and its vicinity by 2016 (see Table 3). Since issuance of the FEIS, some development projects have been completed in the surrounding area; some are now on hold, due to changes in market conditions and financing availability; and some new projects are under development. Overall, as shown in Table 3, development totaling approximately 3,596 dwelling units, 16,000 square feet of office space, 591,500 square feet of retail space, 694 hotel rooms and 934,700 square feet of courthouse and other space was completed by 2010. An additional 6,676 dwelling units; 2,554,491 sf of office space; 668,024 sf of retail space, 959 hotel rooms, and 885,903 sf of other space is now anticipated to be developed in Downtown Brooklyn and its vicinity. Of the approximately 5,185,400 square feet of office space considered in the 2016 No Build scenario for the transportation analyses in the FEIS, only 2,570,491 square feet has been developed or is now planned for development, a decrease of approximately 50 percent. Much of this office space has been or is projected to be developed as residential space, a use that typically generates a lower level of transit demand during the weekday AM, PM, and weekday pre-game peak hours analyzed in the FEIS.

Table 4 shows the estimated travel demand generated by the No Build residential, office, retail and hotel development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from such new development now anticipated to occur by 2035. As shown in Table 4, it is estimated that the residential, office, retail and hotel uses in the FEIS 2016 No Build development scenario would generate 11,382 subway trips in the weekday AM peak hour, 14,965 in the weekday PM peak hour and 6,331 in the weekday pre-game peak hour. For the FEIS subway analyses, the subway trips generated by No Build sites were added to the 2006 baseline network (along with a total of approximately five percent background growth) to forecast 2016 No Build conditions. By comparison, new residential, office, retail and hotel development now anticipated to occur by 2035 would generate an estimated 7,638, 9,908 and 4,980 new subway trips in the weekday AM, PM and pre-game peak hours, respectively. There would be 3,744 fewer subway trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 5,057 fewer in the PM and 1,351 fewer trips in the weekday pre-game peak hour.

As noted previously, in addition to residential, office, retail and hotel uses, the FEIS No Build scenario accounted for travel demand from the development of approximately 2,244,615 square feet of miscellaneous uses that do not fall into these categories, including academic, marina, rehearsal studio, theater, and performing and visual arts space. By contrast, as shown in Table 3, it is now anticipated that a total of only 885,903 square feet of such space would be developed from 2010 through 2035. Given this decrease in projected development, these miscellaneous uses would generate lower subway demand than what was analyzed in the FEIS, and separate travel demand forecasts for these uses are not included in Table 4.

The analysis of future subway conditions in the FEIS utilized a 2006 baseline condition that was increased by a total of approximately five percent to account for background growth through 2016 (0.5 percent per year, in line with the 2001 CEQR guidance) and to which was added travel demand from No Build developments. It should be noted that average weekday ridership on the New York City Transit subway system actually increased by an average of roughly 1.5 percent per year from 2006 to 2009, more than the 0.5 percent per year rate assumed in the FEIS (likely due in part to the surge in gasoline prices that occurred during this period). However, it is assumed that ridership will not continue to grow at this rate in coming years given that the 2010 *CEQR Technical Manual* recommends that for transportation analyses in the vicinity of Downtown Brooklyn, an

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annual background growth rate of 0.25 percent be applied for the first five years and an annual rate of 0.125 percent be applied for the sixth year and beyond.

In summary, under the Extended Build-Out Scenario there would be a potential ten percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the 2001 *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. However, future volumes at existing subway station stairways and fare arrays analyzed in the FEIS would have to increase by 39 percent or more compared to what was forecast for the 2016 Build with Mitigation condition in the FEIS before reaching capacity. In addition, the number of subway trips generated by No Build development now anticipated to occur by 2035 is expected to be substantially less than what was forecast for 2016 in all analyzed peak hours. Therefore, the potential changes in subway demand resulting from the Extended Build-Out Scenario are not expected to result in new significant adverse subway station impacts.

Under 2001 *CEQR Technical Manual* criteria, projected increases in subway load levels from a No Build condition to a Build condition that exceed practical capacity may be considered significant impacts if a proposed action generates five or more additional passengers per car. As shown in Table 13-48 in the FEIS, with full build-out, the Project would generate an average of no more than 4.2 additional passengers per car in the peak direction on all subway lines serving the Project site. The Project would therefore not result in significant adverse impacts to subway line haul conditions based on 2001 *CEQR Technical Manual* criteria, irrespective of any increase in background growth or demand from No Build development resulting from the Extended Build-Out Scenario.

Transit-Buses

As shown in Table 13-49 in the FEIS, the proposed Project would generate from 2 to 38 new peak direction trips on analyzed bus routes in either the AM or PM peak hour in the 2016 Build condition. As disclosed in the FEIS, under NYCT guidelines, this demand would result in a capacity shortfall of 14 spaces on westbound B38 buses in the AM peak hour, resulting in a significant adverse bus impact based on the current service frequency of B38 buses. As standard practice, NYCT routinely conducts ridership counts and adjusts bus service frequency to meet its service criteria, within fiscal and operating constraints. Therefore, no mitigation was proposed for this potential impact to westbound B38 bus service. Under the Extended Build-Out Scenario, there would be no change in the number of peak hour bus trips generated by the Project, and therefore, the incremental change in bus load levels resulting from the Project in 2035 would also remain unchanged from what was analyzed in the FEIS.

It is expected, however, that there would be changes in background growth and No Build site demand under the Extended Build-Out Scenario. The Extended Build-Out Scenario would potentially represent an approximately ten percent increase in background growth (based on the 0.5 percent/year growth rate recommended in the 2001 *CEQR Technical Manual*) compared to the level of background growth assumed in the FEIS for the 2006 through 2016 period. By contrast, overall New York City Transit bus ridership actually decreased by two percent (an average of 0.67 percent per year) from 2006 to 2009 compared to the 1.5 percent (0.5 percent per year) increase assumed for this period in the FEIS.

Table 4 shows the estimated travel demand generated by the No Build development assumed for the 2006 through 2016 period in the FEIS, and the estimated travel demand from new development now anticipated to occur by 2035. As shown in Table 4, it was estimated that the

residential, office, retail and hotel uses in the FEIS No Build scenario would generate 1,028 bus trips in the weekday AM peak hour, 1,621 in the weekday PM peak hour and 572 in the weekday pre-game peak hour. By comparison, new residential, office, retail and hotel development now anticipated to occur by 2035 would generate an estimated 621, 969 and 388 new bus trips in these peak hours, respectively. There would be 407 fewer bus trips generated in the weekday AM peak hour compared to the FEIS No Build development scenario, 652 fewer in the PM and 184 fewer in the weekday pre-game peak hour. Overall, the data in Table 4 indicate that the number of bus trips generated by No Build residential, office, retail and hotel development through 2035 is expected to be less than what was forecast for 2016 in the analyzed weekday AM, PM and pre-game peak hours. However, it should be noted (as it was in the 2009 Technical Memorandum) that some bus routes may experience localized increases in No Build demand due to background growth and new No Build projects located in their proximity, and/or changes in the directional distribution of peak hour trips due to changes in programmed uses (e.g., from an office travel pattern to a residential one).

It is therefore possible that one or more additional bus routes could experience over-capacity conditions under the Extended Build-Out Scenario. As it is anticipated that the proposed Project would generate from 2 to 38 new peak direction bus trips on any analyzed route—less than the 65-passenger capacity of a single bus—any new over-capacity condition that may occur would be fully addressed by the addition of a single peak direction bus in the affected peak hour. As previously noted, NYCT routinely conducts—as standard practice—periodic ridership counts on its local bus routes and increases service where operationally warranted and fiscally feasible. Therefore, no additional measures would need to be proposed to address any new over-capacity conditions on local bus service under the Extended Build-Out Scenario.

Pedestrians

As discussed in the FEIS, existing pedestrian volumes at the Project site are relatively low, and all analyzed sidewalks, corner areas, and crosswalks are expected to operate at good levels of service (LOS A or B) in all peak hours under 2016 No Build conditions. The Extended Build-Out Scenario would increase No Build volumes by approximately ten percent (i.e., 0.5 percent/year). Given the low existing baseline volumes, this added background growth would result in the addition of fewer than two persons per minute at any analyzed facility in any peak hour. This small increase in volume compared to the volumes analyzed in the FEIS is not expected to result in any new significant adverse impacts at any analyzed sidewalk, corner area or crosswalk.

As shown in Table 4 and discussed above, peak hour transit demand from discrete No Build sites in the vicinity of Downtown Brooklyn is generally expected to be lower than was forecast in the FEIS due to changes in anticipated No Build development since the FEIS analyses were conducted. Overall, this would be expected to result in somewhat fewer pedestrian trips at analyzed sidewalks, corner areas and crosswalks than was originally forecast. It should be noted, however, that one new development not previously analyzed in the FEIS—470 Vanderbilt Avenue—would add approximately 376 dwelling units, 1,091 square feet of office space, and 115,424 square feet of retail space in proximity to the intersection of Vanderbilt and Atlantic Avenues at the northeast corner of the Project site. As all analyzed sidewalks, corner areas, and crosswalks at this intersection were predicted in the FEIS to operate at high levels of service (LOS A or B) in all peak hours under 2016 Build conditions, the additional pedestrian demand from this one development, coupled with the additional background growth under the Extended Build-Out Scenario, is not expected to result in any new significant adverse pedestrian impacts.

AIR QUALITY

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to air quality. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not affect the proposed uses, their emissions, or traffic generated by those uses, which would remain the same as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP and 2006 Design Guidelines. As set forth in the Amended Memorandum of Environmental Commitments, the Project sponsors are obligated to implement measures to minimize air emissions. The stipulations in the Amended Memorandum of Environmental Commitments would not be affected by the Extended Build-Out Scenario. Thus, the Extended Build-Out Scenario would not result in any changes that would affect the air quality analysis as described in the FEIS. A discussion of impacts to air quality during the Extended Build-Out Scenario construction period is provided in Section E, “Construction Period Impacts,” below.

NOISE

The Extended Build-Out Scenario would not result in significant adverse environmental impacts with respect to noise that were not addressed in the FEIS. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not affect the proposed uses, which would remain the same as described in the FEIS. Thus, the Extended Build-Out Scenario would not result in any changes that would affect the noise analysis as described in the FEIS. A discussion of impacts to noise during the Extended Build-Out Scenario construction period is provided in Section E, “Construction Period Impacts,” below.

NEIGHBORHOOD CHARACTER

As presented in the FEIS, the Project would result in localized neighborhood character impacts to immediately adjacent lower density uses in the transitional areas to the south of the Project site, but would not result in significant adverse impacts to the overall neighborhood character of the study areas. Since Project planning progressed since the FEIS, the Project sponsors further developed the design of certain buildings and eliminated certain Project elements. The design development was described and analyzed in the 2009 Technical Memorandum and 2009 MGPP. As noted in the 2009 Technical Memorandum, the design development would not change the FEIS build program notably—the Project would still result in new development that would clearly and substantially alter neighborhood character on the Project site—and would not result in impacts different from those previously identified in the FEIS.

The Extended Build-Out Scenario would not change the FEIS conclusion that the completed Project would not result in significant adverse environmental impacts with respect to neighborhood character. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not affect the proposed uses, which would remain the same as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP and 2006 Design Guidelines. Thus, the Extended Build-Out Scenario would not result in any changes that would affect the neighborhood character analysis for the completed Project as described in the FEIS. A discussion of impacts to neighborhood character during the Extended Build-Out Scenario construction period is provided in Section E, “Construction Period Impacts,” below.

PUBLIC HEALTH

The Extended Build-Out Scenario would not change the FEIS conclusion that the Project would not result in significant adverse environmental impacts with respect to public health. The Extended Build-Out Scenario would affect the timing of construction of the buildings but would not affect the proposed uses, which would remain the same as analyzed in the FEIS, 2009 Technical Memorandum, or as specified in the 2009 MGPP and 2006 Design Guidelines. Thus, the Extended Build-Out Scenario would not result in any changes that would affect the public health analysis as described in the FEIS.

E. CONSTRUCTION PERIOD IMPACTS

Potential construction impacts for the Project were analyzed in detail in the 2006 FEIS and further evaluated in the 2009 Technical Memorandum. The methodologies and findings of these analyses, along with an assessment of the potential construction impacts of the build-out of the Project under the Extended Build-Out Scenario, are discussed below.

2006 FEIS

The 2006 FEIS construction impact analysis examined the potential effects of Project construction on a number of technical areas, including land use, socioeconomic conditions, community facilities, open space, historic resources, hazardous materials, traffic and transportation, air quality, noise and vibration, infrastructure, and neighborhood character.

DESCRIPTION AND SEQUENCING

The FEIS assumed a schedule whereby construction would be completed over a 10-year period, between the 4th quarter of 2006 and the 4th quarter of 2016, as depicted in **Figure 2** [Figure 17-1 in FEIS]. Phase I was to begin with the reconstruction of the LIRR Vanderbilt Yard and the construction on Blocks 927, 1118, 1119, and 1127. Environmental remediation and demolition of existing buildings on all blocks would occur in Phase I. The arena and the subway entrance were expected to be open in October 2009, and the rest of the Phase I development would be completed by the 4th quarter of 2010. In general, the construction of the buildings was to move from west to east, starting on Blocks 1118, 1119, and 1127 (Arena, Urban Room, and Buildings 1 through 4) followed by Block 927 (Site 5). Also included in Phase I was the construction of the West Portal between the Vanderbilt Yard and Flatbush Avenue Terminal; MTA/NYCT connections; installation of major new sewer and water lines; and other utility lines, such as telecommunication facilities with capacity for the complete Project. During Phase I, the period with the greatest number of buildings simultaneously under construction was projected to be between late 2008 to early 2009 when the arena, the LIRR improvements, and five buildings were to be in various stages of construction. **Figure 3** [Figure 17-2 in FEIS] illustrates the activities that were assumed to occur during peak Phase I construction. The levels of construction activities before and after the Phase I peak were to be of lesser intensity. In Phase II, the construction activity would be less intense than during Phase I. From 2010 to 2014, the activity would be centered on Block 1120 with a peak projected to be between the end of 2011 and the beginning of 2012, as illustrated in **Figure 4** [Figure 17-3 in FEIS]. In 2014, the work would shift to Blocks 1121 and 1129 with a secondary peak in 2016. The buildings in Phase II could have proceeded in a different sequence but the effects would not have been materially different.

ASSESSMENT OF IMPACTS

As demonstrated in the summary of FEIS analyses below, the determination of significant adverse impacts during construction relies mainly on the intensity of construction activities and their potential effects on the environment. Since these activities would move through the development area as Project components are being constructed, they would not have prolonged effects on individual uses in the area. Therefore, most areas of environmental concern would be independent of the overall duration of Project construction under the Extended Build-Out Scenario.

To address the environmental concerns described below, the Project sponsors are obligated to incorporate various measures pursuant to the Memorandum of Environmental Commitments. These measures would be requirements of the construction contract documents. For construction, the Project sponsors must undertake, fund, and cooperate in procedures and mitigation measure implementation to minimize the effects of Project construction on traffic conditions, noise, and air quality in the surrounding area. The Memorandum was amended in accordance with the 2009 MGPP. These commitments are further described in detail for each technical category below under the discussion of the Extended Build-Out Scenario.

Land Use

The FEIS noted that construction activities would not occur on every Project block at the same time. Concurrent construction activities would be of varying intensities and construction parking and staging areas would be of similar industrial character as certain existing on-site and adjacent uses. No portion of the Project site would be subject to the full effects of the construction for the entire construction period. Although construction activities would be disruptive and concentrated on some blocks for an extended period of time, there would be measures in place to control noise, vibration, and dust on construction sites, to reduce views of construction sites, and to buffer noise emitted from construction activities. The FEIS, therefore, concluded that significant adverse impacts on land use are not anticipated.

Socioeconomic Conditions

The FEIS disclosed that construction activities associated with the Project would, in some instances, temporarily affect socioeconomic conditions in the vicinity of the Project site. However, access to businesses near the Project site would not be impeded, and most businesses were not expected to be significantly affected by a temporary reduction in the amount of pedestrian foot traffic that could occur as a result of construction activities. Furthermore, because the effects of construction would vary in levels, moving through the development area as different components of the Project get completed and not impeding nearby businesses over the long-term, the FEIS concluded that construction of the Project would not result in any significant adverse impacts on surrounding businesses.

Community Facilities

The FEIS found that none of the community facilities in the area would be affected by construction activities for an extended duration. All community facilities located in close proximity to the Project site are at the western end of the site and therefore would be affected only during the construction of the earlier Project components (i.e., the arena block). The construction sites would be surrounded by construction fencing and barriers that would limit the effects of construction on nearby facilities. Measures outlined in the Construction Protection Plan (CPP) and Maintenance and Protection of Traffic (MPT) Plan would ensure that lane

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closures and sidewalk closures are kept to a minimum and that adequate pedestrian access is maintained to community facilities in the vicinity of the Project site. Construction of the Project would not block or restrict access to any facility in the area, and would not affect emergency response times significantly. NYPD and FDNY emergency services and response times would not be significantly affected due to the geographic distribution of the police and fire facilities and their respective coverage areas. The FEIS found that the only community facility that would experience a significant adverse impact is the Pacific Branch of the Brooklyn Public Library, from noise during the construction of the new arena. Although other community facilities in the area may be affected by construction noise, they would not experience significant adverse impacts.

Open Space

The FEIS noted that construction activities would not displace any existing open space resources. While certain existing and Project open spaces may be temporarily affected by noise from construction activities, access to these open spaces would not be impeded at any point during the construction period. The use of the proposed open spaces to be constructed as part of the Project would be temporarily affected by the construction of adjacent buildings. The FEIS, however, identified a significant adverse impact with respect to open space resources upon the completion of Phase I of the Project, due to the additional residents and commercial occupants of the Phase I period, and also identified noise-related impacts during construction on certain open space areas, as described below.

Cultural Resources

The FEIS indicated that the Landmarks Preservation Commission (LPC) and the New York State Office of Parks, Recreation and Historic Preservation (ORPHP) would be consulted regarding testing for historic period archaeological resources for five lots on the Project site west of 6th Avenue, and, if required, the implementation of mitigation measures. With regard to historic resources, demolition of the former LIRR Stables at 700 Atlantic Avenue and the former Ward Bread Bakery complex at 800 Pacific Street would be significant adverse impacts. Measures to partially mitigate these impacts were developed in consultation with OPRHP and are stipulated in a Letter of Agreement among ESDC, OPRHP, and the Project sponsor. It was further noted that the Project sponsors would prepare and implement a Construction Protection Plan (CPP) to avoid construction related impacts on historic resources within 90 feet of Project construction. For the Atlantic Avenue subway station, consultation with NYCT and OPRHP regarding the proposed finishes in the station where new construction would connect to the historic tiled platform walls would be undertaken, and an evaluation of the potential salvage and reuse potential of materials to be removed in the non-public areas would be conducted. Therefore, the FEIS concluded that the Atlantic Avenue Subway Station would not be adversely impacted.

Hazardous Materials

The potential for contamination in the subsurface (related primarily to localized current or former gas stations and historic fill) and inside buildings (primarily related to asbestos) was identified in the FEIS. However, with the implementation of asbestos removal in accordance with applicable regulations prior to building demolition and a variety of remediation and site-safety measures during excavation, no significant adverse impacts related to hazardous materials were expected to occur as a result of construction of the Project. These measures would include development and implementation of a CHASP, community air monitoring plan during

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excavation, and regulatory oversight of petroleum-related spills by the NYSDEC, where applicable.

Traffic and Transportation

Since there would be different types and levels of construction activities at varying locations within and adjacent to the development area, the FEIS assessment focused on determining potential transportation-related impacts at illustrative points in time during which there would be the highest projected levels of construction activities and when roadway characteristics may be unique (i.e., during specific roadway closures or after permanent change in intersection configuration or street directions). As shown in **Figures 5, 6, and 7** [Appendix Exhibits F17a-31 to F17a-33 in FEIS] for Phases 1A, 1B, and 2B, respectively, different traffic study areas were selected to assess worst-case conditions during three separate time periods. Because construction activities during other phases or times of construction would be lower, any potential impacts would have been addressed in the aforementioned analyses. This methodology of impact determination, consistent with CEQR guidance, is not duration dependent but rather is keyed to the types and levels of construction activities while accounting for changing background conditions.

Traffic

The detailed construction traffic analysis in the FEIS concluded that significant adverse traffic impacts would occur at numerous locations throughout the construction period. However, these impacts would be attributable primarily to factors other than the added traffic from construction trucks and worker vehicles. The permanent closure of several streets within the Project site, the lane disruptions during utility installation and rail yard improvements, and the reconstruction of two bridges over the rail yard were determined to be the main reasons for changes in area travel patterns and traffic diversions. These traffic diversions, when combined with construction-generated traffic, would concentrate traffic at specific intersections near the Project site and result in the projected significant adverse traffic impacts.

Although construction traffic would be more dispersed away from the construction site, significant adverse traffic impacts were also identified for outlying intersections along Atlantic Avenue west of the Project site. Furthermore, as roadway disruptions associated with temporary lane and street closures would affect area intersections during construction peak hours, they would have similar effects on peak hour conditions when background and, following the completion of Phase I of the Project, operational traffic would be higher. Overall, significant adverse traffic impacts during construction were identified for 12 intersections in proximity to the Project site and seven outlying intersections.

Mitigation measures proposed to mitigate Project operational impacts were evaluated to determine the appropriate strategies for addressing traffic impacts during construction. While the proposed mitigation measures would be appropriate for early implementation, some significant adverse traffic impacts during construction, as with the operational conditions, would remain unmitigated.

Parking

Parking demand for construction workers at the site was anticipated during the peak year to average 733 construction worker vehicles arriving at the Project site during the 6 to 7 AM morning peak hour, and the total parking demand would be 916 construction-worker vehicles during the peak year. While some construction workers were expected to find nearby on-street

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parking, the overall projected demand would exceed what would be available on-street. To avoid overtaxing nearby on- and off-street facilities, the Project sponsors would provide on-site (southern half of Block 1129) parking for construction workers at a fee that is comparable to other parking lots/garages in the area. By charging a fee and also limiting its parking capacity only to accommodate the anticipated demand, the on-site parking facility would help in minimizing the number of construction worker vehicles circulating for on-street parking in the area, while at the same time not encouraging the use of private automobiles as the means of travel to the Project site. Since all projected construction worker parking demand would be met, no parking shortfall was anticipated during any phase of construction at Atlantic Yards and the Project was not expected to result in any potential significant adverse parking impacts during construction.

Transit and Pedestrians

The FEIS found that 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. Only nominal increases in transit demand would be experienced along each of these routes and at each of the transit access locations during hours outside of the typical commuter peak periods. Pedestrian trips generated by construction workers would similarly be made during off-peak hours and dispersed to various pedestrian routes. Furthermore, appropriate measures for maintaining temporary sidewalks and overhead protections would be provided throughout construction. Therefore, no significant adverse transit and pedestrian impacts were expected to occur for the entire duration of Project construction.

Air Quality

Construction activities have the potential to impact air quality as a consequence of emissions from on-site construction engines as well as emissions from on-road construction-related vehicles and their effects on traffic congestion. Among these, emissions from diesel engines, primarily from on-site construction equipment, is the major source of adverse effects to air quality. Hence, the determination of potential air quality impacts also hinges on the level of construction activities concurrently taking place at the Project site. The FEIS analysis predicted emission profiles for various pollutants to identify concentrations during various stages of peak construction. The analysis results showed that concentrations of carbon monoxide (CO), nitrogen dioxide (NO₂), and particles with an aerodynamic diameter of less than or equal to 10 micrometers (PM₁₀) were not predicted to be significantly impacted by the construction of the Project in any phase of construction. Although concentrations of particles with an aerodynamic diameter of less than or equal to 2.5 micrometers (PM_{2.5}) were found to increase to levels exceeding the City's interim 24-hour and annual average guidance thresholds in areas immediately adjacent to the construction activity, the PM_{2.5} threshold exceedances were predicted to be limited in extent, duration, and severity. This low level of impact can be mostly attributed to the extensive measures incorporated into the Project construction program aimed at reducing PM_{2.5} emissions. Therefore, no significant adverse impacts on air quality were predicted during the construction of the Project.

Noise and Vibration

Impacts on community noise levels during construction of the Project can result from noise and vibration associated with construction equipment operation and from construction vehicles and delivery vehicles traveling to and from the site. Noise and vibration levels at a given location are dependent on the kind and number of pieces of construction equipment being operated, the

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acoustical utilization factor of the equipment (i.e., the percentage of time a piece of equipment is operating), the distance from the construction site, and any shielding effects (from structures such as buildings, walls, or barriers). Noise levels caused by construction activities would vary widely, depending on the phase of construction and the location of the construction relative to receptor locations. Absent blasting and/or rock removal (which is not anticipated for the Project), the most significant construction noise sources were expected to be equipment such as jackhammers, pile drivers, impact wrenches, and paving breakers, as well as the movements of trucks and cranes. As with the analysis of traffic and transportation and air quality, the determination of potential impacts is based on predicted escalation of noise and vibration levels, which are directly correlated with intensity of construction activities.

Noise

The Project sponsors are obligated to incorporate into the Project measures to reduce or avoid noise impacts due to Project construction activities. After implementation of these measures, there would still be locations where construction activities alone, and construction activities combined with Project-generated traffic, would result in predicted significant adverse noise impacts on the adjacent properties. The FEIS analysis results indicated that there would be three open space resources that would experience significant adverse noise impacts during some portion of the construction period: Brooklyn Bear's Community Garden, the Dean Playground, and South Oxford Park. Because of safety and aesthetic concerns, there was found to be no feasible and practicable mitigation that would eliminate Project impacts; however, with respect to the Dean Playground, the impact would be partially mitigated by the provision of an amenity to the park users. Construction noise mitigation measures for the Pacific Street Branch of the Brooklyn Public Library and the Temple of Restoration on Dean Street were developed.

Significant noise impacts were predicted to occur at the exterior of a number of residential locations during some portion of the construction periods. The majority of buildings near or adjacent to the Project site either have double glazed windows or storm windows. In addition, a large number of residences have some form of alternative ventilation, either window, through-the-wall (sleeve), or central air conditioning. At exterior locations where significant adverse noise impacts were predicted to occur, and where the residences do not contain both double-glazed or storm-windows and alternative ventilation (i.e., air conditioning), the Project sponsors would make these mitigation measures available, at no cost for purchase and installation to owners of residences. In addition, potential significant adverse noise impacts from construction were identified at the exterior of upper floors of certain residential buildings on the north side of Atlantic Avenue and potentially on streets north of Atlantic Avenue. Generally, all of the sites identified north of Atlantic Avenue already have double-glazed windows with sleeves for alternate ventilation. However, residents within the identified zone who do not have double-glazed or storm-windows and alternative ventilation and choose not to accept the mitigation measures made available, would experience significant adverse impacts from construction noise at these locations.

Vibration

The Project sponsors are obligated to implement a monitoring program to ensure that no architectural or structural damage to nearby historic buildings would occur due to vibration from construction activities.

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Infrastructure

In order to construct the Project, several major water and sewer lines would have to be relocated, as well as many smaller utility lines. Water and sewer service lines would have to be connected to the new buildings. All relocations and replacements would meet the standards of DEP and would have to be approved by that agency. The department regularly repairs, relocates, and replaces water and sewer lines without disruption to service. Therefore, no significant adverse impacts on the infrastructure systems or to users were predicted in the FEIS. Construction-generated solid waste would be disposed of off-site at appropriate land fills through the use of private carters.

During construction, energy for the construction activities would be provided to the Project site through the grid power and, as necessary, on-site generators. The Project sponsors have met with Con Edison to ensure the early connection of grid power to the site for use during construction. This would ensure that grid power would be available on site prior to the peak construction period. The amount of electricity required for Project construction would not exceed the amount of electricity required to support the completed development. Relative to the capacity of the city's electric system, the increase in demand was found to be insignificant and there would be no significant adverse impact to the provision of energy to the site or the surrounding area.

Neighborhood Character

With regard to neighborhood character, construction activity associated with the Project was found to have significant adverse localized neighborhood character impacts in the immediate vicinity of the Project site during construction. The degree of this impact would depend on the type of construction activity being performed, the location and the length of time this disruption is expected to occur, and the character of the immediately adjacent neighborhoods. Construction would change the character of the Project site from an underutilized and blighted area to one of construction activity. The existing uses on the site do not contribute to a vibrant neighborhood character, and their replacement with construction activities, which are expected to cause localized impacts but not alter the character of the larger neighborhoods surrounding the Project site, would not result in significant adverse impacts on neighborhood character, except in the immediate vicinity of the Project site.

2009 TECHNICAL MEMORANDUM

As described above, the 2009 Technical Memorandum was prepared to address certain Project modifications and a change in Project completion schedule.

DESCRIPTION OF 2009 CHANGES

As affirmed, the 2009 MGPP allowed for the phased acquisition of property, with the first phase assumed to be completed toward the end of 2009, encompassing the arena block, including the Pacific Street streetbed between Vanderbilt and Carlton Avenues, Block 1129, and certain lots on Blocks 1120 and 1121. The second phase was anticipated to occur toward the end of 2011 and would encompass the remainder of the Project site. Thus, certain land that had been planned to be used for staging of materials would not be acquired; nor would it be available for the arena construction. Instead, part of the construction material staging for the arena would have to take place on the arena block, and the remainder of the staging area and construction parking would continue to be located on Block 1129.

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In addition to the above changes in property acquisition, the modified design of the arena would be simpler than described in the FEIS and the modified arena would cover less ground area during construction, making available space for on-site staging of materials. The replacement of the 6th Avenue Bridge would no longer be necessary, and thus there would be fewer infrastructure improvements constructed.

The 2009 Technical Memorandum addressed two delay scenarios. First, it assessed how construction impacts would change if the schedule were simply shifted ahead by three years. Second, it considered the potential for additional impacts resulting from a further delay in construction. Due to delays in the commencement of construction on the arena block, the anticipated Phase I completion was extended from 2010 to 2014. For the same reason, completion of Phase II or the full build-out of the Project was extended from 2016 to 2019.

As detailed in **Table 5** below, the 2009 Technical Memorandum found that the duration of construction of most Project elements, would not change as a result of their modified start date within the overall construction schedule. Rather, with the exception of Project elements whose construction had already commenced, the schedule's overall timeline reflected a shift by approximately three years from what was presented in the FEIS. Under the schedule presented in the FEIS, in the fourth quarter of 2009 the construction of the arena would be completed and by the fourth quarter of 2010 the remaining arena block buildings—Buildings 1, 2, 3, and 4—would be completed. Under the revised schedule, completion of the arena construction would occur in the first quarter of 2012, and the reconstruction of the Carlton Avenue Bridge would be completed in time for the opening of the arena and would be compatible with LIRR rail yard operations and the new permanent yard, which was expected to be completed in 2013. The duration of the LIRR rail yard's construction—as well as the duration of construction for the site preparation and platforms on Blocks 1120, 1121, and 1128—would be longer than anticipated in the FEIS.

The 2009 Technical Memorandum found that no significant adverse impacts would result from shifting the start date forward by three years.

DELAYED BUILD-OUT

The 2009 Technical Memorandum also provided an assessment of potential delays to the build-out of the Project, using 2024 as a benchmark for the technical areas undergoing a quantitative analysis. The assumed delays would not affect the completion timing of the arena and Building 2, transit access improvements, construction of the new LIRR rail yard, or reconstruction of the Carlton Avenue Bridge. However, instead of having continuous construction of the platform over the rail yard in Phase II, the delayed build-out was assumed to involve platform construction in sections, with each of the corresponding buildings moved forward in development. In Appendix A of the 2009 Technical Memorandum, potential effects of completion delay of Building 1 from 2013 to 2017 was addressed, as noted in **Table 5** above.

Table 5
FEIS and 2009 Technical Memorandum Construction Phasing

Project Component	FEIS		2009 Technical Memorandum	
	Duration	Time Period	Duration	Time Period
Phase I				
LIRR Rail Yard*	42 months	2006-2010	79 months	2007-2013
Arena**	32 months	2007-2009	29 months	2009-2012
Building 1***	41 months	2007-2010	35 months	2010-2013
Building 2	22 months	2008-2009	22 months	2010-2012
Building 3	32 months	2008-2010	32 months	2010-2013
Building 4	36 months	2008-2010	36 months	2011-2014
Site 5	41 months	2007-2010	37 months	2011-2014
Phase II				
Platform Block 1120	23 months	2009-2011	29 months	2011-2014
Building 5	24 months	2011-2012	24 months	2013-2015
Building 6	21 months	2011-2012	21 months	2014-2016
Building 7	30 months	2011-2013	32 months	2014-2017
Site Preparation Blocks 1121 & 1129	71 months	2006-2012	107 months	2007-2014
Platform Block 1121	20 months	2011-2012	20 months	2014-2015
Building 8	18 months	2012-2014	18 months	2015-2017
Building 9	21 months	2014-2015	21 months	2017-2018
Building 10	20 months	2015-2016	20 months	2018-2019
Building 11	18 months	2015-2016	18 months	2018-2019
Building 12	21 months	2015-2016	20 months	2018-2019
Building 13	18 months	2014-2015	18 months	2017-2018
Building 14	15 months	2012-2013	15 months	2015-2016
Building 15	31 months	2010-2012	32 months	2012-2015
Notes: *Extended schedule reflects periodic suspensions of construction activity since commencement of the temporary yard in 2007. **Includes excavation *** Potential for further delay in the completion of Building 1 was assessed in Appendix A to the 2009 Technical Memorandum.				

ASSESSMENT OF IMPACTS

The FEIS construction analysis examined the potential effects of Project construction on a number of technical areas. However, not all of these areas would be affected by the changes addressed in the 2009 Technical Memorandum. Therefore, this Memorandum’s construction impact analysis focused only on those technical areas that could be affected by the GPP modifications, design development, and schedule change. Conclusions made in the 2006 FEIS on potential impacts during construction for land use, socioeconomic conditions, community facilities, open space, historic resources, hazardous materials, and infrastructure would remain unchanged and were not further discussed. Comparisons to the findings presented in the 2006 FEIS with respect to traffic and transportation, air quality, and noise were made in the 2009 Technical Memorandum and are summarized below.

Traffic and Transportation

As illustrated in **Figure 8** [Figure 7 in 2009 Technical Memorandum], compared to the construction schedule analyzed in the FEIS, the revised construction schedule was found to result in maximum construction activities shifting from 2008-2009 to 2012, with fewer deliveries and approximately 40 percent fewer estimated daily workers. However, peak construction under the revised schedule would take place after the completion of the arena and

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Building 2, whereas peak construction under the FEIS schedule was projected to occur prior to completion of any building. Hence, prior to any buildings having been completed, the revised schedule would generate less peak construction traffic than analyzed in the FEIS. For the new construction peak in 2012, projected construction traffic levels would be comparable to those projected for the FEIS Phase II peak construction analysis. In that analysis, the entire arena block (the arena and Buildings 1, 2, 3, and 4) was assumed to be completed, whereas for the new construction peak in 2012, only the arena and Building 2 would be completed. Therefore, operational traffic attributed to the completed components of the arena block would be less with the Project modifications. Overall, the cumulative peak conditions resulting from the revised construction schedule was found to fall within the maximum envelopes analyzed in the FEIS.

Furthermore, since peak construction activities under the revised construction schedule would take place after the completion of the arena, roadway improvements, traffic mitigation measures, traffic circulation plans, and updated curbside parking regulations described in the FEIS would already be in place to accommodate operational traffic from the arena and other to be completed buildings. Hence, the magnitude of temporary significant adverse traffic impacts generated by the construction activities under the revised construction schedule was expected to be similar to or lower than estimated in the FEIS. Therefore, the 2009 Technical Memorandum found that the revised construction schedule would not be expected to result in additional or new significant adverse construction traffic impacts or required mitigation measures or additional parking resources that were not identified in the FEIS. With overall lower levels of construction worker trips, there would also not be a potential for significant adverse transit and pedestrian impacts during construction. The 2009 Technical Memorandum found that if there is a delay in build-out beyond 2019, the build-out of buildings would be more spread out, resulting in a lower intensity of construction activities and therefore lower or similar impacts.

Air Quality

The construction air quality analysis in the FEIS was revisited to determine if the revised construction schedule would have the potential to cause new significant adverse impacts not identified in the FEIS. The general means and methods used for construction, as presented in the FEIS, were not expected to change as a result of the revised construction schedule. In order to assess the potential change in the impact on air pollutant concentrations associated with the revised schedule, the emissions assumptions prepared for the FEIS were applied to the revised schedule, resulting in new estimates ('emissions profiles') of 24-hour and annual average fine particulate matter (PM_{2.5}) emissions throughout the duration of construction. These emissions profiles were then compared with the profiles presented in the FEIS. The new 24-hour and annual average ground-level emissions profiles with the revised construction schedule, together with the previous profiles presented in the FEIS, were presented in Figures 8 and 9 in 2009 Technical Memorandum, respectively. Ground-level emissions are emissions from activities that do not occur at elevated locations in the constructed buildings. Since most emissions would be near ground level, and the nearest receptors are at ground level, the highest impacts were predicted to be at ground level and are affected mostly by emissions at or near ground level.

As presented in the figures, the level of intensity during the peak construction period with the revised schedule would be lower than that analyzed in the FEIS. With the revised schedule, a peak in 24-hour average ground-level emissions of 5.1 pounds per day (lb/day) was predicted, whereas a peak of 7.4 lb/day was predicted in the FEIS. Similarly, the peak annual average ground-level emission with the revised schedule was predicted to be 2.3 lb/day, whereas an annual peak of 2.8 lb/day was predicted in the FEIS. The 2009 Technical Memorandum,

therefore, found that the revised schedule would therefore result in lower peak emission levels than those predicted in the FEIS, and would therefore generally result in lower concentration increments. Furthermore, since the FEIS was published, additional information regarding emissions controls had become available, indicating that the diesel particle filters (DPFs)—the central component of the emissions reduction program being applied for the construction of the Project—reduce emissions significantly more than was assumed in the analysis. In the FEIS, DPFs were assumed to reduce diesel particulate matter (DPM) by 85 percent. The latest information indicates that almost all DPFs reduce DPM emissions by at least 92 percent, and most are in the range of 95 to 98 percent. Several large construction projects analyzed more recently under the City Environmental Quality Review program have applied an assumption of 90 percent reduction. Applying this assumption would result in overall emission increments that are at least 1/3 lower than presented in the FEIS, and in all likelihood closer to 2/3 lower. Therefore, the revised construction schedule was expected to yield lower emissions than what was disclosed in the FEIS and, as with the FEIS findings, would not result in any significant adverse impacts on air quality during construction. If there is a delay in build-out beyond 2019, completion of Project buildings would be more spread out, requiring fewer pieces of construction equipment to be used simultaneously, thereby resulting in even lower projected emission increments.

Noise

The construction noise analysis presented in the FEIS was also reviewed to determine if the revised construction schedule would have the potential to cause new significant adverse impacts not identified in the FEIS. The construction noise analysis presented in the FEIS concluded that at a number of specific locations near the Project site, for specific periods of time, significant adverse noise impacts would occur as a result of the construction of the approved Project. In addition, the FEIS identified measures, some of which the Project sponsors have already implemented, to mitigate these impacts.

The revised construction schedule, when compared to the construction schedule presented in the FEIS, was found to contain comparable construction activities. There were two primary differences identified between the FEIS construction schedule and the revised construction schedule. The first difference was that with the revised construction schedule, certain construction activities would occur at a later date. The second difference concerned the number of pieces of construction equipment simultaneously operating at the Project site at any time period. In peak periods the number of pieces of construction equipment simultaneously operating on the Project site at any time period with the revised construction schedule extending beyond 2019 would be fewer than was assumed at a comparable period of construction for the FEIS construction analysis. Therefore, with a delayed build-out to 2024, noise levels produced by construction activities would be expected to be comparable to or less than the noise levels predicted to occur with the FEIS construction schedule, and are unlikely to result in any significant impacts not identified in the FEIS.

With regard to vibration, the Project sponsors would continue to implement a monitoring program to ensure that vibration levels at buildings within an affected area are kept below the 0.50 inches/second PPV limit and no architectural or structural damage would be expected to occur. Consequently, no significant noise or vibration impacts would be expected to occur that were not already identified previously in the FEIS.

Neighborhood Character

As described in the FEIS, construction activity associated with the Project would have significant adverse localized neighborhood character impacts in the immediate vicinity of the Project site during construction. The Project site and the immediately surrounding area would be subject to added traffic from construction trucks and worker vehicles, partial and complete street closures, and bridge reconstruction, resulting in changes in area travel patterns and the resultant significant adverse traffic impacts. Construction traffic and noise would change the quiet character of Dean Street and Pacific Street in the immediate vicinity of the Project site. With the revised construction schedule set forth in the Technical Memorandum, there would be an additional five years during which portions of the Project site would be an active construction area. Therefore, the localized, significant adverse neighborhood character impacts at Dean and Pacific Streets would continue through the construction period.

The Technical Memorandum further found that if the build-out of the Project is delayed to 2024, there would likely be lower intensities of construction worker and truck delivery traffic, pollutant emissions, and construction noise and vibration than would occur in a more concentrated construction timeframe. Although the duration of the effects would be prolonged, the effects were found likely to be even more localized, as buildings become completed and occupied by their permanent intended uses.

ADDITIONAL COMMITMENTS

As part of the approval process for the 2009 Technical Memorandum, further commitments were made, though not for construction impacts, resulting in an Amended Memorandum of Environmental Commitments. This update or amended memorandum contains essentially the same construction-related commitments as those made on the 2006 FEIS, with certain specifications, including:

- For traffic, maintain on-site designated staging areas throughout the construction period to store materials and to accommodate construction vehicles that require early arrival and marshalling for immediate material delivery to high-demand construction areas; provide on-site parking for construction workers at levels appropriate in light of the number of workers employed at the site during different stages of construction, to a maximum of 800 spaces and no more than 1,100 surface parking spaces in the aggregate on Block 1129 to accommodate parking demand from the arena and other Project buildings; equip interim construction staging and parking areas with directional lighting angled to limit light intrusion beyond the site and provide screening for the interim surface parking lot on Block 1129;
- For noise, provide a minimum 8-foot high perimeter barrier (constructed of ¾-inch thick plywood), with a 16-foot high barrier (of ¾-inch thick plywood) adjacent to sensitive locations and operate noisy delivery trucks, such as concrete trucks, behind the barriers; make available double-glazed or storm windows and alternative ventilation for those residential locations where the FEIS identified significant noise impacts and such windows and air conditioning are not currently installed, work with the Parks Department to supplement its planned improvements to the Dean Playground with a comfort station open to the general public; and implement a monitoring program to ensure that vibration levels at the Swedish Baptist Church and the town houses along Dean Street immediately adjacent to the Project's Building 15 site are kept below 0.50 inches/second.
- For air quality, ensure sufficient grid power is available to each site as early as practicable.

EXTENDED BUILD-OUT SCENARIO

Should there be a prolonged delay in completion of the Project that extends beyond 2024, the program and use for the Project are not expected to change from that approved in 2009. Development of this Project—regardless of the completion year—would need to be consistent with the approved 2009 MGPP, the 2006 Design Guidelines, and the Amended Memorandum of Environmental Commitments (December 2009). Any future modifications to those documents would be subject to review under SEQRA.

The scheduling of construction activities for a major project is an exceedingly complex endeavor, with conceptual schedules for construction made early on in project planning evolving over the course of the design and development process. Accordingly, construction sequencing plans can be prepared to assess environmental impacts, but those plans can be expected to change as the Project proceeds. In order to assess whether significant construction-related impacts not previously addressed in the FEIS and 2009 Technical Memorandum would result from a hypothetical delay in Project construction extending beyond 2024, an illustrative “Extended Build-Out Scenario” assuming Project completion in 2035 has been prepared. That scenario has been designed to illustrate the general sequence that could be followed in implementing the Project over an extended period. However, it does not identify a specific schedule with fixed years for each Project element given the market-related and other uncertainties inherent in making long-term predictions concerning a construction schedule under the Extended Build-Out Scenario. Moreover, the Project sponsors have not developed a date-specific schedule for individual Project elements under the Extended Build-Out Scenario because it is obligated to use commercially reasonable efforts to construct the Project on an expedited schedule. In order to undertake an analysis presented in the discussion below, AKRF developed a hypothetical schedule consistent with the Extended Build-Out Scenario based on the staging figures discussed below. The sequence of development assumed for this Extended Build-Out Scenario accounts for certain constraints that have been put into place since the 2009 Technical Memorandum was prepared. As discussed previously, subsequent to the preparation of the 2009 Technical Memorandum, the MTA agreements were executed. Those agreements stipulate that air space acquisition and platform construction on Blocks 1120 and 1121 cannot begin until improvements to the permanent MTA/LIRR rail yard are completed. They also provide that platform construction may be undertaken in up to three contiguous phases with the minimum size of any phase being a complete building site. Building construction on these blocks can proceed as corresponding portions of the platforms are completed. Another constraint imposed on Project sequencing is a requirement appearing in the Development Agreement that a building on Block 1129 be initiated by 2020. The construction of a building on Block 1129 would start the transformation of that block from an interim surface parking lot and staging area to permanent use. A description is provided below of how Project construction could proceed, in light of contractual constraints, in the Extended Build-Out Scenario.

ENVIRONMENTAL COMMITMENTS

As Project construction proceeds, a number of measures must be implemented pursuant to an Amended Memorandum of Environmental Commitments. The specific measures for construction traffic, air quality, and noise are summarized generally below. In addition to those technical areas, the Amended Memorandum of Environmental Commitments includes measures in other areas that would affect the construction. As discussed earlier in this analysis, a CPP approved by LPC and ORPHP would be developed and implemented to prevent impacts on historic resources within 90 feet of any construction. One aspect of the CPP is to limit vibrations

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to protect the historic structures, which are found along Dean Street and the nearby Swedish Baptist Church. To prevent potential impacts related to hazardous materials, a CHASP would be developed and implemented. In addition, a community air monitoring plan would be implemented during any excavation. Construction contracts would include provisions for a rodent (mouse and rat) control program. Prior to the start of construction, the contractor would engage the services of a professional abater who would survey and bait the appropriate areas and provide for proper site sanitation.

ESDC has the right under its agreements with the Project sponsors to enter the Project site at reasonable times to monitor the contractors' compliance with the terms of the commitments. ESDC has retained a technical consultant to assist it in assuring that the Project sponsors comply with such commitments. The environmental monitor reviews all submittals to determine if they meet the requirements of the environmental commitments. If the requirements are not met, ESDC has the right to disapprove the submittal and require re-submittal.

CONSTRUCTION TECHNIQUES

The methods used during the Extended Build-Out Scenario would follow those discussed in the FEIS. Construction activities would generally take place Monday through Friday. In accordance with city laws and regulations, construction work would generally begin at 7 AM on weekdays, with some workers arriving to prepare work areas between 6 AM and 7 AM. Normally, work would end at 3:30 PM, but the workday would be extended for specific trades to complete some specific tasks to 6:00 PM. Night and weekend work would occur on occasion, if permitted by the City under certain circumstances. Because of the presence of the large equipment and the type of work, access to the construction sites would be tightly controlled. The work area would be fenced off and limited access points for workers and trucks would be provided. Security guards and flaggers would be posted and all persons and trucks would have to pass through security points. After work hours, the gates would be closed and locked. Security guards would patrol the construction sites after work hours and over the weekends to prevent unauthorized access.

The first step for construction would be disconnection of existing utilities and demolition of the existing buildings to clear the sites. Demolition of buildings on one block could occur while construction of buildings is underway on other blocks. Asbestos abatement would be the first part of demolition. These specialty tasks are strictly regulated in New York City to protect the health and safety of the construction workers and the public, nearby residents and workers.

Construction of each of the buildings would generally follow the same sequence of construction activities. After excavation, where necessary, the foundations would be poured for buildings not located on a platform. Buildings 3, 4, 5, 6, 7, 11, 12, 13, 14, and 15 and the building on Site 5 will include below-grade parking structures; these structures will be built in connection with the building foundations. For the most part, Buildings 5 through 10 would be built on platforms and would not require the foundation activity but would require footings and support columns. Then the superstructure and floors would be erected for the concrete buildings, and the cladding would be attached to the superstructure. Finally, the interior finishing would be the last activity in constructing a building. The construction periods for individual residential buildings would be expected to range from 15 to 36 months, depending on their size.

SEQUENCING OF CONSTRUCTION

In the event that the Project is delayed beyond 2024, it is likely that construction would proceed generally on a parcel-by-parcel basis, with each building being individually designed, financed, and constructed. During certain periods more than one building could be under construction simultaneously, so the Extended Build-Out Scenario accounts for that potential circumstance as well. Such a sequence would be consistent with the Sponsor's Agreement with the MTA, because the construction of the platform during each "Platform Construction Phase" can be sequenced to go forward in up to three sections, with each section supporting one or more buildings. The illustrative sequencing of building construction described below, one of any number of possible scenarios, is also consistent with the general approach of developing the Project from west to east, with more buildings completed in the early stages. In the Extended Build-Out Scenario, there would likely be more flexibility in the order of which buildings would be completed ahead of others. These variations, however, are not expected to result in material differences in the overall assessment of potential impacts under the Extended Build-Out Scenario.

Figures 9 through 15 illustrate how the Project site would change over time based on the construction sequencing that is assumed for the Extended Build-Out Scenario. These 7 "Stages" are snapshots-in-time that show what would be completed, what would be under construction, and what would not have been started. The timing of the start of a building's construction would be dependent on market conditions, but the sequencing of the buildings, the permanent rail yard, and the platform is assumed for the purposes of this analysis to be as shown in the accompanying figures. Rather than providing a narrative description of site conditions upon completion of each building, "Stages" 1 through 7 are used to describe how the Project site would appear at certain points in time as construction progresses. The construction work for each Stage would likely take several years under the Extended Build-Out Scenario. Currently, the arena is under construction. Upon the completion and opening of the arena in 2012, Building 2 would be under construction and expected to be completed shortly thereafter, as depicted in Figure 9 (Stage 1). It is anticipated that staging areas for materials, supplies, and equipment would generally be on the building site itself. The Phase II building sites have spacious footprints for construction in New York City. However, the building sites on the arena block are more constrained and it is likely that some staging would be done outside of these building sites if space is available elsewhere on the Project site. Also under construction would be the MTA/LIRR permanent rail yard, which is scheduled for completion between 2013 and 2016. Materials for the permanent rail yard cannot be staged in the active areas of the rail yard. Part of Block 1120 would be used for staging of materials to be used in the rail yard and there would be direct access to the below grade rail yard from the Block 1120 staging area and from the existing ramp at Pacific Street, near 6th Avenue. Materials for the arena block that cannot be staged on that block would be staged on a portion of the site of the future Building 15 (west end of Block 1128) and on a portion of the northeast corner of Block 1129. Also on Block 1129, the existing building at 752 Pacific Street would be used for construction field offices. After construction of the temporary parking facility and associated screening, the remainder of Block 1129 would be used to accommodate parking for a portion of the construction workers during the work day and patrons attending events at the arena during the evenings and weekends.

On the arena block, at Stage 1 of construction completion, the future site for Building 4 would be open to the rail yard but protected by a perimeter wall that would include, as stipulated by DOT, a 42-inch high knee wall and fence. This element has been approved by the City's Public Design Commission. At Stage 1, the sites for future Buildings 1 and 3 would be converted into

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temporary plazas. The plaza at the future Building 1 site, with a new subway entrance to the MTA/LIRR Atlantic Terminal station, would provide an urban plaza with a mix of uses at the front entry of the arena (see **Figure 16**). This urban plaza would create a significant public amenity and include landscaping in planters; retail kiosks to provide food, beverages, and other items; public art; seating; access to the new station entrance; and a large flexible program space for outdoor functions. Similar green space and public amenities would be provided on the temporary plaza with bicycle parking at the site of Building 3 (see **Figure 17**). Hence, in the first few years of arena operations, the immediate area surrounding the arena block would consist of a mix of completed structures, temporary public plazas, and active construction areas.

Figure 10 provides an illustration of the Project site at Stage 2 when Buildings 3 and 4, as well as Site 5 and the MTA/LIRR rail yard, are completed. By this time, all infrastructure work and roadway improvements are also expected to be in place. All of the buildings on Block 1129 and the building on site 15 would have been demolished. The perimeter fence around the Building 4 site would have been deconstructed. Construction staging would be accommodated on Block 1129, the future site of Building 15, and staging on Block 1120 would continue. Block 1129 would accommodate parking for a portion of the construction workers during the workday and patrons attending events at the arena during the evenings and weekends. As in Stage 1, parking for 24 police vehicle parking would be provided on the site of Building 15 and Block 1129.

In Stage 3 as shown in Figure 11, Building 1 would be open for occupancy, and all of the Project west of 6th Avenue would be completed. The platform over the permanent rail yard would commence in this stage, and the platform section for Buildings 5 and 6 would be completed while the platform for Building 7 would still be under construction. The platform for Buildings 7 and 8 is expected to be built continuously, and although Figure 11 does not show construction of the platform for Building 8 on Block 1121, that part of the platform would be completed before Stage 4. Buildings 5 and 6 on the Block 1120 platform would be completed along with Building 15. In the Extended Build-Out Scenario, the construction of these buildings would be sequential with each building completed and occupied as construction goes along. As each building is completed, the associated open space would also become available, further reducing areas of construction. Also depicted in Figure 11 is the start of construction for Building 14 on Block 1129, which would be consistent with the Development Agreement's requirement that a building on Block 1129 must be started by 2020. The remainder of Block 1129 would continue as surface parking and construction staging areas. Since all properties on Block 1129 have been acquired by the Project sponsor, it is possible that Buildings 11, 12, 13, and 14 may progress ahead of the others east of 6th Avenue should construction and operational logistics permit. Again, these buildings would be constructed in sequence, with each building being individually constructed, completed, and occupied.

As shown in Figure 12 (Stage 4), Buildings 7 and 14 are expected to be completed. The platform for Building 8 would also be nearing completion. The completion of buildings and associated permanent open space on Block 1129, beginning with Building 14, would start to transform this block from an interim surface parking lot and staging area to permanent use. The bed of Pacific Street would have temporary landscaped streetscape, which would be publicly accessible and would continue to accommodate limited and controlled truck traffic from the staging area. Because the building sites are large for an urban area, it is expected that most of the construction staging would be done on the individual building sites. While the platform over Block 1121 is being constructed, direct access between the construction area and the staging area would be available. Therefore, trucks traversing the temporary landscaped streetscape on Building 14 are expected to be minimal.

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Figure 13 shows Stage 5 with Building 8 construction completed, and work beginning on Building 13. This would further reduce the use of Block 1129 for surface parking and construction staging.

At Stage 6 (Figure 14) construction of the platform for Buildings 9 and 10 would have begun. Building 13 on Block 1129 would have been completed. The remaining portion of the block would be used for surface parking and construction staging.

Stage 7 is shown in Figure 15, and Buildings 11 and 12, accompanied by their respective permanent open space and below-grade parking, would be completed one at a time. As each building is completed, the associated open space would also become available, further reducing areas of construction.

With build-out of the Project extending out to 2035, the presence of construction activities would be prolonged. However, construction duration and requirements for individual development components would be similar to those of the Project analyzed in the FEIS. As noted above, as each of the buildings is completed, adjacent landscaped open space would be provided in conformance with the 2006 Design Guidelines.

Temporary Use of Block 1129

Parking

Prior to the time when construction on Block 1129 is completed, the surface parking lot there would provide varying numbers of parking spaces to accommodate parking needs of construction workers during the workday and arena event traffic during the evenings and weekends. In addition, parking for police vehicles would be provided until permanent parking for those vehicles is available. When necessary, stackers would be in use to allow for the parking of up to two cars per space and a total surface lot capacity of up to the 1,100 cars. Consistent with the Project plan for permanent underground parking for over 2,000 cars on Block 1129, the temporary surface parking would also be accessible from Carlton Avenue, Dean Street, and Vanderbilt Avenue to facilitate efficient circulation. Within the lot, queuing and circulation space would be provided, and valet operations would be in place to accommodate periods of high demand (i.e., during pre- and post-arena events). Under the Extended Build-Out Scenario, it is likely that buildings would be completed and occupied in a sequential manner, instead of concurrent construction and completion of several buildings at a time. The sequential construction would result in the need for fewer parking spaces to accommodate construction workers and a smaller area for construction staging. In addition, as noted above, the building sites are large for an urban area, and much of the material staging for the construction of each building is expected to be accomplished on the individual building site. Temporary surface parking would be sequentially reduced and eliminated, and replaced by permanent below-grade parking, which would also come on line incrementally.

ASSESSMENT OF IMPACTS

For the Extended Build-Out Scenario, general construction practices, equipment, staging, maintenance and protection of traffic, and work hours would be similar to those described in the FEIS and the 2009 Technical Memorandum. Construction activities for individual buildings would be unchanged. However, with the prolonged schedule, there would be less overlap of these activities for different buildings, resulting in overall lower intensity in construction activities on the Project site. The FEIS analysis examined the potential effects of Project construction on a number of technical areas, including land use; socioeconomic conditions;

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community facilities; open space; historic resources; hazardous materials; traffic and transportation; air quality; noise and vibration; infrastructure; and neighborhood character. However, not all of these areas would be affected by the prolonged construction under the Extended Build-Out Scenario. The conclusions on socioeconomic conditions, community facilities, historic resources, hazardous materials, and infrastructure would remain unchanged since construction-related effects would be similar for these technical areas irrespective of the length of construction. Therefore, this technical analysis focuses only on those technical areas that could be affected by the construction activities under the Extended Build-Out Scenario. Comparisons to the conclusions presented in the 2006 FEIS with respect to open space, land use and urban design; traffic and transportation, air quality, noise, and neighborhood character are discussed below.

Open Space

A key component of the Project is the provision of 8 acres of publicly accessible open space, which would be developed incrementally during Phase II as buildings during this phase are completed. The FEIS identified a temporary significant adverse open space impact in the non-residential (¼-mile) study area between the completion of Phase I and the completion of Phase II. As was noted in the FEIS, although the quantitative analysis found that active and combined passive open space ratios for the residential (½-mile) study area would remain below the levels recommended by the Department of City Planning, the qualitative assessment concluded that the open space elements and public amenities not included in the quantitative analysis, including the private open space, the publicly accessible plaza and interim open areas to be potentially developed as part of the Project in Phase I—and the availability of large nearby open spaces (e.g., Prospect Park and Fort Greene Park), would help alleviate the burden on this study area's open spaces. The Extended Build-Out Scenario would not result in significant adverse environmental impacts with respect to open space that were not addressed in the FEIS. The Extended Build-Out Scenario would affect the timing of the open space development but not the ultimate layout of the 8 acres of publicly accessible open space or the Project's population, which would remain the same as described in the FEIS.

With the Extended Build-Out Scenario, the temporary impact identified in the FEIS would extend longer, but would continue to be addressed by the incremental completion of the Phase II open space. As each of the Phase II buildings is completed, the adjacent open space would be provided in conformance with the 2006 Design Guidelines, thereby offsetting some of this temporary open space impact.

Land Use and Urban Design

With the Extended Build-Out Scenario, the schedule for the overall completion of the Project would be delayed with fewer buildings being constructed simultaneously. However, as described above, as each building is completed, irrespective of its actual sequencing, it must conform with the 2006 Design Guidelines for that site and provide the necessary permanent facilities such as public access, open space, below-grade parking, infrastructure retention/detention capacity, and other commitments. As the site is developed from west to east, it would be transformed into the new urban design form of the Project as contemplated in the 2006 Design Guidelines and 2009 MGPP, and analyzed in the FEIS. The discussion of urban design, consistent with CEQR guidance, focuses on the considerations of the pedestrian experience in a public space such as streets and public open space. This section assesses whether the Extended Build-Out Scenario

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would result in any new significant adverse impacts on urban design that were not previously disclosed in the FEIS.

The FEIS characterized the Project site as an area with uses and building forms that differed from much of the surrounding area, defined primarily by lower-rise residential, commercial, and warehouse buildings, many of which were vacant and in disrepair, vacant lots, gas stations, and an active below-grade open rail yard. At the time that the FEIS was published, the Project site itself reflected its early industrial character and was characterized by blighted conditions on the edge of the stable surrounding residential neighborhoods. The open rail yard, spanning three blocks, comprises a significant area of the Project site. Since the date of preparation of the FEIS, most of the buildings at the Project site (including all buildings on Blocks 1118, 1119 and 1127 and most of the buildings on Block 1129) have been removed to make way for the Project; all but one of the remaining buildings and structures on Blocks 1129 and 1121 are scheduled to be removed in the near future.

While the Extended Build-Out Scenario would prolong the completion of the Project to 2035, there would be an incremental realization of the Project as buildings are completed in a sequential manner. Each building is expected to be individually financed and built; thus, each site would be expected to proceed with construction through to completion and occupancy. Sites not under active construction would be maintained under their existing conditions or would have interim uses such as temporary public plazas or other amenities, parking and/or construction staging areas.

Stage 1

At Stage 1, Site 5 would remain unchanged and would continue to be occupied by existing retail uses. However, the transformation of the Project site would have begun with the completion and opening of the arena, as well as the ongoing construction of Building 2. Construction of Buildings 1 and 3 would not have started and those sites would be occupied by temporary public open space as illustratively shown on Figures 16 and 17. The site of Building 4 would continue to remain a below-grade, open rail yard with a perimeter wall and fencing. Additionally, a small southwest corner portion of Block 1128 would be used for construction staging, arena support, or police parking.

The delay in the construction of Building 3 in the Extended Build-Out Scenario would make the arena building a more prominent visual element on Dean Street between Flatbush and 6th Avenues. This temporary condition, which would be eliminated in Stage 2 when Buildings 3 and 4 would be constructed, would be partially addressed by the interim open space at the Building 3 site. The delay in the construction of Building 3 would result in a delay in the buffer to the adjacent residential area south and east of the arena. This effect would be partially off-set by Building 2 and the interim open space on the Building 3 site.

Blocks 1120 and 1121 would be under construction as improvements to the permanent MTA/LIRR rail yard are underway. From an urban design perspective, this activity would be minimally noticeable since work would occur within the below-grade rail yard. A portion of the at-grade site on Block 1120 would be used as a rail yard construction staging and storage area but this use would not be significantly different from its historical use as a LIRR bus storage area.

When the arena opens in 2012, the majority of Block 1129 would be used to provide 1,100 surface parking spaces for arena patrons in a temporary condition until they are located below-grade in conjunction with the build-out of the Project buildings on Block 1129. One area of

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Block 1129, at the northeast corner of the block at the corner of Pacific Street and Vanderbilt Avenue, would be set aside for construction staging in connection with the work on the adjacent rail yard. One building on Block 1129 (752 Pacific Street) would continue to be used as temporary office space for the construction contractors. The surface parking lot would be available to construction workers during the workday to reduce construction worker parking on local streets.

The temporary surface parking lot and construction staging area on Block 1129 would be screened and landscaped around its perimeter (see **Figure 18**). The design of the fence along with the landscaping would provide a visual buffer for pedestrians and residents of the adjacent neighborhood. An illustrative rendering is shown in **Figure 19**. As shown in Figure 19, the perimeter of the parking lot and construction staging area on Block 1129 would include an approximately 10-foot tall fence that will be set back a minimum of four feet from the property line to allow for a landscaping zone: the fence would be built with metal, stone, treated concrete block, or a combination of these materials. The fence would allow for some pedestrian visibility into the parking facility from the sidewalk and would be a backdrop and support for climbing plants. Ground cover and evergreens would also be located in the landscape buffer to provide a soft edge and layers of screening. The fence and landscaping design would be coordinated to achieve a balance of screening, measures of both visibility and more solid areas, and would be designed and maintained to seek to ensure that in any season, the landscaping, fencing and lighting would work together to create a safe environment for pedestrians and an unobtrusive environment for nearby residents. The directional lighting planned for the site would illuminate different parts of the interior of Block 1129 while minimizing off-site light intrusion onto the upper floor residences in the immediate area as well as the surrounding neighborhood.

Stage 2

At Stage 2, construction of Buildings 2, 3 and 4 would be occupied by their intended permanent residential and ground-floor retail uses, in keeping with the transformation of the Project site and consistent with 2009 MGPP and 2006 Design Guidelines. Site 5 would also be completed. The site of Building 1 would continue to be occupied by the urban plaza. The permanent MTA/LIRR rail yard would be completed and still be below grade, and its appearance would be similar to its historic and existing condition, except that the below-grade railroad cut on Block 1119 would no longer exist, because the arena and Building 4 would be built at-grade at that location. The site of Building 15 and the at-grade portion of Block 1120 would continue to serve as construction staging areas or temporary surface parking facilities. As described above, Block 1129 would continue as an interim surface parking for arena events and construction workers and, on the northeast corner of the block, as a construction staging area. In addition, the building at 752 Pacific Street would be demolished. The screening and landscaping around the parking lot would continue to provide a visual buffer to the pedestrians and surrounding neighborhood. The interim surface parking lot would be utilized the most during the early stages of construction (Stages 1 and 2). In subsequent stages, development would be underway on Block 1129 and the surface parking lot would be incrementally reduced as the parking spaces would be relocated under the new buildings on the block.

Stages 3 through 5

By Stage 3, Buildings 5 and 6 on Block 1120 would have been completed and occupied with Building 7 under construction. Buildings 1 and 15 would also be completed, which would represent half of the Project's buildings and completing the development of the western end of the Project site with their urban design form as stipulated in the 2006 Design Guidelines and the

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2009 MGPP. As noted previously, construction of at least one of the buildings on Block 1129 would need to be initiated by 2020. This would start the transformation of the interim surface parking lot into its permanent program. Block 1121 would continue to be an open rail yard and would not be notably different from its historic and existing conditions. Construction of Building 8 would start by Stage 4, after Building 14 has been completed. Building 13 on Block 1129 would be under construction. With the completion of Building 14 and construction of Building 13, the surface lot would have decreased in size and in use as interim parking. At this point, approximately 2/3 of the Project area would be realized in its final urban design form.

Stages 6 through 7

At completion of Stage 5, 75 percent of the Project would have been realized along with its final urban design elements. Stages 6 through 7 represent the final build-out of Blocks 1121 and 1129. Construction would take place in a north-south pattern with the incremental reduction of the interim surface lot on Block 1129. This represents the last four of the Project's 17 buildings.

The Extended Build-Out Scenario would not result in significant adverse urban design impacts not identified in the FEIS. The FEIS assessed the urban design impact of the Project on the surrounding neighborhood in the areas of street connections, building massings and design, street level uses, open space, and effects on nearby visual resources. As noted above, the FEIS discussion of urban design was consistent with CEQR guidance, which focuses on the considerations of the pedestrian experience in a public space such as from the public street and public open space. The FEIS determined that the proposed Project would obscure views of the Williamsburgh Savings Bank Building from certain vantage points south of the Project site along the Flatbush Avenue corridor and from certain other vantage points, which would be a significant adverse historic resources impact. The reduction in height of Building 1, as modified in the 2009 MGPP would somewhat lessen the Project's effect on urban design and visual resources. The extended construction would not change this impact.

While the Extended Build-Out Scenario would result in a delay of the completion of all the Project's elements, it would not change any of the Project's urban design elements or the Project's conformance with the 2006 Design Guidelines or the 2009 MGPP. Under the Extended Build-Out Scenario, the building site would either remain in their current condition, be used as interim public space, or, for identified sites, construction staging and temporary parking. The Project sponsors are obligated under the 2009 MGPP and the Amended Environmental Commitments Memorandum to maintain the sites in a clean and secure manner, and where practicable, to provide temporary public amenities at locations not being used for active construction activities. Further, there are constraints that obligate the Project sponsors to move forward with development of sites within prescribed timeframes. Since each site is expected to be individually financed and built, each site would be expected to proceed with construction through to completion and occupancy. There would be an incremental realization of the Project as buildings are completed and these uses during construction would not differ from that assumed in the FEIS and would be much like other construction sites around the city. Thus, the Extended Build-Out Scenario would not result in any new significant adverse impacts on urban design not previously disclosed in the FEIS.

Traffic and Transportation

Under the Extended Build-Out Scenario, with the completion of buildings occurring in a more sequential manner, the intensity of construction activities would be less than that assessed in the FEIS or the 2009 Technical Memorandum. As detailed below, the numbers of construction

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workers and truck deliveries during all stages of the Project would be lower than those estimated for the FEIS analyses. Furthermore, because the prolonged construction would result in fewer components of the Project under construction at any given time, there would also be fewer temporary lane and sidewalk closures throughout the Project site at one time. Since the demand of construction workers on parking resources, transit services, and the area's pedestrian elements would also be lower than those assessed in the FEIS, which concluded that there would not be any potential significant adverse impacts, the Extended Build-Out Scenario would similarly not result in significant adverse impacts on these environmental categories. The discussion below, therefore, focuses on variations in traffic circulation, construction-generated traffic, and potential impacts during the seven stages of construction described above, as compared to those identified in the FEIS for Phase I and Phase II construction.

Stage 1

The on-going Stage 1 construction, which includes construction activities on the arena block and the MTA/LIRR rail yard, as well as improvements to the area's roadways and infrastructure, is similar to Phase 1A analyzed in the FEIS. Both encompass the use of Block 1129 (with access along Carlton Avenue, Dean Street, and Vanderbilt Avenue) as a staging and construction worker parking area and require the closure of the Carlton Avenue Bridge during construction of that portion of the rail yard. Reopening of Carlton Avenue between Pacific Street and Atlantic Avenue would take place with the opening of the arena. Portions of Block 1120 (with access along Atlantic Avenue) and Block 1128 (with access along 6th Avenue and Dean Street) would also be used for construction staging. The smaller Block 1128 staging area is expected to be used for construction offices and trailers, while those areas on Blocks 1120 and 1129 would primarily serve the rail yard construction efforts. During arena construction, Block 1129 could also provide storage of trucks waiting to make deliveries to the arena block via Pacific Street. This activity is expected to reduce substantially after the arena is completed because of the fewer deliveries required for the construction of the other Project components. When the construction of Building 2 begins, most of its staging is expected to be accommodated on site.

Due to the delay in constructing other buildings on the arena block and the development at Site 5, this construction stage would yield substantially lower numbers of construction workers and truck deliveries than the FEIS's Phase 1A construction. And at the end of this construction stage, with Carlton Avenue reopened and the closure of 6th Avenue during the FEIS's Phase 1B construction no longer required, the surrounding roadway network would resemble closely what was expected at the end of Phase I, when all buildings, including the arena, other buildings on the arena block, and Site 5 were expected to be completed, and improvements would be in place for the surrounding roadway network.

In comparison, peak Stage 1 construction worker and truck deliveries would be approximately 25 and 20 percent of those used in the FEIS Phase 1A and Phase 1B peak construction analyses, respectively. These FEIS analyses identified certain significant adverse traffic impacts at nearby intersections, which were largely attributable to the temporary closure of the Carlton Avenue Bridge and the permanent closures of 5th Avenue and the two segments of Pacific Street within the Project's development area. With the permanent closure of 5th Avenue between Flatbush and Atlantic Avenues, Pacific Street between Flatbush and 6th Avenues, and Pacific Street between Carlton and Vanderbilt Avenues, background traffic would be diverted regardless of whether there would be on-going construction at the Project site. The assessment of potential traffic impacts during construction, as well as for operational conditions of the Project's build-out, accounted for the effects of this traffic diversion. Traffic circulation under this roadway network

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during Stage 1 construction would encompass construction worker vehicles accessing the temporary surface parking lot on Block 1129 at driveway locations on Carlton Avenue, Dean Street, and Vanderbilt Avenue. Truck deliveries would be made to the arena block, the rail yard on Blocks 1120 and 1121, and the three staging areas described above. The use of Block 1129 for delivery storage to serve the construction of the arena would likely be intermittent on an as needed basis and the need to use Pacific Street to transport materials would not likely occur during the construction peak hours (6-7 AM and 3-4 PM on a typical weekday). Because Stage 1 would yield substantially fewer construction workers and truck deliveries than Phase 1A or Phase 1B, it is expected that the projected traffic impacts in the FEIS would be at lower magnitudes or not occur at all during peak Stage 1 construction, and as with the FEIS analysis results, some of these impacts could be mitigated with the measures previously identified and implemented, as stipulated in the Project's Amended Memorandum of Environmental Commitments, and others would be partially mitigated or would remain unmitigated. Some of the measures expected to be put in place during Stage 1 construction include coordination with the DOT Office of Construction and Mitigation Coordination (OCMC) to develop, implement, and fund the appropriate maintenance and protection of traffic (MPT)—to address specific and primarily localized conditions during construction and provide for the adequate and safe flow of vehicles and pedestrians—based on specific conditions at the time of construction, implementation of other roadway operational measures, on-site vehicular access management, truck delivery scheduling and staging, provision of construction worker parking, NYCT coordination on temporary bus stop relocations, implementing certain turn prohibitions, and providing temporary turn lanes for traffic detours and added capacity.

Further, although several buildings that were projected to be completed at the end of Phase 1 in the FEIS would not be completed at the end of Stage 1 construction, the resulting roadway network, with both Carlton and 6th Avenue open to traffic and other roadway improvements in place, would be similar to the roadway network anticipated for the FEIS's Phase II development. This roadway network would incorporate various traffic improvements, including the physical reconfiguration of the Atlantic Avenue/Flatbush Avenue/4th Avenue intersection, conversion of Pacific Street between Flatbush Avenue and 4th Avenue to one-way eastbound, and provision of new turn bays or intersection daylighting. In fact, the roadway network at this point would have "matured" and be similar throughout the remaining stages of construction, and is reflective of that considered in the FEIS's Phase 2B peak construction analysis.

Stage 2

During Stage 2 construction, the arena would have opened for operation and construction of Building 2 and the permanent rail yard would continue. Buildings 3 and 4, as well as the development on Site 5 would follow; however, they are likely to progress in a more sequential fashion than assumed in the FEIS. As such, MPT requirements for each of the buildings would be localized and affecting fewer street frontages at any given time and would be typical of other single-building construction projects throughout the City. For example, temporary curb lane closure and sidewalk protection may move in a counter clockwise direction from Building 2 to Building 3 and then finally to Building 4, as these buildings are constructed. Vehicle access and circulation would not be restricted, similar to conditions during Phase 2B construction, since the surrounded roadway network would have matured with all the planned improvements in place. Construction worker parking would continue to be accommodated at Building 1129 via access along Carlton Avenue, Dean Street, and Vanderbilt Avenue. Truck deliveries would similarly access each construction site, via NYCDOT designated truck routes. By this time, the entire site of future Building 15 is expected to be also available for the staging of building construction on

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the arena block. Staging for the future construction of the platform over the MTA/LIRR rail yard would be available on Blocks 1120, and limited staging areas would continue to be available on the north side of Block 1129, accessible from the closed portion of Pacific Street between Carlton and Vanderbilt Avenues.

The FEIS analyses projected Phase 2B peak construction activities to be less than 60 percent of those in the Project's overall construction peak during Phase 1B. A comparison of the projected peak worker and truck deliveries during Stage 2 construction shows that they would be similar but slightly lower than those projected for the FEIS's Phase 2B peak construction analysis. Operational traffic due to completed components of the Project during Stage 2 construction would also be lower even toward the end of Stage 2 than those assumed under the Phase 2B peak construction analysis (Building 1 and likely Building 4 not yet generating operational traffic in Stage 2 construction). With cumulative operational and construction traffic during Stage 2 construction less than that from Phase 2B construction, the projected traffic impacts in the FEIS for Phase 2B would be at lower magnitudes during peak Stage 2 construction, and as with the FEIS analysis results, some of these impacts could be mitigated with the measures previously identified and implemented and others would be partially mitigated or would remain unmitigated.

Stage 3

During Stage 3, the last building on the arena block, Building 1, would be constructed, along with Buildings 5, 6, and 15. Platform construction would start at the footprint of Buildings 5 and 6 then continue eastward to facilitate the start of Building 7 construction. As mandated by the Development Agreement, Building 14 would also begin construction in Stage 3, with a start date of no later than 2020. East of 6th Avenue, Buildings 5 and 6 would be constructed in sequence after the platform below is completed. Construction of Building 15 on Block 1128 would take place anytime during Stage 3 and construction of Buildings 7 and 14 would commence toward the end of this stage. MPT on the arena block would be isolated at the Building 1 construction site, which to this point was programmed to be a temporary open space plaza. Since the construction of Buildings 5, 6, and 15 in Stage 3 would be similar in time frame as that in Phase 2, their respective MPT would be similar as well. Equipment staging is expected to be mostly accommodated on each construction site with Block 1129 providing for additional staging if needed. Permanent parking on Block 1129 would begin to become available upon completion of Building 14. Hence, construction worker and arena parking on Block 1129 may be accommodated, toward the end of Stage 3, by a combination of permanent and temporary surface parking. All vehicular access and circulation would be comparable to that described for Stage 2 and Phase 2B construction, as well as to the Project's final build-out. This condition is expected to continue throughout the remainder of the Project's construction.

A comparison of the projected peak worker and truck deliveries during Stage 3 construction shows that they would be just over half of those projected for the FEIS's Phase 2B peak construction analysis. With the extended rolling out of completed buildings, operational traffic due to completed components of the Project during Stage 3 construction would also be lower than those assumed under the Phase 2B peak construction analysis. Therefore, the projected traffic impacts in the FEIS for Phase 2B would be at lower magnitudes during peak Stage 2 construction, and as with the FEIS analysis results, some of these impacts could be mitigated with the measures previously identified and implemented and others would be partially mitigated or would remain unmitigated.

Stage 4

Stage 4 construction pertains to the completion of Buildings 7 and 14 and the on-going construction of Building 8. At this point in time, almost the entirety of Project development west of Carlton Avenue would have been completed and occupied, and the adjacent open space on that block provided. As construction moves to the easternmost blocks of 1121 and 1129, construction activities are expected to become even more localized and contained. Since available staging area on Block 1129 would be immediately adjacent to the Stage 4 construction sites, curb lane and sidewalk closures for staging purposes are likely to be kept to a minimum. Much of Pacific Street between Carlton and Vanderbilt Avenues would continue to provide access to the construction staging area of Block 1129. Upon completion of the permanent below-grade parking in Building 14, there would be a combination of underground and temporary surface parking on Block 1129 to accommodate construction worker and arena parking.

A comparison of the projected peak worker and truck deliveries during Stage 4 construction shows that they would be less than 40 percent of those projected for the FEIS's Phase 2B peak construction analysis. At the end of this stage, more than half of the 15 buildings programmed to be developed would have been completed and occupied, making the entire development area more of a new neighborhood rather than an undeveloped construction site. The area's traffic from completed buildings would gradually overshadow the reduced construction traffic. Cumulatively, the anticipated traffic impacts and required mitigation measures during Stage 4 construction are expected to be of lower magnitudes than those identified in the FEIS. Similar to conclusions made for the previous construction stages, some of the construction impacts could be mitigated and others would be partially mitigated or would remain unmitigated.

Stage 5

In Stage 5, construction would continue west to east and north to south on Blocks 1121 and 1129. Building 8 would be completed and construction of Building 13 would commence. Similar to Stage 4, construction staging is expected to be mostly contained within these blocks with minimal curb lane and sidewalk closures and parking on Block 1129 would be accommodated by a combination of permanent underground and temporary surface parking. A comparison of the projected peak worker and truck deliveries during Stage 5 construction shows that they would be approximately 25 percent of those projected for the FEIS's Phase 2B peak construction analysis. Similar to conclusions made for the previous construction stages, some of the construction impacts could be mitigated and others would be partially mitigated or would remain unmitigated.

Stage 6

In Stage 6, Building 13 and the platform on Block 1121 would be completed, and construction of Buildings 9 and 10 would commence. Similar to Stages 4 and 5, construction staging is expected to be mostly contained within these blocks with minimal curb lane and sidewalk closures and parking on Block 1129 would be accommodated by a combination of permanent underground and temporary surface parking. A comparison of the projected peak worker and truck deliveries during Stage 6 construction shows that they would be less than 40 percent of those projected for the FEIS's Phase 2B peak construction analysis. Similar to conclusions made for the previous construction stages, some of the construction impacts could be mitigated and others would be partially mitigated or would remain unmitigated.

Stage 7

In Stage 7, construction of the remaining buildings (Buildings 9, 10, 11, and 12) and their permanent open space would be sequentially completed. Throughout this final stage of construction, activities on Blocks 1121 and 1129 would be similar to typical construction of single buildings with construction staging primarily contained on site and conditions resembling closely to the Project's final build-out. Peak worker and truck deliveries during Stage 7 would be approximately 40 percent of those projected for the FEIS's Phase 2B peak construction analysis. Similar to conclusions made for the previous construction stages, some of the construction impacts could be mitigated and others would be partially mitigated or would remain unmitigated.

Air Quality

The construction air quality analysis in the FEIS was revisited to determine if the Extended Build-Out Scenario would have the potential to cause significant adverse impacts not identified in the FEIS. Overall, the construction means and methods, as presented in the FEIS, are not expected to change as a result of the revised construction schedule. In the FEIS, the air quality analysis of the construction phases included a detailed quantified modeling study of the most intensive construction periods determined through a review of a site-wide PM_{2.5} emissions profile. PM_{2.5} was selected as the worst-case pollutant, based on the fact that PM_{2.5} was identified as having the highest ratio of emissions to impact criteria when compared with other pollutants of concern—(CO, NO₂). Two short-term periods and three annual periods were selected for modeling during Phase I of construction; one short-term period and one annual period were selected for modeling during Phase II of construction.

As described in the FEIS, concentrations of CO, NO₂, and PM₁₀ were not predicted to be significantly impacted by the construction of the Project in any phase of construction. PM_{2.5} concentrations were predicted to possibly increase in areas immediately adjacent to the construction area by more than the applicable 24-hour and annual average guidance thresholds, and annual average PM_{2.5} concentrations were predicted to possibly exceed the guidance threshold at some ground-floor residential locations immediately adjacent to the construction activity. However, the predicted PM_{2.5} threshold exceedances were limited in extent, duration, and severity: The increments in excess of interim guidance thresholds were predicted to be highly localized, i.e., almost entirely due to construction activity in close proximity to the affected location and not due to cumulative impacts from the larger Project site. Due to the extensive measures incorporated in the Project's construction program aimed at reducing PM_{2.5} emissions, this low level of impact would be lower than increments predicted for many standard small-scale construction operations and would be much lower than impacts of standard construction operations of a similar size. For these reasons, as concluded in the FEIS, no significant adverse impacts on air quality are predicted during the construction of the Project.

In order to assess whether significant construction-related air quality impacts not previously addressed in the FEIS would result from a delay in Project Construction extending beyond 2024, an illustrative Extended Build-Out Scenario assuming Project completion in 2035 was prepared, and is analyzed below for its potential impact on air quality, based on the detailed analysis presented in the FEIS and on the differences between the reasonable worst- case construction schedule assumed in the FEIS and the Extended Build-Out Scenario.

The Extended Build-Out Scenario would have a longer construction schedule whereby each building or construction task would be completed under the same schedule duration analyzed in the FEIS, but there would be less simultaneous work on multiple sites and buildings and more

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time in between the start of each building's construction activities. The number of units of construction equipment simultaneously operating on the Project site at any time would be expected to be less (throughout all Project areas) than that which was assumed during a comparable period of construction for the FEIS analysis. Therefore, the resulting concentration levels for the Extended Build-Out Scenario would be less than that analyzed in the FEIS. Under both SEQRA and CEQR, the determination of the significance of impacts is based on an assessment of the predicted intensity, duration, geographic extent, and the number of people who would be affected by the predicted impacts. With less intense construction activities, the number of exceedances predicted in the Extended Build-Out Scenario would be less than that reported in the FEIS. In addition, with fewer overlaps and more time in between construction activities, the predicted annual concentrations in the Extended Build-Out Scenario would also be less than those reported in the FEIS. At individual receptor locations, concentrations of potential concern are almost entirely due to intensive construction equipment emission sources located in close proximity to the receptor location. The Extended Build-Out Scenario—although prolonging the overall duration of construction across the 22 acre site—would not increase the duration of intense construction operations near individual receptor locations, since a prolonged construction schedule would not increase the duration of the construction work on individual project elements. Accordingly, a prolonged construction schedule would not be expected to increase the frequency, duration or intensity of elevated concentrations at individual receptor locations.

Although the potential for dust would continue in the general vicinity of the construction area for a longer duration since the Extended Build-Out Scenario would have a longer construction schedule, concentrations would not persist in any particular location because the activities generating dust would not occur continuously at any single location throughout construction. In addition, since there would be less simultaneous work on multiple sites and buildings and more time in between the start of each building's construction activities, the overall dust emissions at any period in the Extended Build-Out Scenario would be expected to be less than that analyzed in the FEIS. Furthermore, to minimize the effects of dust generating activities, the Project sponsors are obligated to incorporate comprehensive dust control measures as part of the Amended Memorandum of Environmental Commitments. These commitments include limiting on-site speed, watering equipment/trucks and construction/unpaved surfaces, covering or water-misting stockpiled materials, and inspecting departing trucks for proper sealing or covering of loose materials. In addition, a community air monitoring plan will be implemented during any excavation. Air monitoring stations would be established at the perimeter upwind of the work activities and at the downwind perimeter of the work zone. Monitoring at the upwind and downwind stations would be conducted when soil is disturbed. Therefore, there would be no new significant adverse impacts due to dust emissions in the Extended Build-Out Scenario.

The Amended Environmental Commitments Memorandum also requires a diesel emissions reduction program to minimize the use of diesel engines, maximize the use of electric engines, require the use of the grid for electricity instead of portable generators where possible; limit unnecessary idling of vehicles and non-road engines; require the use of ultra-low sulfur diesel fuel and best available tailpipe emissions reduction technologies; and require placement of stationary engines at a minimum of 50 feet from sensitive locations.

Since the FEIS was published, additional information regarding emissions controls has become available, indicating that the diesel particle filters (DPFs)—the central component of the emissions reduction program being applied for the construction of the Project as required by the Amended Memorandum of Environmental Commitments—reduce emissions significantly more than was assumed in the analysis. In the FEIS, DPFs were assumed to reduce diesel particulate

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matter (DPM) by 85 percent. The latest information indicates that almost all DPFs reduce DPM emissions by at least 92 percent, and most are in the range of 95 to 98 percent. Several large construction projects analyzed more recently under CEQR have applied an assumption of 90 percent reduction. Therefore, the Extended Build-Out Scenario is expected to yield much lower concentrations than disclosed in the FEIS (emissions would be at least 1/3 to 2/3 less) and, as with the FEIS findings, would not result in any significant adverse impacts on air quality during construction.

Stages 1 through 7 are used to describe how the Project site would appear at certain points in time as construction progresses. For each Stage, a comparison of construction activity under the FEIS and the Extended Build-Out Scenarios, including the possible concurrent construction activities at various sites, is presented and analyzed in terms of potential construction related emissions, concurrent operational and mobile-source emissions, and the ensuing potential air quality effects.

Stage 1

As described in the “Extended Build-Out Scenario” section above, the arena, the MTA/LIRR permanent rail yard, and Building 2 would be under construction up to the completion of Stage 1 (the opening of the arena in 2012). Activities leading up to Stage 1 are similar to the worst-case Phase I short-term and annual scenarios analyzed in the FEIS. However, construction activities at Site 5 and Building 15 were also included in the FEIS worst-case periods, but would not be under construction leading up to Stage 1 of the Extended Build-Out Scenario. As reported in the FEIS, during Phase I of construction, there is a slight chance that the PM_{2.5} 24-hour increments may exceed the threshold on a single day on the sidewalk and at ground-floor residential windows near the intersection of Dean Street and 6th Avenue. Annual average PM_{2.5} increments may also exceed the threshold for one year on the sidewalk and at ground-floor residential locations along the south side of Pacific Street between 4th Avenue and Flatbush Avenue, and for one year at the ground floor of the building immediately adjacent to construction on Block 1128. Since construction activities would be less intense leading up to Stage 1 of the Extended Build-Out Scenario as compared to the FEIS, the predicted concentrations would be less and the potential short-term impacts at these receptor locations are even less likely to occur under the Extended Build-Out Scenario. In addition, with more time in between construction activities, even though the construction duration is longer, the predicted annual concentrations would be less in the Extended Build-Out Scenario since the level of construction activities occurring during this period of time would be much less than those analyzed in the FEIS.

Therefore, since the level of construction activities would be less leading up to Stage 1 than those analyzed in the FEIS, no new significant adverse impacts on air quality would be predicted leading up to this stage of the Extended Build-Out Scenario.

Stage 2

Upon completion of Stage 2, Buildings 2, 3 and 4, as well as Site 5 and the MTA/LIRR rail yard, would be completed. The sequence for the construction activities at these locations in the Extended Build-Out Scenario is similar to the sequence in the FEIS. In the FEIS, these activities did not represent a peak construction period during Phase I (the scenarios analyzed in the FEIS represent periods with peak emissions and also account for other considerations like the proximity of sensitive receptors). Generally, construction would result in lower concentration increments during periods with lower construction emissions. Emissions during non-peak periods would often be much lower than the peak emissions. However, since the worst-case

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short-term results may often be indicative of very local impacts (i.e., sidewalks next to construction, or a single location across the street from specific engines), similar maximum local impacts may occur at any stage at various locations, but would not persist in any single location since emissions sources would not be located continuously at any single location throughout construction. Equipment would move throughout the site as construction progresses.

Since this stage was not a peak period in the FEIS, it would not represent a peak period in the Extended Build-Out Scenario, and the resulting air pollutant concentrations would be less than the ones predicted leading up to Stage 1. Therefore, since no new significant adverse impacts on air quality would be predicted leading up to Stage 1, no new significant adverse impacts on air quality would be predicted leading up to Stage 2 of the Extended Build-Out Scenario.

Stage 3

Upon completion of Stage 3, Building 1 would be opened for occupancy. FEIS Phase II buildings, including Buildings 5, 6, and 7 on the Block 1120 platform and Buildings 14, and 15 would also have advanced. Activities leading up to this stage are similar to the FEIS Phase II peak period, with the exception that the construction activities for Building 1 would most likely occur concurrently with Buildings 5 and 6 during the peak period whereas the FEIS Phase II included construction of Building 7 concurrent with Buildings 5 and 6. Buildings 5, 6 and 7 are located on the same block. The increments in excess of interim guidance thresholds predicted in the FEIS were highly localized, i.e., almost entirely due to construction activity in close proximity to the affected location (the building under construction immediately adjacent to the receptor location) and not due to cumulative impacts from the construction of other building further away. Since Building 1 is not in the vicinity of Buildings 5 and 6, as Building 7 was in the FEIS analysis, the resulting concentration levels leading up to this stage would be less than those analyzed in the FEIS Phase II peak periods. Therefore, since no significant adverse impacts on air quality were predicted in the FEIS Phase II peak periods, no new significant adverse impacts on air quality would be predicted leading up to Stage 3 of the Extended Build-Out Scenario.

Stage 4

Upon completion of Stage 4, construction activities would occur at the rail yard platform on the western portion of Block 1121, along with Buildings 7, 8, and 14. In the FEIS, these activities would be less intense than the peak construction period during Phase II (the scenarios analyzed in the FEIS represent periods with peak emissions and also account for other considerations such as the proximity of sensitive receptors). In addition, in the Extended Build-Out Scenario, there would be less simultaneous work and more time in between the start of each building's construction activities. The number of construction equipment simultaneously operating on the Project site at any time would be expected to be less than that assumed for a comparable period of construction as analyzed in the FEIS analysis. Therefore, the resulting concentration levels leading up to Stage 4 for the Extended Build-Out Scenario would be less than the levels in the FEIS. Since construction activities are less intense in the Extended Build-Out Scenario and the FEIS Phase II peak periods were modeled with receptors on completed Phase I elements adjacent to the construction, there would be no new Project impacts that were not identified in the FEIS Phase II peak periods analyses. Therefore, no new significant adverse impacts on air quality would be predicted leading up to Stage 4 of the Extended Build-Out Scenario.

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Stage 5

Upon completion of Stage 5, construction would take place at Buildings 8 and 13. Similar to Stage 4, these activities would be less intense than the peak construction period during FEIS Phase II. Therefore, no new significant adverse impacts on air quality would be predicted leading up to Stage 5 of the Extended Build-Out Scenario.

Stage 6

Upon completion of Stage 6, Building 13 and the rail yard platform on Block 1121 would be completed and construction would proceed on Buildings 9 and 10. Similar to Stages 4 and 5, these activities would be less intense than the peak construction period during FEIS Phase II. Therefore, no new significant adverse impacts on air quality would be predicted leading up to Stage 6 of the Extended Build-Out Scenario.

Stage 7

Upon completion of Stage 7, Buildings 9, 10, 11, and 12 would be completed. Similar to Stages 4, 5 and 6, these activities would be less intense than the peak construction period during FEIS Phase II. Therefore, no new significant adverse impacts on air quality would be predicted leading up to Stage 7 of the Extended Build-Out Scenario.

Noise

The construction noise analysis presented in the FEIS examined the potential noise impacts of construction of the Project with a compressed schedule wherein several buildings would be simultaneously constructed. The Extended Build-Out Scenario would have a longer construction schedule whereby each building or construction task could be completed in the same amount of time, but there would be less overlap in construction of buildings and more time in between various construction activities. With this hypothetical construction schedule, the number of pieces of construction equipment simultaneously operating on the Project site at any time would be either the same or less than that assumed for a comparable period of construction as analyzed in the FEIS. As a result, in general, it would be expected that noise levels produced by construction activities with the Extended Build-Out Scenario construction schedule would be comparable to or less than the noise levels predicted to occur with the FEIS construction schedule, and impacts would be expected to be of comparable or lesser intensity with the Extended Build-Out Scenario construction schedule.

In order to establish an assessment of the duration and magnitude of noise levels, and of the locations where significant impacts would be likely to occur with the Extended Build-Out Scenario, the construction noise analysis results presented in the FEIS were revisited, and various stages of the Extended Build-Out Scenario were examined in comparison to the FEIS construction analysis results. Based upon this examination, an assessment was made of when and where significant noise impacts would be expected to occur for each stage of the Extended Build-Out Scenario. The results of this assessment are presented below.

Evaluation Approach

The approach for identifying the significant construction noise impacts expected to occur under the Extended Build-Out Scenario consisted of associating the significant impacts identified in the FEIS construction noise analysis at specific sensitive receptors (shown in **Figure 20**) with specific buildings or construction tasks and examining which stages of the Extended Build-Out Scenario construction schedule would include construction of those buildings or those

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construction tasks in order to assess the magnitude and duration of construction related increases in noise levels and to determine whether each stage would result in significant impacts at specific receptor locations.

The construction noise analysis in the FEIS was based on a detailed construction schedule showing the specific construction activities, the number of workers on the site, the amount and type of construction equipment on the site, and the number of construction deliveries on a quarterly basis. The specific locations of construction equipment and activities were also accounted for on a quarterly basis. Detailed construction noise modeling using the CadnaA software, a computerized model developed for noise prediction and assessment, identified significant impacts at several nearby sensitive receptors over the course of the 10-year construction schedule.

Significant noise level increases primarily resulted from localized on-site construction equipment operating in very close proximity to the receptor. Consequently, the duration of the impacts at a given receptor closely followed the construction schedule of the Project elements immediately adjacent to it, and construction noise impacts moved through the Project site with the most intense construction activities as the schedule progressed.

Given the correlation between the locations of predicted noise level increases and on-site construction activities and equipment, the significant impacts identified in the FEIS at specific sensitive receptors can be attributed to specific buildings or construction tasks (e.g., Building 7, permanent railroad yard construction). Therefore, at each sensitive receptor during each stage, the potential for significant impact can be identified based on which buildings are under construction and which construction tasks are undertaken during that stage.

The magnitude of the construction noise related impacts with the Extended Build-Out Scenario are expected to be the same as or less than those described in the FEIS, because the magnitude of the impacts generally depend on the specific construction activities and type of equipment being used nearest the receptor, rather than the simultaneous activity on the entire site, and the specific construction activities occurring at each construction parcel would not change substantially under the Extended Build-Out Scenario. The significant noise level increases predicted in the FEIS ranged from 3 dBA (the threshold of perception and the significance according to CEQR) to the upper teens of dBA (a readily noticeable increase). The range of magnitudes in the noise level increase is partially due to difference between the specific conditions at the sensitive receptors, but the construction related noise levels also vary over the construction period based on the different activities that occur as part of construction and the nature of the process of constructing a building. Some construction tasks are much more intensive and may result in the large noise level increases (e.g., excavation, foundation work), while other tasks are much less noisy (e.g., interior fit-out, finishing). In addition, as the building shell is completed, more of the construction work takes place inside the building, shielding it from the nearby sensitive receptors. As a result, the greatest noise level increases occur only over a limited duration of the construction process.

As mentioned above, the existing noise levels at each sensitive receptor affect the magnitude of the construction related noise level increases. Locations that have higher existing noise levels will experience smaller noise level increases as a result of construction generated noise. Consequently, some sensitive receptors that are located adjacent to heavily trafficked roadways and have high existing noise levels will experience fewer and smaller significant noise level increases or no significant noise level increases at all, while other sensitive receptors located

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along less-trafficked side streets may experience substantially larger and more significant noise level increases during the most intensive construction activities.

While significant adverse noise impacts are predicted to occur at a large number of locations, particularly residential locations adjacent to the Project site, because of the construction noise mitigation measures that have been incorporated into the Project and committed to by the Project sponsors, the magnitude of the noise levels produced by construction activities for this Project are below those typically produced by major construction projects in New York City. Typical construction activities for major construction projects produce noise levels ranging from the high 70s to about 90 dBA with an uncontrolled average of about 85 dBA. With the insight from the detailed analyses performed and the subsequent incorporation of noise reduction methods in the Project, normal weekday construction activities for the Project are expected to produce noise levels at nearby receptor locations generally ranging from about 57 to 78 dBA, with an average in the low 70s dBA range; 2nd shift weekday nighttime construction activities, on those occasions when they occur, are expected to produce noise levels at nearby receptor locations generally ranging from about 56 to 75 dBA, with an average in the mid 60s dBA range; weekend daytime construction activities, on those occasions when they occur, are expected to produce noise levels at nearby receptor locations generally ranging from 57 to 75 dBA, with an average about 70 dBA.

In general, even during construction, L_{10} noise levels would generally be in the high 60 to high 70 dBA range and would be in the *CEQR Technical Manual's* "marginally acceptable" to "marginally unacceptable" categories. One location where an exception to this statement would occur would be at receptor 7, located on Atlantic Avenue between Clermont and Carlton Avenues, because of the noise produced by high traffic volumes on Atlantic Avenue and the noise produced by nearby on-site construction activities, L_{10} noise levels at this location would be in the low 80 dBA range, for approximately one year during construction, and would be in the "clearly unacceptable" category. Other years, when a high level of construction activity is not taking place adjacent to this receptor, L_{10} noise levels would be lower, in the high 70 dBA range, and would be in the "marginally unacceptable" category. (Noise levels in many areas of New York City are in the "marginally unacceptable" range.)

While construction activities would be noticeable and intrusive to receptors near the project element under construction, the noise levels produced by construction activities with the incorporated noise reduction measures would be relatively low for construction of a project of this magnitude.

As part of the approval process, the Project sponsors have committed to incorporating measures to reduce or avoid the impacts due to construction activities. These measures include: the use of quieter construction equipment, scheduling deliveries during weekday daytime hours, early electrification of equipment where and when practicable, siting noisier equipment away from sensitive receptors where and when practicable, a minimum 8-foot high perimeter plywood barrier surrounding the construction site with a 16-foot high adjacent to sensitive receptors, and noise curtains and equipment enclosures where and when practicable. In addition, most sensitive receptors that have the potential for significant impact already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors have made offers to provide double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation in conformance with the Amended Memorandum of Environmental Commitments.

The sensitive receptors that have the potential for significant construction noise impacts during each stage of the Extended Build-Out Scenario construction schedule are described below.

Stage 1

Construction activity up to the completion of Stage 1 includes construction of the arena, Building 1 temporary plaza area, Building 2, Building 3 temporary plaza area, and the permanent railroad yards. These activities would result in the potential for significant construction noise impacts at noise receptor sites 2, 3, 4, 9b, 9c, 10, 10a, 10b, 10c, 12, 13, 14, 16, and 17. Each of these receptors is expected to experience significant impacts primarily during construction of their immediately adjacent the project elements. Depending on the construction schedule of each project element, this may or may not last the entire duration of the construction stage. At some of these sites, the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Stage 2

Construction activity up to the completion of Stage 2 includes construction of Building 2, Building 3, Building 4, Site 5, and the permanent rail yard. These activities would result in the potential for significant construction noise impacts at noise receptor sites 1, 2, 3, 4, 9b, 9c, 10, 10a, 10b, 10c, 11, 12, 13, 14, 16, and 17. Each of these receptors is expected to experience significant impacts primarily during construction of project elements in the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

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Stage 3

Construction activity up to the completion of Stage 3 includes construction of Building 1, Building 5, Building 6, Building 7, Building 14, Building 15, LIRR Platform 1, and LIRR Platform 2. These activities would result in the potential for significant construction noise impacts at noise receptor sites 3, 4, 5, 6, 10, 10a, 10b, 10c, 10d, 12, and 14. Each of these receptors is expected to experience significant impacts primarily during construction of project elements in the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Stage 4

Construction activity up to the completion of Stage 4 includes construction of Building 7, Building 8, Building 14, and LIRR Platform 2. These activities would result in the potential for significant construction noise impacts at noise receptor sites 4, 5, 6, 10, 10a, 10b, 10c, 10d, and 14. Each of these receptors is expected to experience significant impacts primarily during construction of project elements in the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Stage 5

Construction activity up to the completion of Stage 5 includes construction of Building 8 and Building 13. These activities would result in the potential for significant construction noise impacts at noise receptor sites 5, 6, 10, 10a, 10b, 10c, and 14. Each of these receptors is expected to experience significant impacts primarily during construction of project elements in the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Stage 6

Construction activity up to the completion of Stage 6 includes construction of Building 9, Building 10, Building 13, and LIRR Platform 3. These activities would result in the potential for significant construction noise impacts at noise receptor sites 5 and 6. At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). Each of these receptors is expected to experience significant impacts primarily during construction of project elements in the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Stage 7

Construction activity up to the completion of Stage 7 includes construction of Building 9, Building 10, Building 11, and Building 12. These activities would result in the potential for significant construction noise impacts at noise receptor sites 5 and 6. Each of these receptors is expected to experience significant impacts primarily during construction of project elements in

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the area immediately adjacent to these receptors. Depending on the construction schedule of each project element, the impacts on a particular receptor may not last the entire duration of this hypothetical construction stage and the significant impacts would be expected to occur only for a portion of this construction stage.

At most of these locations residential uses already include double-glazed windows and an alternate means of ventilation (i.e., air conditioning). At potentially impacted sensitive receptors that do not have one or both of these measures, the Project sponsors are obligated to make available, prior to the start of construction, double-glazed windows or interior windows and/or alternative means of ventilation, as noise mitigation, as set forth in the Amended Memorandum of Environmental Commitments. The double-glazed windows or interior windows and alternative ventilation at these structures would result in interior noise levels during most of the time that are below 45 dBA $L_{10(1)}$ (the CEQR acceptable interior noise level criteria). However, as described in the FEIS, even though these structures would have double-glazed windows and alternative ventilation, during some limited time periods, certain construction activities located closest to the receptors may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for residential uses.

Each of the noise receptor locations identified above as experiencing significant adverse noise impacts during the construction period were also identified in the FEIS construction analysis as receptor locations that would experience significant adverse noise impacts during the construction period. The mitigation measures identified in the FEIS to avoid or minimize these impacts would continue to address impacts in the Extended Build-Out Scenario.

Neighborhood Character

As described above, at the time that the FEIS was published, the Project site still largely reflected its early industrial character and stood in stark contrast to the character of much of the surrounding area, which includes uses more typical of viable urban neighborhoods, including residential and commercial development. The open rail yard, spanning three blocks, comprises a significant area of the Project site. The FEIS concluded that construction activity associated with the Project would have significant adverse localized neighborhood character impacts in the immediate vicinity of the Project site during construction. Construction traffic and noise would change the quiet character of Dean Street and Pacific Street in the immediate vicinity of the Project site. The impacts would be localized and would not alter the character of the larger neighborhoods surrounding the Project site. The FEIS identified a number of mitigation measures to reduce the construction impacts; these measures were subsequently imposed in the SEQRA Findings Statement and the Amended Memorandum of Environmental Commitments.

For the Extended Build-Out Scenario, there would be continued localized adverse impacts on Dean and Pacific Streets; however, impacts associated with construction activity would be less intense because there would be less simultaneous activity on the site. As each building is completed, it would be occupied by its permanent intended uses. The amount of time and effort required to complete each Project component would be similar regardless of whether several buildings are constructed concurrently or they are sequenced one at a time. There would be an incremental realization of the Project as buildings are completed in a sequential manner. Sites not under active construction would be maintained in their existing condition (as in the case of Site 5) or would have interim uses such as temporary public plazas or other amenities, interim surface parking and/or construction staging areas.

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Although the length of time where the temporary surface parking and staging area on Block 1129 would be prolonged with the Extended Build-Out Scenario, it would not be occupied by a 1,100-car surface parking lot for the entire construction duration. As sites are developed on Block 1129, the above-ground interim parking lot would be reduced as parking is provided below-grade. Furthermore, construction of at least one of the four buildings on Block 1129 would be started by 2020. Although the entire Project would be prolonged in the Extended Build-Out Scenario, 2020 represents an outside date for when the interim surface parking and staging areas on Block 1129 would start its incremental transformation into completed and occupied permanent uses, including public open space and below-grade permanent parking.

Therefore, the impacts of the Project's construction on neighborhood character with the Extended Build-Out Scenario would remain localized and be comparable to those described in the FEIS and the 2009 Technical Memorandum. As in the FEIS scenario, the construction activity associated with the Project would have significant adverse neighborhood character impacts in the immediate vicinity of the Project site during construction, but these impacts would be localized and would not alter the character of the larger neighborhoods surrounding the Project site. The following analysis assesses the potential impacts on neighborhood character during each of the illustrative construction stages.

Stage 1

The presence of cranes, earth moving and loading equipment, and other heavy equipment used from the construction during Stage 1 for the development on the arena block would result in a temporary localized neighborhood character impact on the immediate area to the south and west of the arena site. The residents along Dean Street directly south of the arena block would experience localized neighborhood character impacts from the construction activities, but given the less intensive pace of construction on that block, the neighborhood character effects would be expected to be less than those disclosed in the FEIS. Moreover, with the activities focused on the arena block, the eastern end of the Project site would experience less neighborhood character effects from the construction activities. Construction of Buildings 1 and 3 would not have started and those sites would be occupied by temporary public open space (see Figures 16 and 17). The site of Building 4 would continue to remain a below-grade, open rail yard with a perimeter wall and fencing and would represent no change on neighborhood character.

Improvements to the permanent MTA/LIRR rail yard on Block 1120 and 1121 would be underway, but these activities would not have significant adverse impacts on neighborhood character since work would occur within the below-grade rail yard. A portion of the at-grade site on Block 1120 would be used as a rail yard construction staging and storage area but this use would not be significantly different from its historical use as a LIRR bus storage area and would have no materially different effect on neighborhood character.

The area immediately adjacent to Block 1129, which is closest to the residential neighborhood of Prospect Heights to the south, would experience increases in pedestrian and vehicular activities along Dean Street linking Block 1129 and the arena (i.e., between Vanderbilt and 6th Avenues), primarily during the pre-game and post-game peak periods at the arena; however, the pedestrian and vehicular traffic would be at the same (or reduced) level as in the permanent condition upon Project completion, and as analyzed in the FEIS and the 2009 Technical Memorandum. (Upon Project completion, Block 1129 will have 2070 below-grade parking spaces; thus, vehicular traffic associated with the interim surface parking lot of 1100 spaces is expected to be less than analyzed in the permanent condition in the FEIS.) The operations of the surface parking lot serving the arena patrons would remain unchanged from that analyzed in the FEIS, although operations of the interim

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surface lot would extend over a longer period of time under this Extended Build-Out Scenario. As previously described, when necessary, stackers would be used that allow two cars per space to provide a capacity for up to the 1,100 cars. Consistent with the Project plan for permanent underground parking on Block 1129, the temporary surface parking would be accessible from Carlton Avenue, Dean Street, and Vanderbilt Avenue to facilitate efficient circulation. Within the lot, queuing and circulation space would be provided, and valet operations would be in place to accommodate periods of high demand (i.e., during pre- and post-arena events).

The temporary surface parking lot would be screened and landscaped around its perimeter. The landscaping, fencing and lighting would work together to create a safe environment for pedestrians and a less obtrusive effect on nearby residents. The directional lighting planned for the site would illuminate different parts of the interior space while minimizing off-site light intrusion onto the upper floor residences in the immediate area of Vanderbilt Avenue and Dean Street as well as the surrounding neighborhood. As in the FEIS Scenario, the upper floor residences immediately across from the parking lot (i.e., upper floor residences on the eastern edge of Block 1128, the south side of Dean Street between Carlton and Vanderbilt Avenues and, to a lesser extent, the eastern side of Vanderbilt Avenue between Dean and Pacific Streets) will see the screening (which will be 10' in height), but because of their elevation will also see over the screening into the surface parking lot; this would be a change in their views from the pre-Project condition in which Block 1129 was characterized by a mix of abandoned industrial buildings, occupied residential and commercial buildings, a homeless shelter and much smaller surface parking lots. That change in views would not constitute a significant adverse impact to neighborhood character. During off-peak times when the lot would not be actively used for parking, the lot would also include some low lighting to safely light the site. The vertical screening, landscaping, and directional lighting will minimize the effects of this use on adjacent residences, but as in the permanent condition, the surface parking lot will result in significant traffic impacts that would affect the local area.

Once the arena is complete and opened, the construction staging area on Block 1129 would be located in a discrete area of the northeast corner of the block, at the corner of Pacific Street and Vanderbilt Avenue, adjacent to the rail yard. This location is more distant from the residences on Carlton Avenue and Dean Street and is separated from the residences on the eastern side of Vanderbilt Avenue by Vanderbilt Avenue, which is a wide street. The construction staging area will also be screened as described above.

Stage 2

At Stage 2 of construction completion, construction would continue on the arena block with the sequential construction (with some potential overlap) of Buildings 2, 3, and 4. Site 5 (Block 927) construction would also be completed in Stage 2. Below-grade parking would also be complete under Buildings 3 and 4 and Site 5. Construction would also proceed to the east on Blocks 1120 and 1121 with the permanent rail yard completed in Stage 2 and platform construction and staging ongoing on Block 1120. There would be no change in use between Stages 1 and 2 on Block 1129, as it would continue to be used for surface parking, and, in the northeastern corner, for construction staging.

Similar to conditions in Stage 1, the presence of cranes, earth moving and loading equipment, and other heavy equipment used between Stages 1 and 2 for the development on the arena block and platform construction on Blocks 1120 and 1121 would result in a temporarily localized neighborhood character impact on the areas immediately adjacent to the Project site. However, over half of the arena block would be completed with three buildings occupied by its permanent

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intended uses. Neighborhood character effects of the construction activity would be less in the area at the eastern end of the Project site, because the buildings under construction would be west of Sixth Avenue. As construction is completed for the permanent rail yard, it is anticipated that construction staging activities would lessen on Block 1129, reducing its effects. Block 1129 would continue to operate as a construction staging area as well as interim surface parking for arena events as described in Stage 1. The screening and landscaping around the parking lot would continue to provide a visual buffer to the pedestrians and surrounding neighborhood. The interim surface parking lot would be utilized the most during the very early stages of construction (Stages 1 and 2). In subsequent stages, development would be underway on Block 1129 and the surface parking lot would be incrementally reduced as the parking spaces would be relocated under the new buildings on the block.

Stages 3 through 5

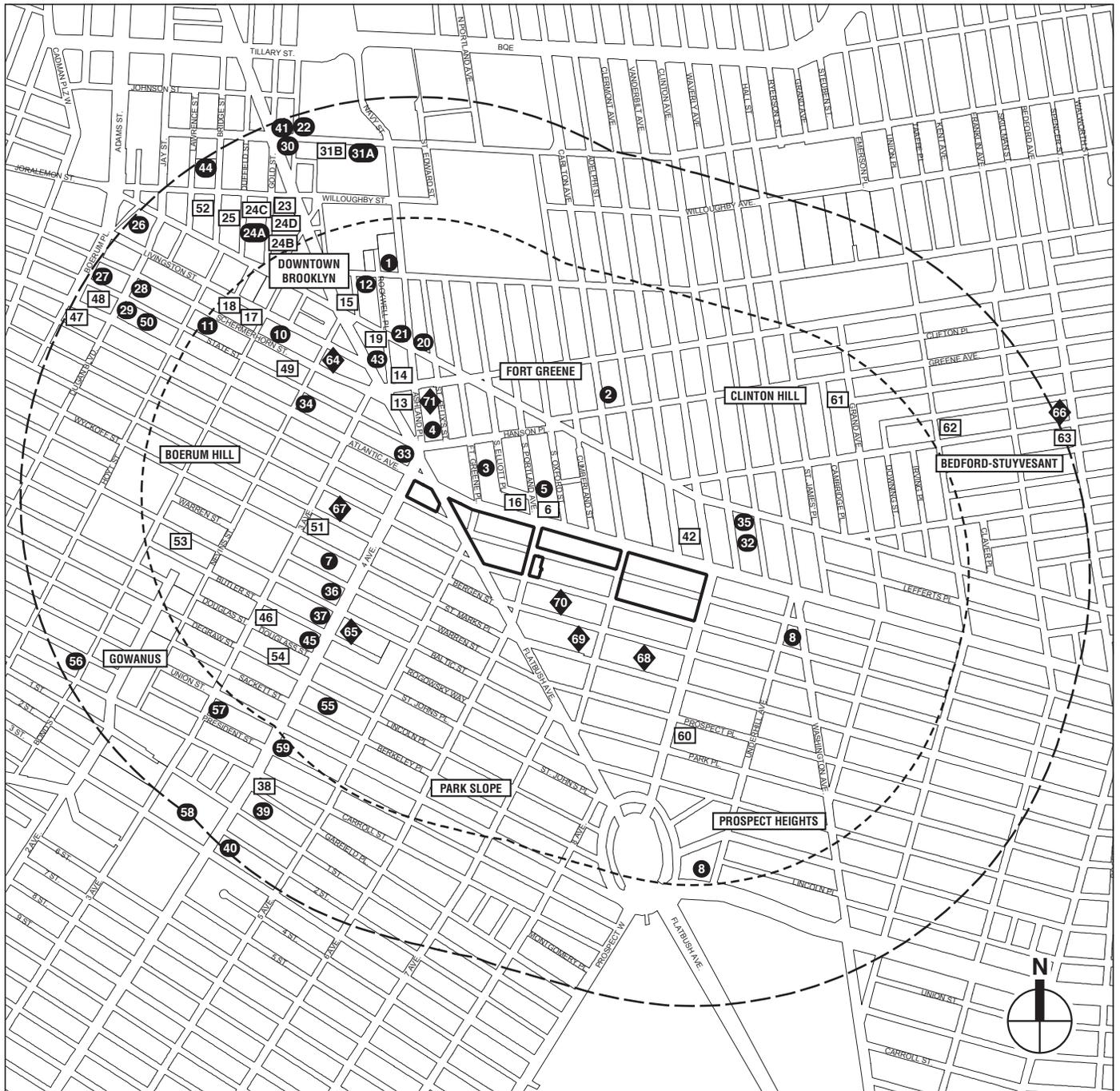
Construction would be completed on the arena block by Stage 3—the arena and Buildings 1 through 4 and the indoor open space area in the Urban Room at Building 1 would have been constructed sequentially, and be occupied with their permanent intended uses. There would be no construction occurring at the eastern end of the Project site, as Buildings 15, 5 and 6 and their associated open space areas (Buildings 5 and 6) and below-grade parking would be occupied with their permanent intended uses. At this point, half of the approximately 22-acre area site would be developed with its permanent intended uses. Construction would be ongoing on the eastern portion of Block 1120 and western portion of Block 1121 for the construction of Buildings 7 and 8, respectively, and on the western portion of Block 1129 for Building 14, with the completion of both Buildings 7 and 14 at Stage 4. Surface parking would continue to occupy the eastern portion of Block 1129, and the screening described above would remain in place in that area. Similar to previous stages, the entire Project site would be in use. However, during this time, the entire western portion of the site would be completed and occupied with its permanent intended uses and less of the site would be under construction than during the previous stage.

Development of Buildings 7 and 14 and their associated below-grade parking and open space areas as well as the start of construction on Buildings 8 would result in a temporarily localized neighborhood character impact on the immediately adjacent area. However, since construction is primarily occurring to the east of Carlton Avenue, it is anticipated that the residential neighborhoods to the south and to the north (west of Carlton Avenue) and the commercial district to the north of the Project site would not experience localized neighborhood character impacts at this time. Building 13 on Block 1129 would be under construction in Stage 5. With the completion of Building 14 and construction of Building 13 and their associated open space areas, the surface lot would have decreased in size and in use as a parking facility. At this point, approximately 2/3 of the Project would be developed with its permanent intended uses.

Stages 6 and 7

These periods represent the final build-out of Blocks 1121 and 1129 with sequential construction of each of the last four of the 17 Project buildings. At this point, 75 percent of the Project would have been completed and occupied with their permanent intended uses and associated open space areas and below-grade parking.

There would be temporarily localized neighborhood character impact on the areas immediately adjacent to the construction activity. Similar to previous conditions, it is anticipated that the residential neighborhoods west of Carlton Avenue or the commercial district to the north of the Project site would not experience localized neighborhood character impacts at this time. *



Project Site

1/2-Mile Perimeter

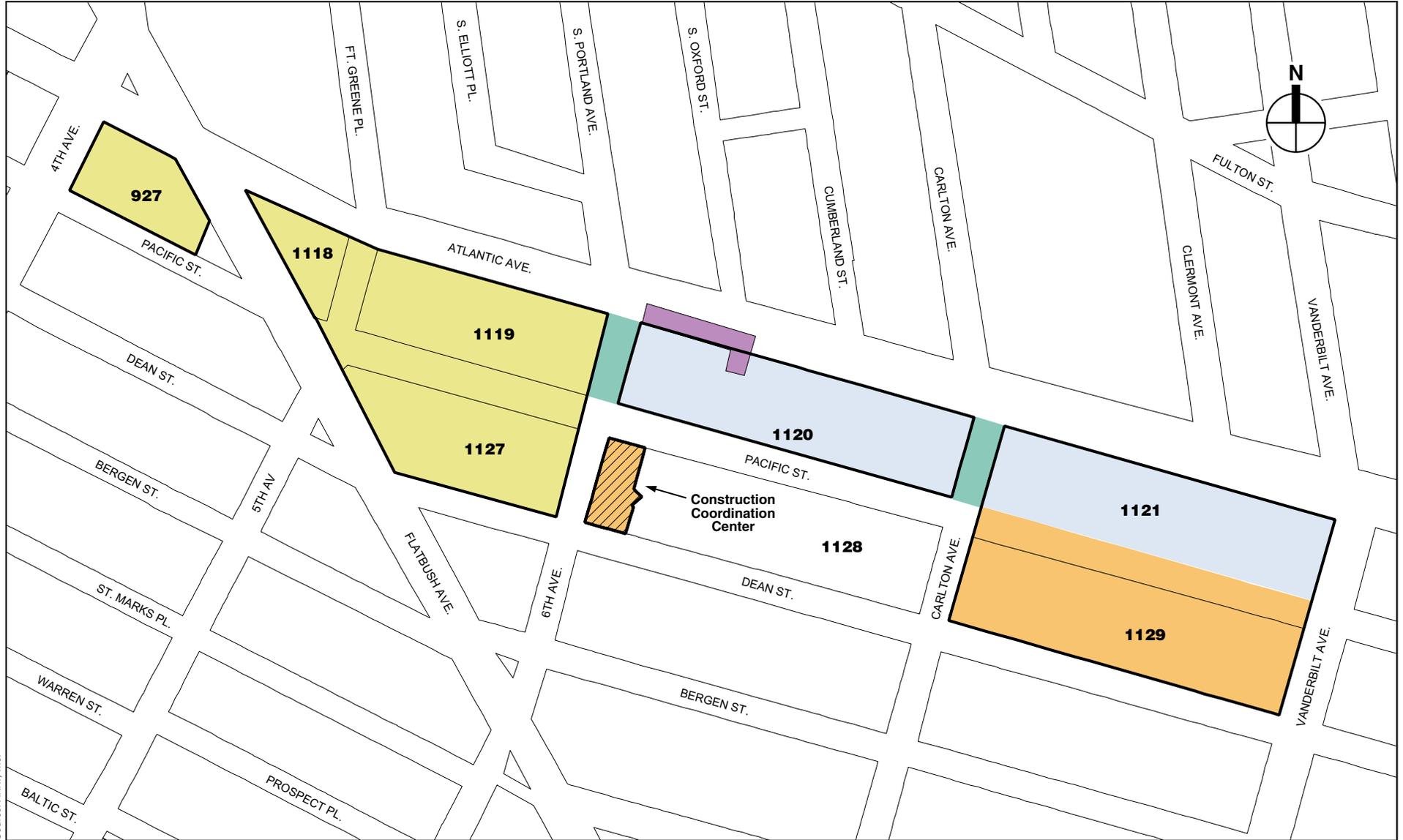
3/4-Mile Perimeter

Completed No Build Projects Noted in the FEIS or 2009 Technical Memo (see Table 1 for reference)

No Build Projects Noted in the FEIS or 2009 Technical Memo

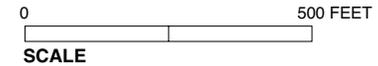
New No Build Projects Since 2009

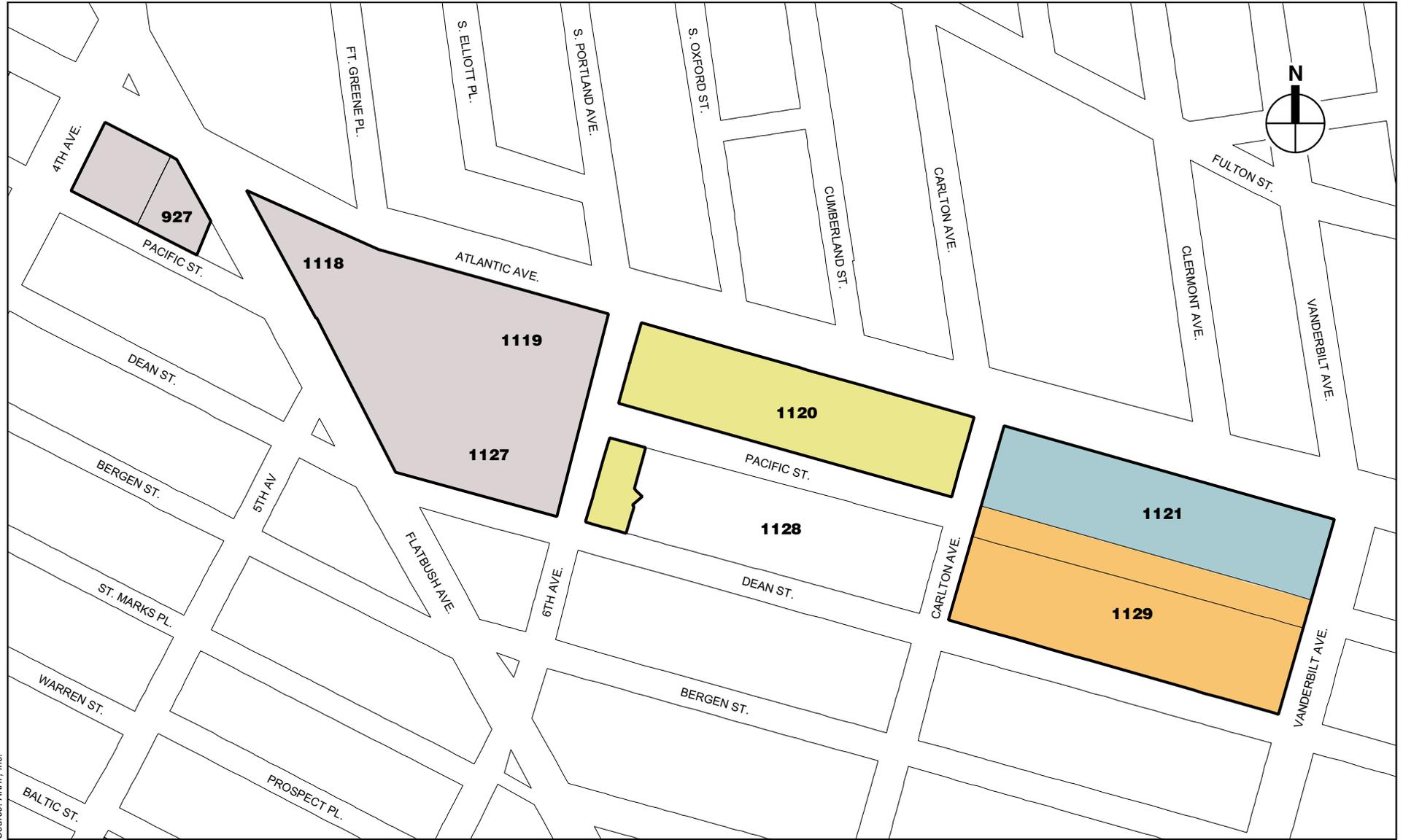
0 2000 FEET
SCALE



Source: AKRF, Inc.

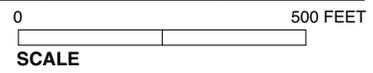
- Project Site
 - Site Construction
 - West Portal Construction
 - Railyard Reconfiguration (below grade)
 - Bridge Reconstruction
 - Staging and Parking Area
- 1120** Blocks

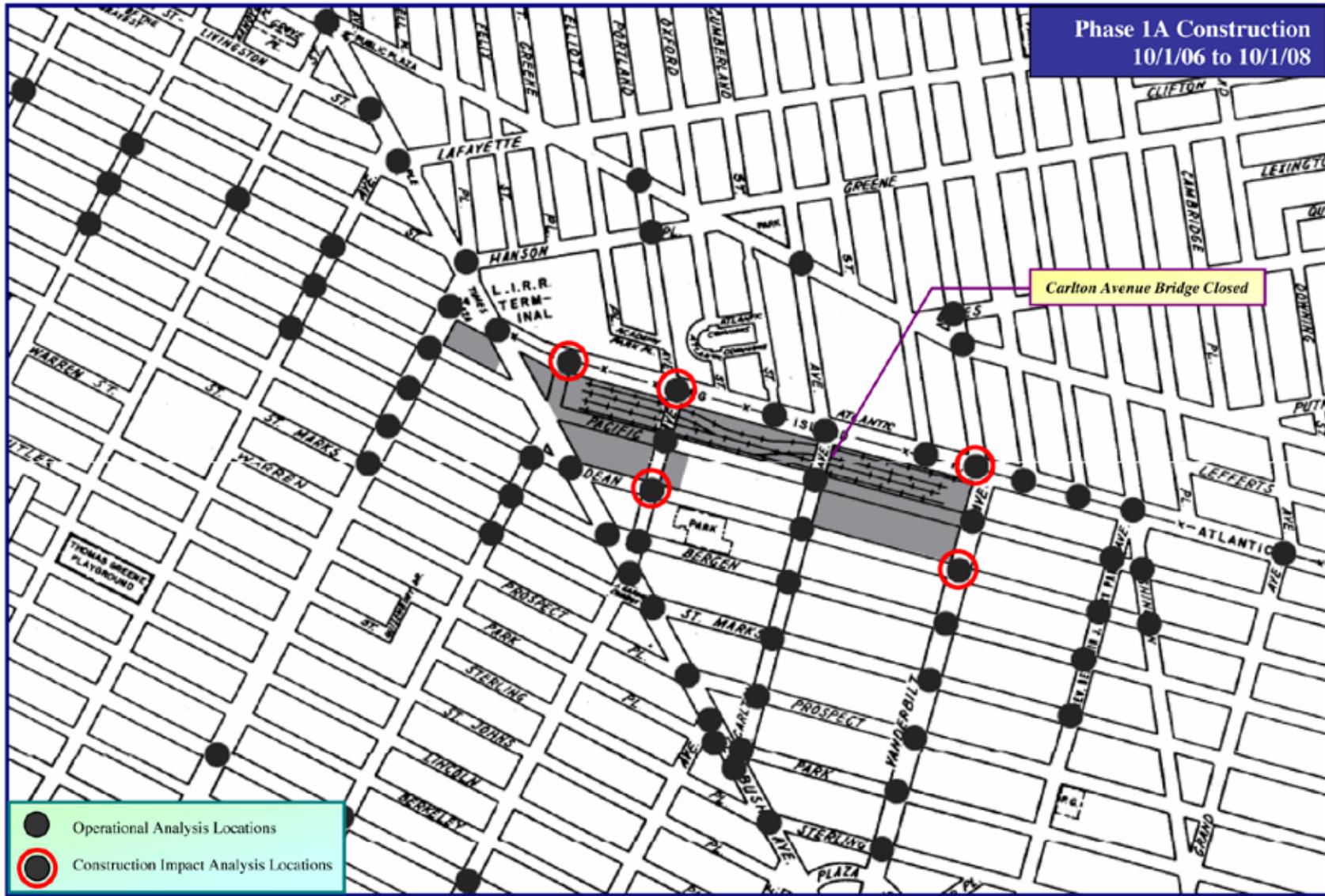


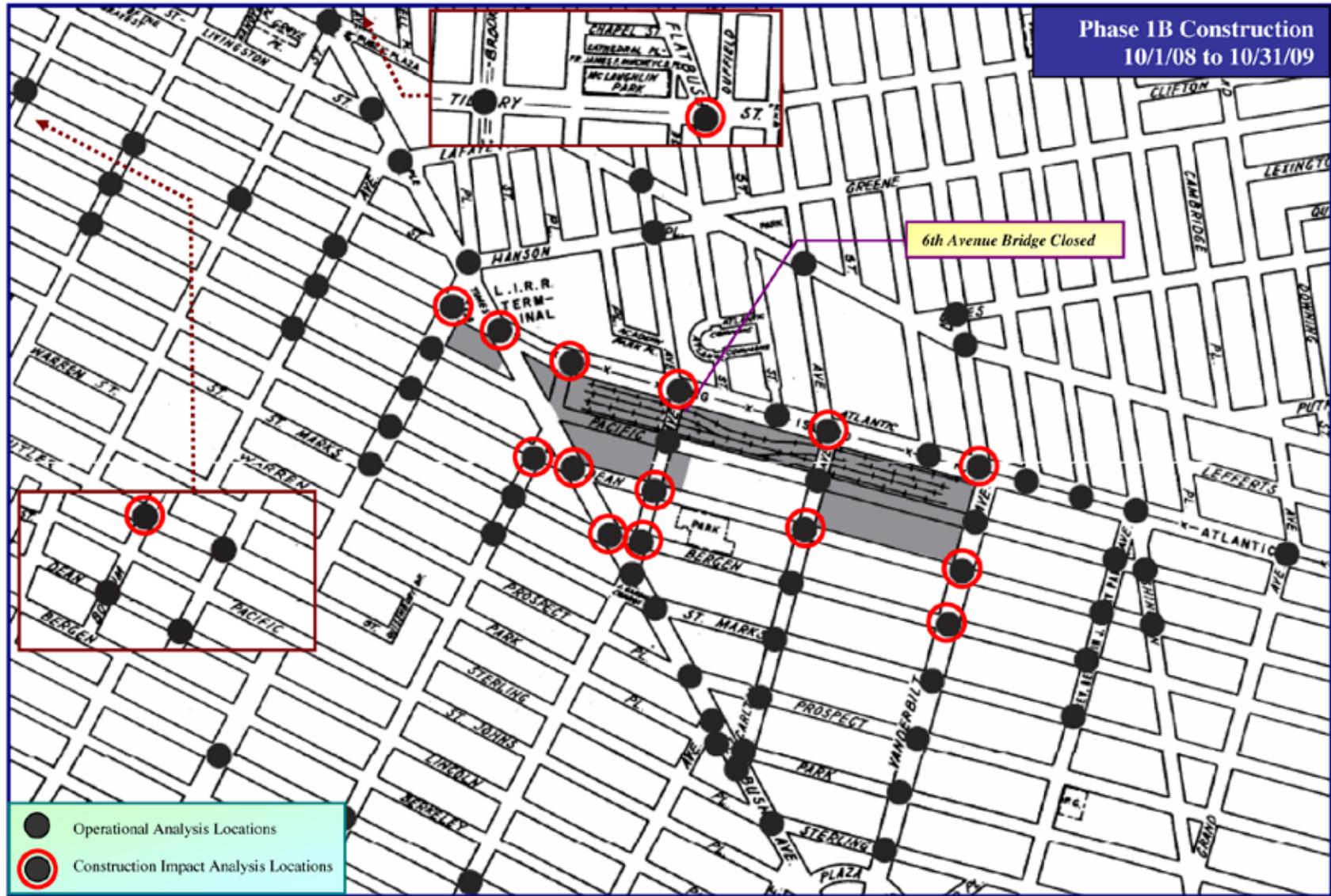


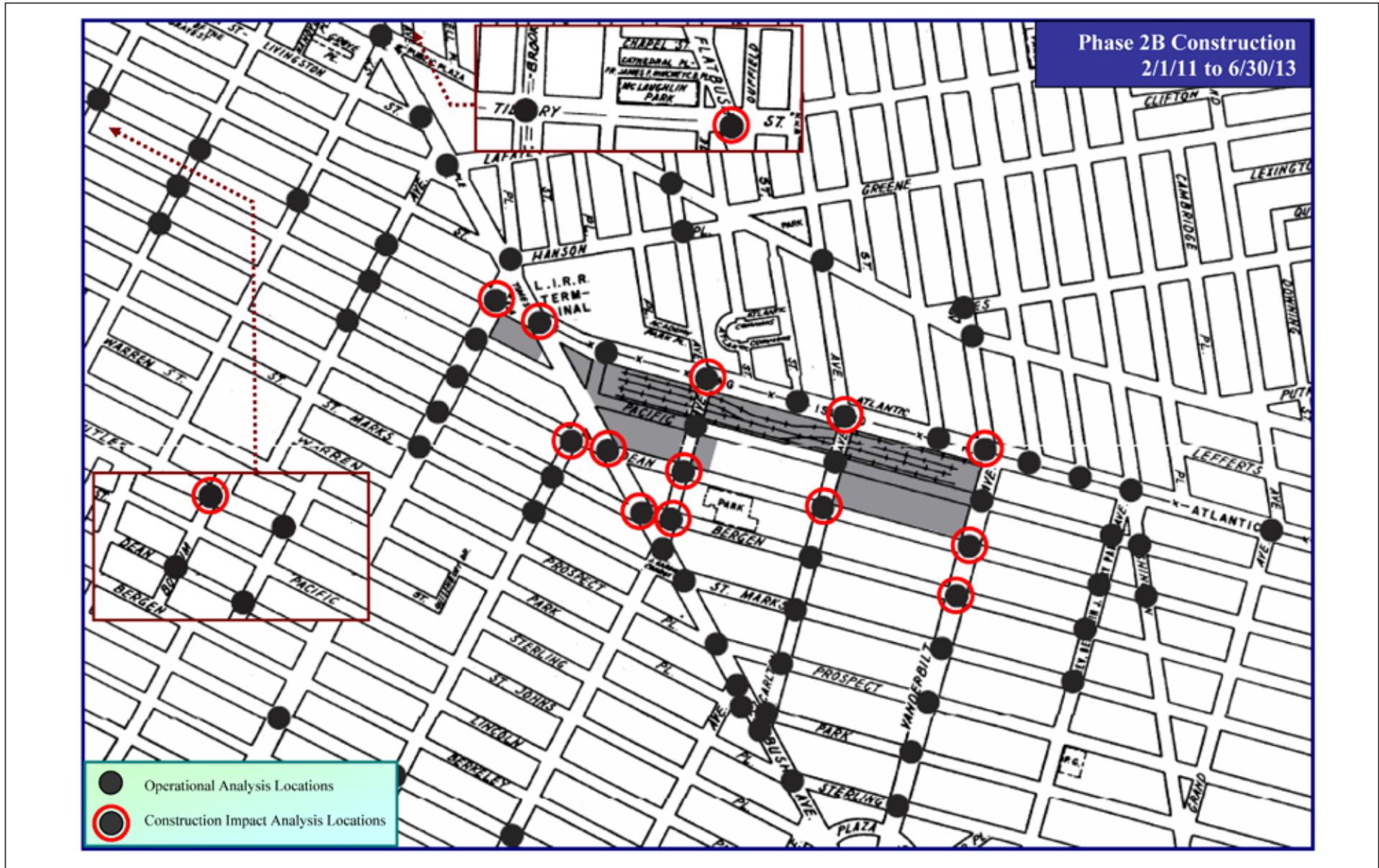
Source: AKRF, Inc.

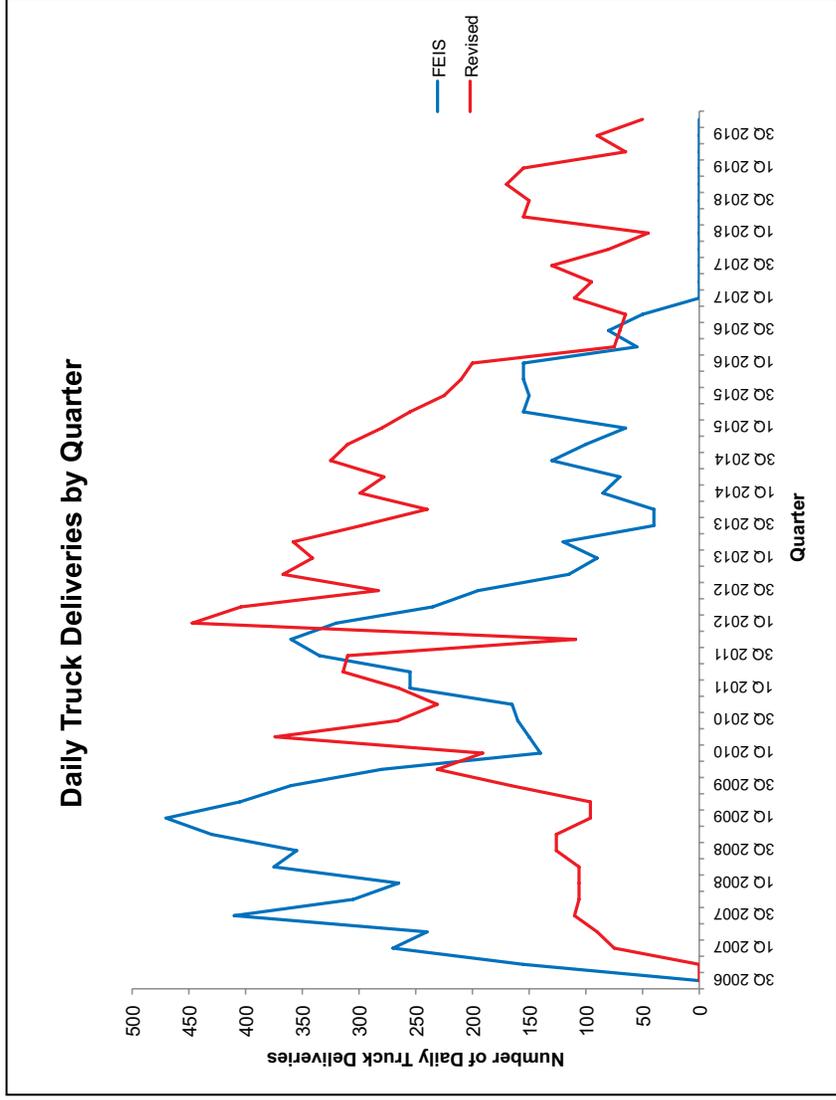
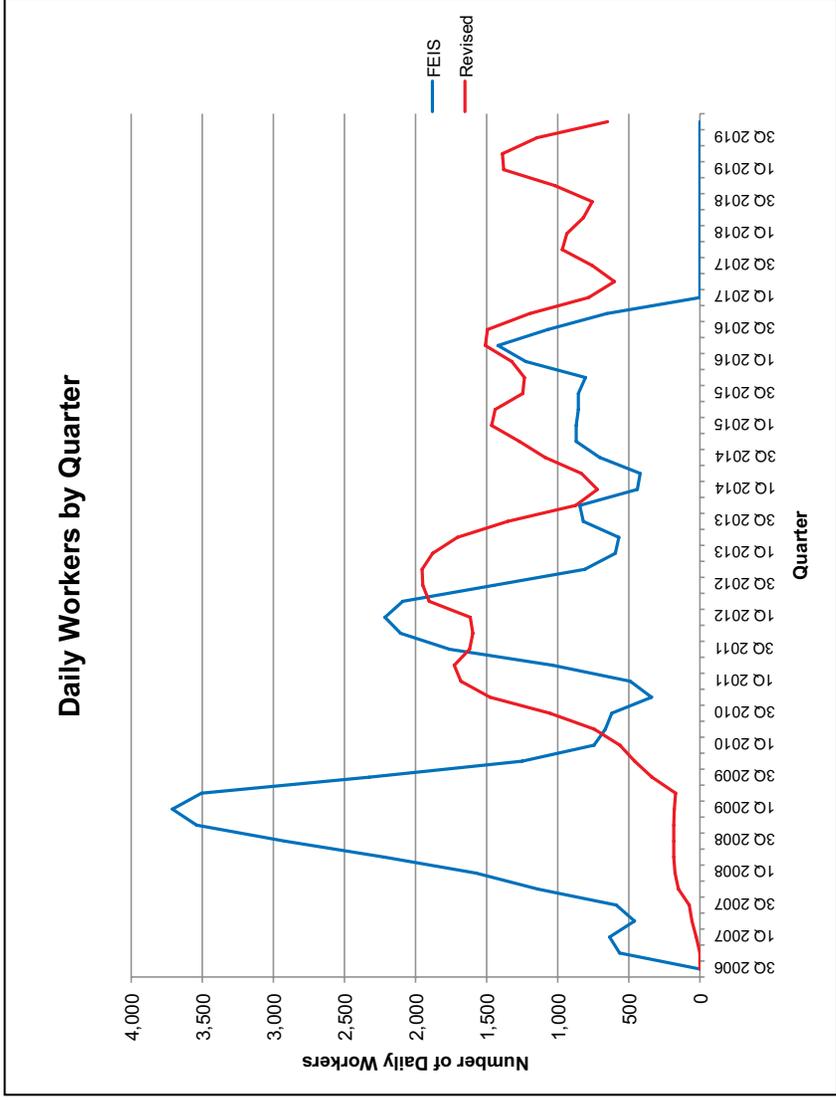
- Project Site
- Platform Construction
- 1120** Blocks
- Building Construction
- Staging and Parking Area
- Completed Construction

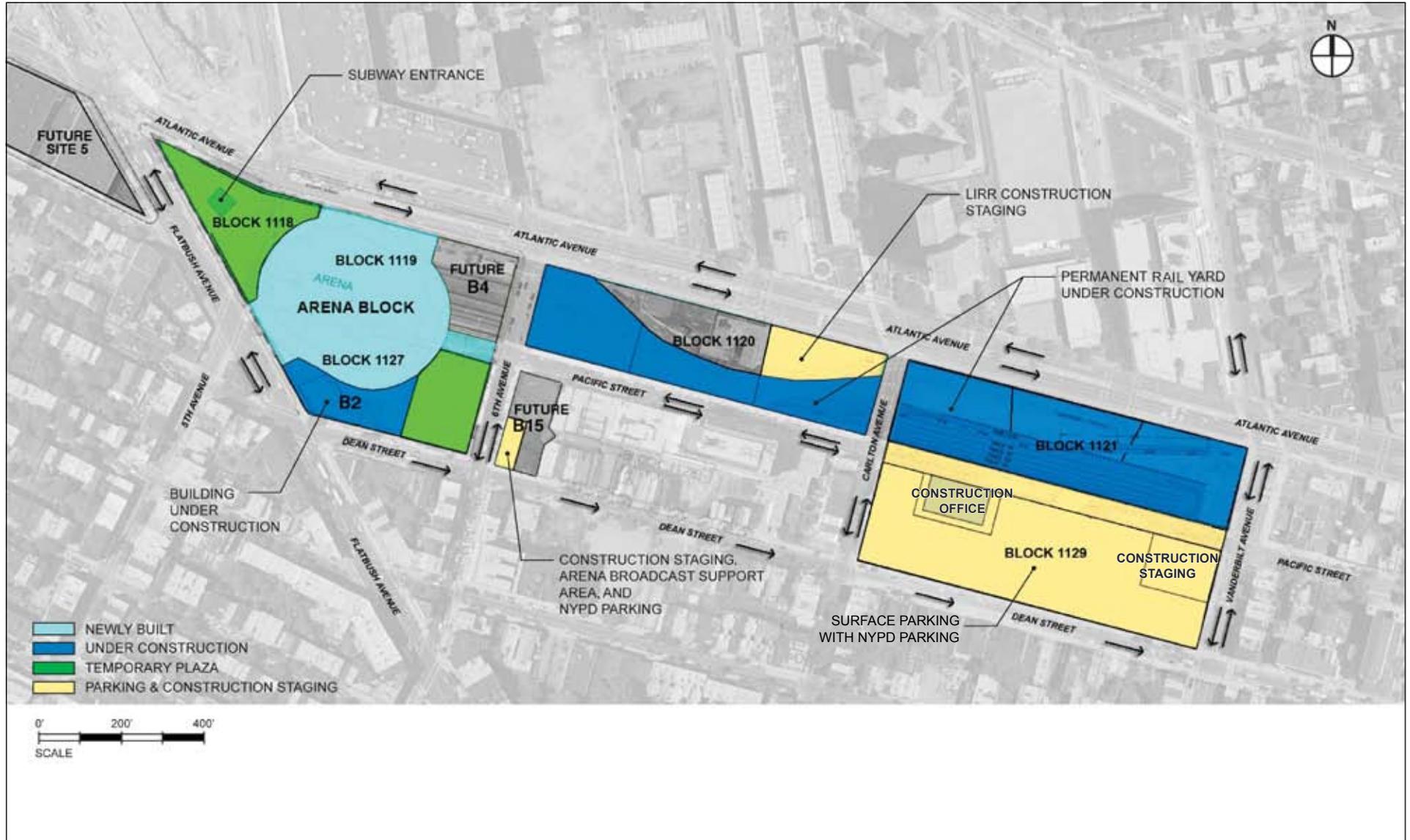






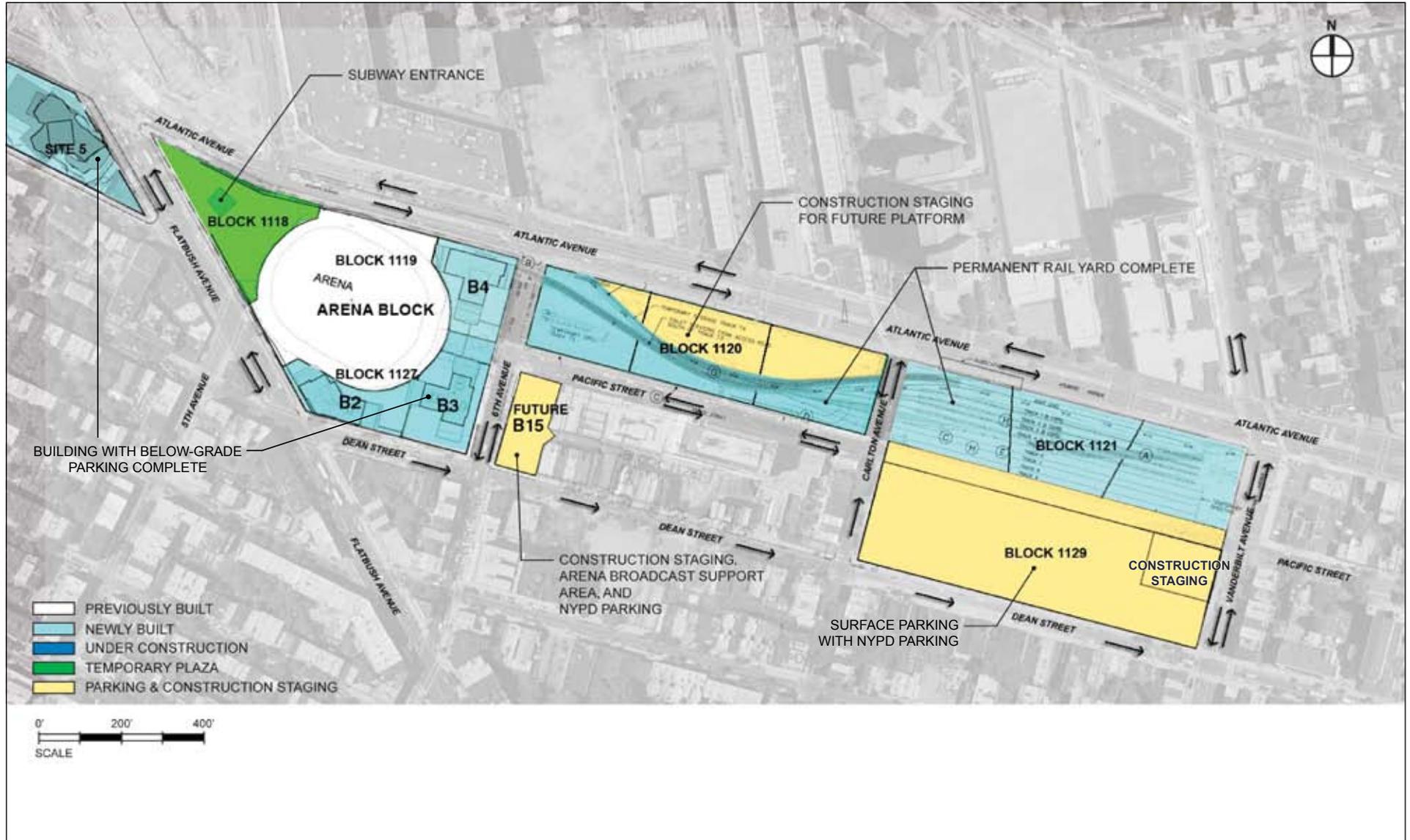






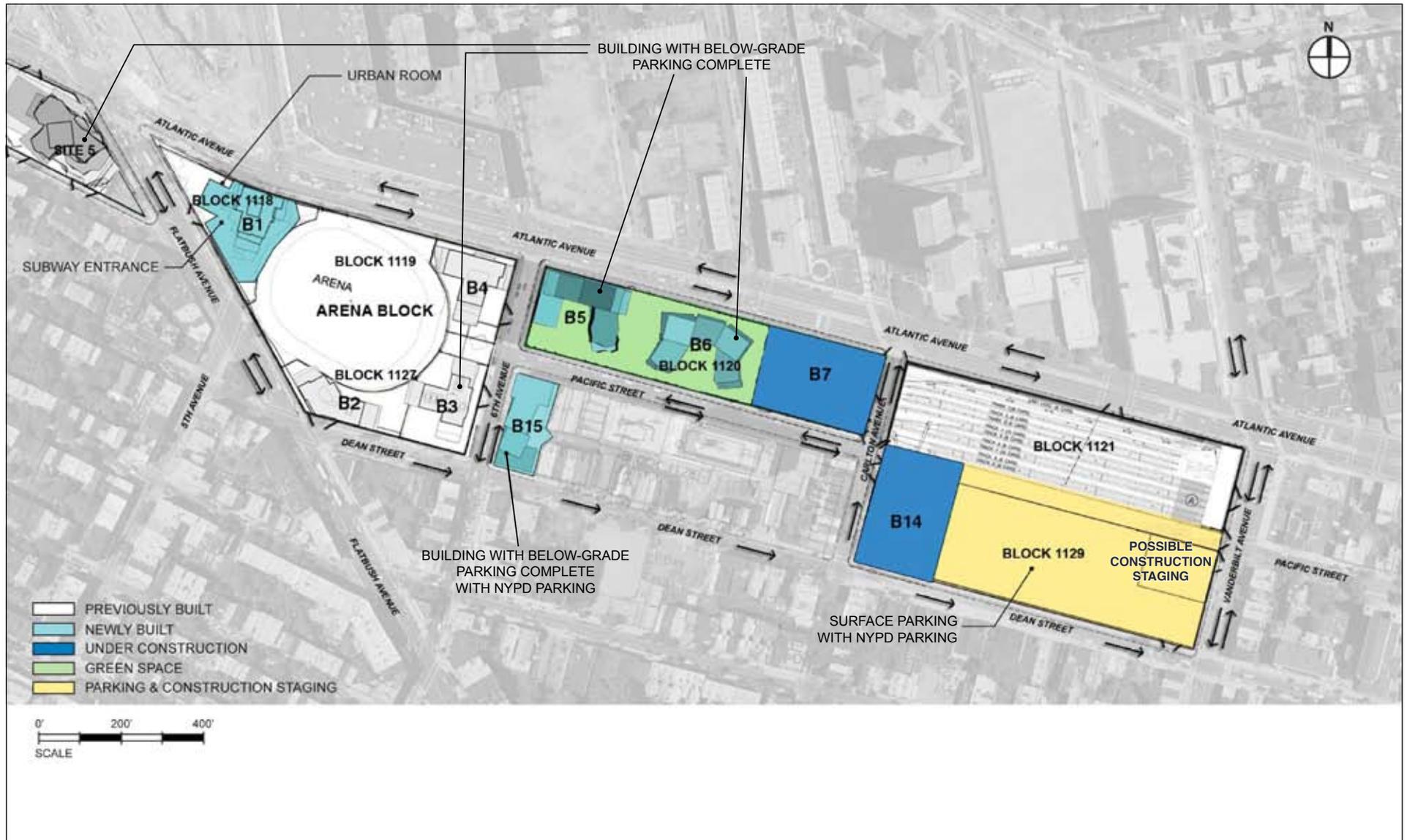
SOURCE: Stantec 12/2010

Illustrative Extended Build-Out Scenario:
 Stage 1
 Arena Opening
 Figure 9



SOURCE: Stantec 12/2010

Illustrative Extended Build-Out Scenario:
 Stage 2
 LIRR Permanent Yard Complete
 Figure 10

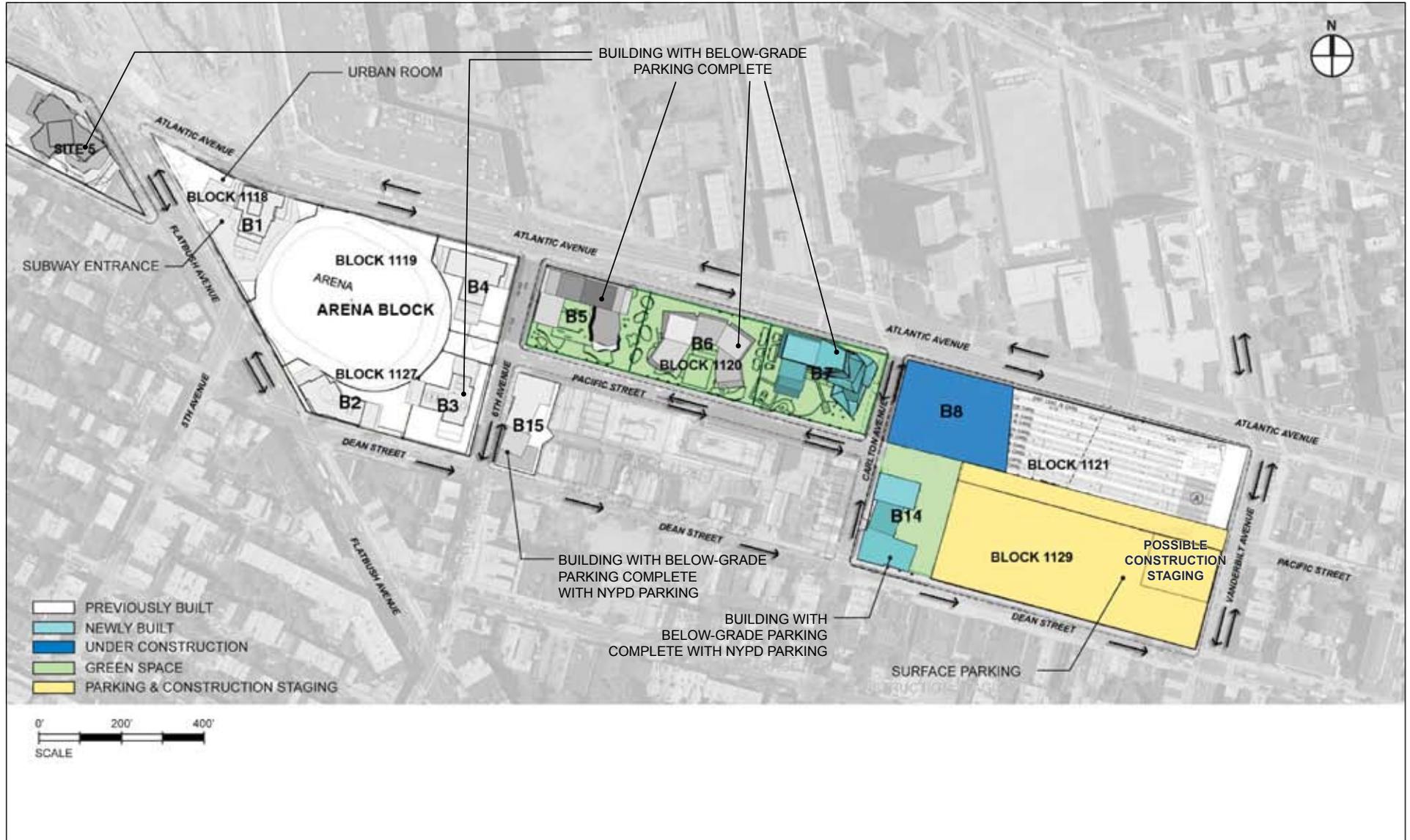


SOURCE: Stantec 12/2010

Extended Build-Out Scenario: Stage 3

Platform Partially Complete Over Block 1120

Figure 11

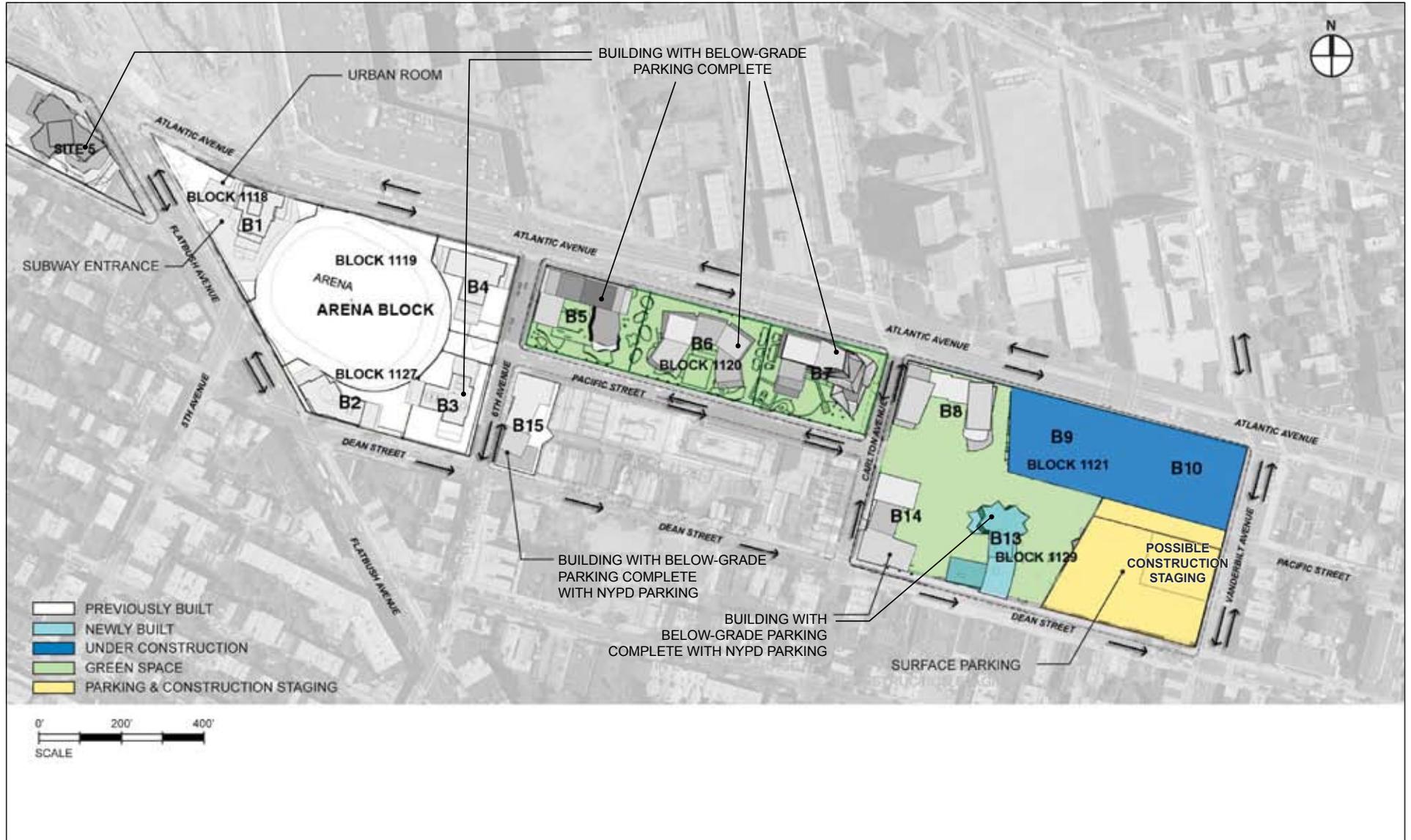


**Illustrative Extended Build-Out Scenario:
 Stage 4
 Platform Complete Over Block 1120
 Figure 12**



SOURCE: Stantec 12/2010

**Illustrative Extended Build-Out Scenario:
 Stage 5
 Platform Partially Complete Over Block 1121
 Figure 13**



**Illustrative Extended Build-Out Scenario:
 Stage 6
 Platform Complete Over Block 1121
 Figure 14**

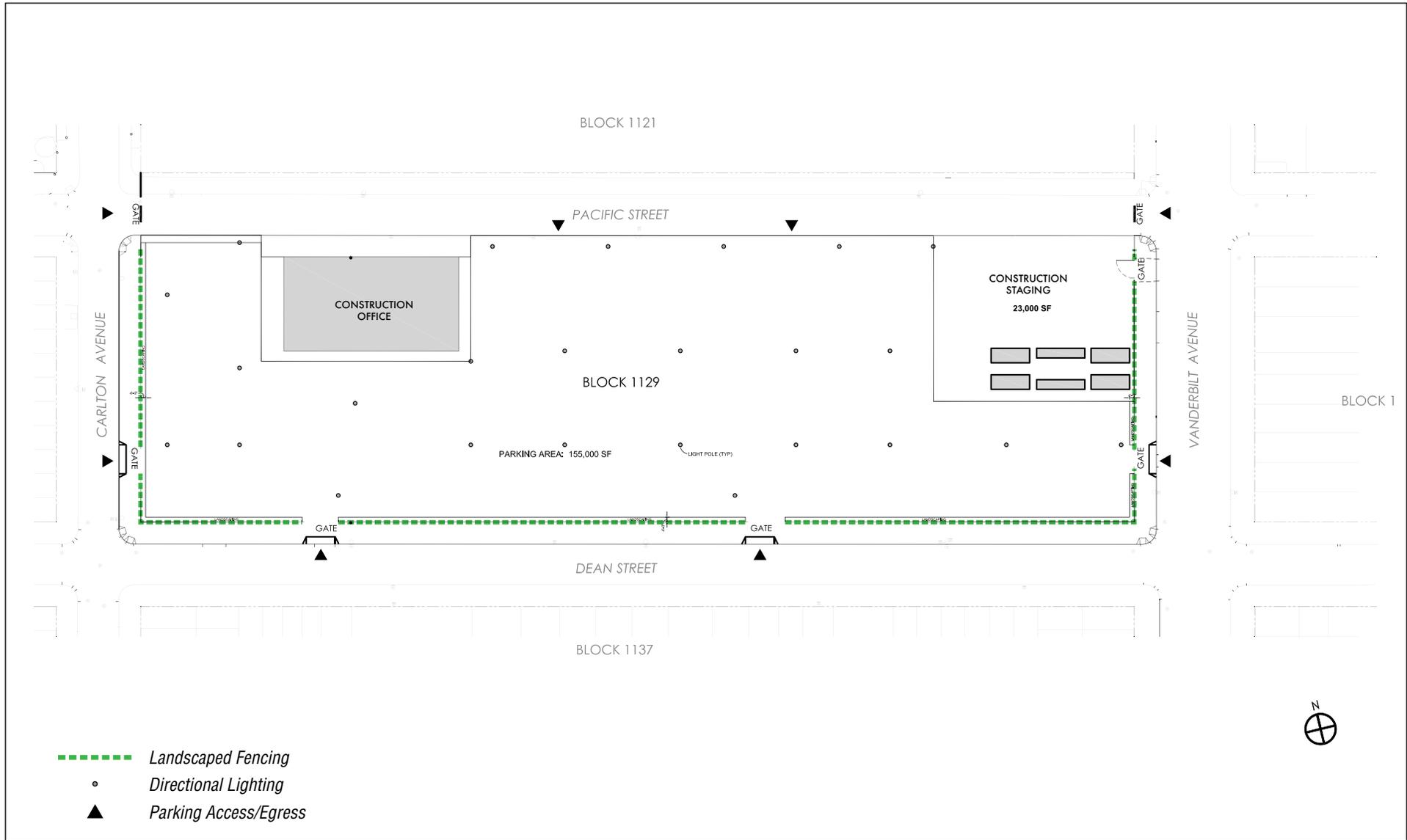


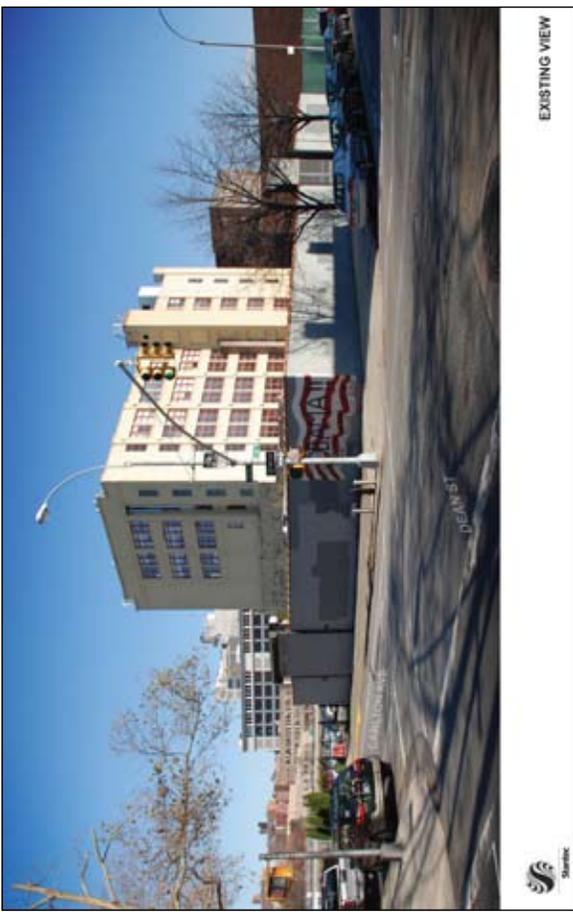
SOURCE: Stantec 12/2010

**Illustrative Extended Build-Out Scenario:
 Stage 7
 Final Build Out
 Figure 15**





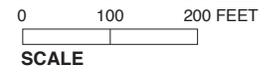




**Pedestrian Perspective of Block 1129-
Looking Northeast at Dean Street & Carlton Avenue**
Figure 19



* Developments expected to be completed by time of analysis (see Table 2-1)



This figure has been revised since the DEIS

EXHIBIT E

Atlantic Yards Land Use Improvement and Civic Project
ESDC Response to Supreme Court's November 9, 2010 Order

This document has been prepared to comply with an Order of the Supreme Court for New York County dated November 9, 2010 (the “Remand Order”), which directed Empire State Development Corporation (“ESDC”) to make “findings on the impact of the Development Agreement and of the renegotiated MTA agreement on its continued use of a 10 year build-out for the Project, and on whether a Supplemental Environmental Impact Statement is required or warranted.” ESDC executed the Development Agreement referenced in the Remand Order on December 23, 2009; in general, it requires affiliates of Forest City Ratner Companies (collectively, “FCRC”) to construct the Atlantic Yards Land Use Improvement and Civic Project (the “Project”) pursuant to ESDC’s modified general project plan affirmed on September 17, 2009 (the “2009 MGPP”). The “renegotiated MTA agreement” referenced in the Remand Order is comprised of several contracts (collectively, the “MTA Agreements”) also executed on December 23, 2009; in general, the parties to the MTA Agreements are FCRC, the Metropolitan Transportation Authority (“MTA”), the Long Island Rail Road (“LIRR”) and with respect to certain matters, ESDC.

ESDC acknowledged in 2009 that: (i) a key factor in the pace of Project development at the site will be the market demand for the residential units that comprise most of the square footage of the 16 non-Arena buildings and (ii) the market demand will be influenced by general economic and financial conditions. Based on its assessment of market demand, ESDC concluded in 2009 that it was reasonable to assume that the demand for the Project’s residential units will be sufficiently robust to allow the Project to be constructed on FCRC’s 10-year construction schedule, which the Final Environmental Impact Statement (“FEIS”) had used in 2006 to assess the environmental impacts of the Project under the State Environmental Quality Review Act (“SEQRA”). At the same time, in 2009, ESDC acknowledged that the 10-year construction schedule could be delayed for years in the event of prolonged poor market or general economic conditions. ESDC assessed the effect of such a potential delay in the 2009 Technical Memorandum prepared in connection with the 2009 MGPP and concluded that the potential for a delay in the Project would not require or warrant the preparation of a Supplemental Environmental Impact Statement (“SEIS”). Project opponents challenged this conclusion in the litigations that led to the Remand Order, asserting that ESDC lacked a rational basis for the 10-year construction schedule and did not adequately assess the potential environmental impacts of a delay in that schedule. ESDC believes that its decision making in 2009 was rational (based on the information available at that time) and that there is no factual or legal basis for the litigation claims brought against it, and for this reason it has sought leave to appeal the Remand Order. Nevertheless, in

compliance with the Remand Order, this document sets forth the ESDC findings required by the Court and provides an explanation of the basis for the findings.¹

ESDC Findings

ESDC finds that:

1. The Development Agreement and MTA Agreement (collectively, the “Development Contracts”) do not have a material effect on whether it is reasonable to use a 10-year construction schedule for the purpose of assessing the environmental impacts of the Project. As was the case when the ESDC Directors approved and affirmed the 2009 MGPP, a key factor in the ultimate pace of development of the Project will be the market demand for the Project’s buildings. The Development Contracts contemplate that the Project will be constructed on a 10-year schedule, but they do not establish 10 years as the outside date for Project completion. The Development Contracts require that: (i) FCRC use commercially reasonable effort to achieve Project completion by 2019 and, in any event, (ii) the Project be completed not later than a 25-year outside date, subject to certain specified contingencies. The fact that the Development Contracts have outside dates for development that go well beyond 10 years was publicly disclosed by ESDC when it approved the 2009 MGPP.

2. As of the date of these findings, it appears unlikely that the Project will be constructed on a 10-year schedule, because the construction of the Project’s residential buildings has lagged behind the 10-year schedule provided by FCRC to ESDC in 2009, and because of continuing weak general economic and financial conditions.

3. A delay in the 10-year construction schedule, through and including a 25-year final completion date, would not result in any new significant adverse environmental impacts not previously identified and considered in the FEIS and 2009 Technical Memorandum and would not require or warrant an SEIS. The analysis of the potential environmental impacts of a 25-year construction schedule – a delay more lengthy than that considered in the 2009 Technical Memorandum – confirms the conclusion reached by ESDC in 2009 that an SEIS is not required or warranted for the 2009 MGPP. Similarly, the Development Contracts do not require or warrant an SEIS.

¹ In making these Court-ordered findings, ESDC does not intend to waive its legal rights to appeal the Remand Order or contest the Remand Order in collateral proceedings and does not intend to establish any general practice under SEQRA that it is appropriate to analyze the environmental impacts of a proposed project by assuming that the selected developer will seek to delay the project’s construction to the outside date of any relevant commercial agreement pertaining to the project.

Explanation for ESDC's Findings

The discussion below begins with the background information needed to understand the context of the issues raised by the Remand Order and then summarizes the basis for the ESDC findings stated above.

A. Background Information

The ESDC Directors affirmed a Modified General Project Plan for the Project on December 8, 2006 (the "2006 MGPP"). As outlined in the 2006 MGPP, the Project will consist of 17 buildings and 8 acres of open space, constructed upon an approximately 22-acre site in Brooklyn. The site encompasses all or portions of eight blocks, as well as some adjoining street segments. The 2006 MGPP divides construction of the 17-building development into two phases. Phase I of the Project is comprised of the Arena and four other buildings constructed on Blocks 1118, 1119 and 1127 and the adjoining segments of Fifth Avenue and Pacific Street (collectively, the "Arena Block"). Phase I also includes construction of a fifth building on a portion of Block 927 ("Site 5"), a new subway station entrance on the Arena Block, a new rail yard on Blocks 1120 and 1121 and the eastern portion of Block 1119 (the "New Yard"), permanent below-grade parking facilities on the Arena Block and Site 5, and an interim surface parking lot on Block 1129. The five non-Arena buildings in Phase I are to contain commercial office and retail, residential, community facility and potentially hotel uses. Phase II consists of development of the remainder of the Project, including 11 buildings with residential, local retail and community facility uses, and eight acres of publicly accessible open space. Six of the Phase II buildings (Buildings 5, 6, 7, 8, 9 and 10) and the open space adjacent to those buildings will be built on a platform constructed over the New Yard, using air rights acquired from MTA.

MTA is participating in the Project principally through the sale of the MTA property and air rights associated with the Vanderbilt Yard, and its authorization and supervision of the New Yard and new subway entrance adjacent to the Arena. On December 13, 2006, the Board of the MTA approved its participation in the Project.

On November 27, 2006, ESDC issued the FEIS, which analyzed the Project's potential environmental impacts, described mitigation measures and evaluated a range of reasonable alternatives. The FEIS assumed a 10-year construction schedule for the Project. It examined the environmental impacts of construction during the 10-year period and used the 10-year schedule to arrive at the "Build Year" for the Project, thereby facilitating the assessment of its operational impacts upon completion in the Build Year.

The SEQRA Findings Statement approved by the ESDC Directors on December 8, 2006 concluded that the Project would have significant adverse impacts with respect to the following analysis areas: public schools (due to Project-created demand for school seats); open space (due to Project-created demand for additional open space resources in the non-residential study area); cultural resources (due to the demolition of two historic buildings on the Project Site, the loss of views of the Williamsburgh Savings Bank

Building from certain public vantage points, and the morning shadows cast by the one of the Project buildings on the Church of the Redeemer's stained glass windows); visual resources (due to the loss of views of the Williamsburgh Savings Bank Building from certain vantage points); shadows (due to shadows cast by certain Project buildings on the Atlantic Terminal Houses open space in certain winter hours and the shadows cast by one building on the Church of the Redeemer's stained glass windows in the morning); traffic (due to unmitigated significant adverse impacts at numerous intersections); noise (due to noise impacts at the Dean Playground and at the Project's on-site open space areas); and construction (due to the effects of construction activities on noise, traffic, two historic buildings, and the character of the local neighborhood over a prolonged construction period). The findings also identified the measures to be taken to avoid or minimize these significant adverse impacts. They further determined, with respect to those areas where the Project would result in unmitigated adverse impacts, that measures would be implemented to avoid or minimize such impacts to the maximum extent practicable.

Despite litigation-related delays in acquisition of the project site, the Project advanced significantly after its approval in 2006. FCRC demolished numerous buildings on the Arena Block and Block 1129 to begin clearing the site for construction. FCRC also performed extensive utility work to re-route in-street utilities on the Arena Block in preparation for the excavation required to build the Arena and new subway entrance.

In addition, pursuant to a license agreement with MTA, FCRC built a temporary rail yard adjacent to the existing LIRR facilities in Vanderbilt Yard. This temporary facility is needed to accommodate LIRR trains while the New Yard is constructed. The temporary rail yard was placed in service on November 23, 2009, allowing FCRC to dismantle a portion of the original rail yard on the Arena Block, as needed to make way for the Arena construction.

In 2009, ESDC, MTA and FCRC negotiated certain changes to the general business plan for the Project to allow construction to proceed, notwithstanding the downturn in the real estate market. The principal change to the business arrangements was that instead of requiring FCRC to pay for the acquisition of the entire 22-acre Project site up front, ESDC and MTA agreed to allow the property (including the MTA air rights over the rail yard) to be acquired in phases.

On June 23, 2009, the ESDC Directors adopted a new Modified General Project Plan for the Project (the "2009 MGPP"). The Project itself remained virtually the same. The site plan calling for 17 buildings and eight acres of open space, as described in the 2006 MGPP, was left in place without material modification.

The 2009 MGPP also updated the anticipated construction schedule for the Project. As noted above, the 2006 MGPP and FEIS had provided for a 10-year construction schedule, with full build-out expected to occur in 2016. The 2009 MGPP shifted the schedule forward by three years to account for the delay in acquisition of the Project site, so that the new anticipated schedule was also 10 years, with full build-out expected in 2019.

The 2009 MGPP required FCRC to use commercially reasonable efforts to complete the Project by 2019. The 2009 MGPP nevertheless acknowledged that the Project's construction could be delayed, and so also established outside dates for certain of the Phase I buildings.

Prior to the Directors' adoption of the 2009 MGPP, ESDC prepared a Technical Memorandum dated June 2009 (the "2009 Technical Memorandum") under SEQRA. The 2009 Technical Memorandum analyzed whether the modifications to the 2006 MGPP, the schedule shift outlined above (and, as discussed in more detail below, potential further delays) and certain design changes within the parameters of the Design Guidelines annexed to the 2006 MGPP would result in any significant adverse environmental impacts that were not disclosed in the FEIS prepared in 2006. The Technical Memorandum also assessed changes in background conditions and analysis methodologies. It examined each area of potential impact that had been addressed in the FEIS. The Technical Memorandum concluded that neither the proposed modifications to the 2006 MGPP nor any of the other changes would result in significant adverse impacts that had not been previously disclosed in the FEIS.

On June 24, 2009, the MTA Board approved new business terms with FCRC. These new business terms, which are incorporated into the several separate but interrelated MTA Agreements, allow FCRC to purchase the property rights and air rights needed for the Project on the Arena Block first (this transaction was consummated on March 4, 2010) and defer acquisition of the remaining air rights on Blocks 1120 and 1121 until later in the development process. ESDC reviewed a memorandum prepared by MTA staff summarizing the MTA Agreements prior to adoption of the 2009 MGPP on June 23, 2009. Under the MTA Agreements as described in the MTA staff summary, the outside date for FCRC's last purchase of air rights on Blocks 1120 and 1121 is 2031. However, the MTA Agreements also allow FCRC to acquire the air rights on a more expeditious schedule. The summary of the MTA Agreements indicated that conveyance of air rights with respect to a specific development parcel on Blocks 1120 and 1121 would occur upon (i) completion of the New Yard and (ii) FCRC's payment of the purchase price allocated to the air rights for that development parcel.

Recognizing that economic and financial conditions associated with the economic downturn could affect the progress of the Project, ESDC commissioned a study by KPMG, an accounting and real estate consulting firm, to determine whether the market could absorb the residential units that would be constructed within a 10-year period. KPMG advised ESDC that it was not unreasonable to expect that the market could absorb the Project's units in that time period. ESDC staff also examined fundamental elements of the

² The MTA Agreements themselves, which were not finalized and signed until December 23, 2009, were not available to ESDC as of the time the 2009 MGPP was adopted or affirmed. In general, the terms of the MTA Agreements do not differ significantly from the terms outlined in the MTA staff summary.

Brooklyn real estate market in concluding, in its Response to Comment document, that demand for the Project's housing units would be robust over a 10-year period.

On September 17, 2009, the ESDC Directors affirmed the 2009 MGPP in the form approved on June 24, 2009. On December 23, 2009, after months of negotiations, ESDC, MTA, FCRC and other entities completed a "Master Closing" at which the Development Agreement, the contracts comprising the MTA Agreements, and several hundred related contracts were signed pertaining to the Project. On March 1, 2010, ESDC acquired title to a large portion of the Project site (specifically, the Arena Block, Block 1129 and the adjoining segment of Pacific Street, Block 1120, Lot 35 and Blocks 1121, Lots 42 and 47) by eminent domain. ESDC obtained vacant possession of these properties on or before July 30, 2010.

The Remand Order was issued in two Article 78 proceedings. The first proceeding was filed by petitioners Develop Don't Destroy (Brooklyn), Inc., et al. (Index No. 114631/09). The second Article 78 proceeding was filed by petitioners Prospect Heights Neighborhood Development Council, Inc., et al. (Index No. 116323/09). In both cases, the petitioners challenge ESDC's determination not to prepare an SEIS in connection with its approval of the 2009 MGPP.

On March 10, 2010, the Supreme Court for New York County dismissed both Article 78 proceedings in a written decision, order and judgment. On April 7, 2010, petitioners filed motions to reargue and renew. Both motions claimed that the Development Agreement made available to the public in January 2010 supported their criticisms of the construction schedule assumptions made in the 2009 Technical Memorandum because it sets forth a 25-year outside date, subject to certain exceptions that could result in additional delays, for completion of the Project.

On November 9, 2010, the Court, in the Remand Order, granted the motions to reargue and renew. ESDC has filed motions to appeal the Remand Order in each proceeding, but it is nevertheless making the findings required by the Court.

B. A Summary of The Relevant Terms of the Development Contracts

Several hundred documents were executed at the Master Closing. The Remand Order has directed that ESDC examine the effects that certain of these agreements, including the Development Agreement and the MTA Agreements, have on the construction schedule for the Project. In order to comply with this directive, ESDC will first summarize relevant provisions of the agreements, and then discuss whether and how they affect the schedule for Project development. It should be noted that the discussion below is a summary only; the Development Agreement and MTA Agreements are quite lengthy and contain numerous provisions that are not summarized here, as the discussion below mentions only key provisions of these contracts.

1. The Development Agreement

In the Development Agreement, ESDC engages FCRC to develop and construct the Project. Its relevant provisions are as follows:

- The Development Agreement states that ESDC is engaging FCRC to “develop and construct” the “Project.” Development Agreement § 2.1. The term “Project” is defined by reference to the Atlantic Yards Land Use Improvement and Civic Project as described in the 2009 MGPP. *See* Development Agreement § 2.3 and at page 1 (first Whereas clause). As required by the 2009 MGPP, the Project must be developed in conformance with the Design Guidelines that were approved by ESDC in 2006 and which have not changed since that time. *See* Development Agreement § 2.2.
- FCRC is required to use “prudent and reasonable business practices in the performance of [its] obligations ... under this Agreement ... and shall devote sufficient time to cause the development and construction of the Project to proceed in accordance with the terms of this Agreement, [and] the [2009] MGPP ... subject ... to Unavoidable Delays.” Development Agreement § 2.1.
- The term “Unavoidable Delay” or “Unavoidable Delays” is a force majeure concept that is narrowly defined. *See* Development Agreement Appendix A at 18. FCRC’s inability to obtain construction financing or pay the monies required to perform its obligations under the Development Agreement is not considered an Unavoidable Delay. *Id.*
- FCRC must “use commercially reasonable effort 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 for any Unavoidable Delays.” Development Agreement § 2.2 (emphasis added).
- The “Outside Phase II Substantial Completion Date” is defined as the 25th anniversary of the “Project Effective Date,” subject to Unavoidable Delays (discussed above) and Affordable Housing Subsidy Unavailability (discussed below). *See* Development Agreement § 8.7.

³ The FCRC affiliates that are parties to the Development Agreement are Atlantic Yards Development Company, LLC, Brooklyn Arena, LLC, and AYDC Interim Developer, LLC. Each has distinct obligations under the Development Agreement, but for the sake of simplicity, the discussion above and below refers to all FCRC affiliates simply as “FCRC.”

- The Project Effective Date is defined as the earlier of: (i) the date on which ESDC has acquired and achieved Vacant Possession of the properties at the site initially acquired by ESDC through eminent domain or (ii) the date on which FCRC waives the Vacant Possession requirement. *See* Development Agreement Appx. A at 15 (definition of “Project Effective Date”). The Project Effective Date was ultimately established as May 12, 2010, the date on which FCRC waived the Vacant Possession requirement. Thus, the Outside Phase II Substantial Completion Date is the 25th anniversary of this date (May 12, 2035).
- In general, the term Affordable Housing Subsidy Unavailability mentioned above is defined as the inability of FCRC to obtain financing under such programs for Affordable Housing Units then generally available to developers of Affordable Housing Units. *See* Development Agreement Appx. A at 1. The Development Agreement has very detailed requirements and a number of somewhat intricate provisions to limit the extent to which Affordable Housing Subsidy Unavailability may delay the outside dates for completion of Phase I and Phase II of the Project. *See* Development Agreement §§ 8.6(d)(i)(IV), (VI), 8.6(d)(ii), 8.8(g). Ultimately, however, a continued Affordable Housing Subsidy Unavailability may delay the construction of the Project’s required affordable housing (and could even delay Project completion beyond the 25-year outside date for Phase II) because: (i) the Project is required to contain a large number and percentage of affordable housing units, as specified in the 2009 MGPP and (ii) the affordable housing units are expected to be constructed under the affordable housing programs generally available to other real estate developers in New York City.
- Phase I of the Project is to be completed not later than the Outside Phase I Substantial Completion Date, which is defined as the 12th anniversary of the Project Effective Date (*i.e.*, by May 12, 2022), subject to Unavoidable Delay and, with respect to the affordable housing component of Phase I, subject to Affordable Housing Subsidy Unavailability. *See* Development Agreement § 8.6.
- In addition to the 12-year outside date for completion of Phase I, there are deadlines for the construction of individual Phase I buildings. Subject to certain provisions concerning Affordable Housing Subsidy Unavailability and Market Financing Unavailability (a term that is narrowly defined to exclude finance unavailability due to FCRC-specific financial circumstances), 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), (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). Breach of these deadlines will incur payment of certain specified liquidated damages.

- Within 10 years of the Project Effective Date (*i.e.*, by May 12, 2020), subject to Unavoidable Delays, Affordable Housing Subsidy Unavailability and Market Financing Unavailability, FCRC is required to commence construction of one of the residential buildings on Block 1129. *See* Development Agreement § 8.7(c).
- Within 15 years of the Project Effective Date (*i.e.*, by May 12, 2025), subject to Unavoidable Delays, FCRC is required to enter into a Development Lease with associated completion guarantees to construct at least one Phase II building over the LIRR rail yard, together with the platform associated with that Phase II building and its associated open space. *See* Development Agreement § 8.5.
- The requirement that FCRC use commercially reasonable effort to cause the substantial completion of the entire Project by December 31, 2019 is not modified, limited or impaired by the separate and distinct contractual requirements to meet all of the outside dates specified above (*i.e.*, the first non-Arena building on the Arena Block by May 12, 2013, the second non-Arena building on the Arena Block by May 12, 2015, the third non-Arena building on the Arena Block by May 12, 2017, the first Phase II building on Block 1129 by May 12, 2020, the first Phase II building over the rail yard by May 12, 2025, the completion of Phase I by May 12, 2022 and the completion of Phase II by May 12, 2035). *See* Development Agreement § 8.1(d).
- The “commercially reasonable effort” provision is subject to stipulated penalties of up to \$10,000 per day for violations of this covenant. *See* Development Agreement § 17.2(a)(x). These stipulated penalties are not exclusive. *See* Development Agreement § 17.2(d) (“In addition to the remedies set forth in Section 17.2(a), ESDC shall be entitled to any and all remedies available to ESDC at law or in equity under or in connection with this Agreement ... , including without limitation, specific performance, injunctive relief, and the recovery by ESDC from [FCRC] of any and all damages, sums, costs, and expenses incurred by ESDC as a result of or connection with [FCRC’s] respective Default under this Agreement.”).

- The Development Agreement also contains numerous other stipulated penalties and liquidated damages provisions. For example, if FCRC does not complete Phase I by the first anniversary of the Outside Phase I Substantial Completion Date, subject to Unavoidable Delay and, with respect to the affordable housing component of Phase I, subject to Affordable Housing Subsidy Unavailability, FCRC is required to pay liquidated damages of \$5,000,000 per Project Building. *See* Development Agreement Schedule 3 at 4. Missing the Outside Phase I Substantial Completion Date, depending on the extent and duration of the delay in missing that deadline, may also result in the requirement to pay more than \$29,000,000 in liquidated damages to the City of New York. *See* Development Agreement Schedule 3 at 10. In the event that the entire Project is not completed by the Outside Phase II Substantial Completion Date, ESDC can terminate FCRC's right to develop the remaining undeveloped areas of the Project site. *See* Development Agreement §§ 17.2(a)(vi), 17.5.
- In a different contract, also executed at the master closing that occurred on December 23, 2009, ESDC entered into a Recognition Agreement with Gramercy Warehouse Funding II LLC (“Gramercy”), the entity that provided financing to FCRC to acquire a portion of the Project site. In consideration for providing such financing to FCRC, Gramercy holds a leasehold mortgage on certain Project parcels. Under the terms of the Recognition Agreement, ESDC has agreed that in the unlikely event that FCRC defaults on its obligations to Gramercy and Gramercy forecloses on its leasehold mortgage, ESDC would provide additional time for Gramercy, beyond that which is provided to FCRC, to perform certain construction obligations under the Development Agreement and various leases. Providing a mortgagee with additional time to cure the default, or an imminent default, of a borrower is not unusual for complex real estate transactions.

2. The MTA Agreements

As noted above, the MTA Agreements are comprised of several distinct contracts. Certain key terms of such contracts are described separately below.

⁴ It should be noted that MTA and FCRC have entered into a number of agreements with respect to the Project, in addition to those addressed in these findings.

(a) **Air Space Parcel Purchase and Sale Agreement for Air Space over Block 1120, Lot 1 and Block 1121, Lot 1 (the “Air Space Purchase Agreement”).**

The Air Space Purchase Agreement was entered into between MTA and LIRR (collectively, the “MTA Parties”) and FCRC in order to grant FCRC the right to purchase the “Air Space Parcel” (specifically defined as an area within the air space over the specified lots of the Vanderbilt Yard above a defined horizontal plane). Its relevant provisions are summarized below.

- The agreement provides for the subdivision of the Air Space Parcel into up to 6 separate “Air Space Subparcels” each of which may be purchased separately. *See* Air Space Purchase Agreement at 2. FCRC is granted the right “from time to time” until the “Purchase Right Expiration Date” of June 1, 2031 to purchase each of the Air Space Subparcels, subject to certain conditions. *See* Air Space Purchase Agreement at 11, 13, 15. Among those conditions are that the construction of the New Yard shall have been completed in accordance with the project documents. *See* Air Space Purchase Agreement at 15.
- The purchase price is to be paid under the agreement through a combination of annual installments and accelerated lump sum payments due at the closing for each Air Space Subparcel. (As noted above, the agreement allows Air Space Subparcels to be purchased individually, “from time to time.”) The “Annual Initial Payment” begins at \$2,000,000, with payments due each year in 2012, 2013, 2014 and 2015. *See* Air Space Purchase Agreement at 13. Thereafter, “Annual Ongoing Payments” beginning at \$11,033,357 are to be paid from 2016 until 2031, unless all of the Air Space Subparcels have been purchased prior to that date. *Id.* The purchase price (including both the accelerated lump sum payments and the installment payments) is allocated among the Air Space Subparcels, with the allocation for each subparcel being in proportion to the ratio that the gross square footage of floor area to be built under the 2009 MGPP on such subparcel bears to the aggregate square footage of floor area to be built under the 2009 MGPP within the entire Air Space Parcel. *Id.* at 14. (This ratio is defined under the agreement as the “GSF Allocation Percentage” for that Air Space Subparcel.) Payments are due at the closing for each Air Rights Subparcel (referred to as the “Subparcel Balance Purchase Price”) in an amount calculated (in accordance with the GSF

⁵ The FCRC affiliate that is a party to this agreement is Atlantic Yards Development Company, LLC. For the sake of simplicity, the affiliate is referred to as FCRC in the discussion below.

Allocation Percentage) so that the aggregate purchase price for the entire Air Space Parcel will equal \$80,000,000, discounted to January 1, 2010 at a discount rate of 6.5% per annum. *Id.* After a closing occurs, the annual installment payments are reduced by excluding the portion of the payment that would have been allocated to the Air Space Subparcel(s) already paid for by FCRC. *Id.* at 15.

- At the closing of each Air Space Subparcel, MTA is to deliver fee title to the applicable subparcel to FCRC or its designee. It is anticipated that ESDC will be that designee, and will simultaneously lease such Air Space Subparcel to an affiliate of FCRC. *Id.* at 26.
- The Agreement defines various “Developer Events of Default,” including one concerning the construction of the New Yard. *Id.* at 30. Under that provision, it is an event of default if the New Yard is not completed by the expiration of the “New Yard Substantial Completion Liquidated Damages Period,” a term defined in the Yard Relocation and Construction Agreement (at page 11) as 90 days after September 1, 2016, subject to certain extensions. The MTA Parties may terminate the Agreement upon written notice to FCRC with respect to all Air Space Subparcels as to which a closing has not occurred if a Developer Event of Default occurs.

(b) Air Space Parcel Development Agreement

The parties to this agreement are MTA, LIRR and FCRC. The agreement sets forth the parties’ obligations with respect to the development of the air space (including the platform and other improvements) over the Vanderbilt Yard (defined, for purposes of this agreement, as Block 1120, Lot 1, Block 1121, Lots 1, 42 and 47). Certain relevant provisions are summarized below:

- The agreement requires that the platform be constructed in accordance with specific “Design and Construction Requirements,” which are incorporated into the agreement as attachments (and which are subject to modification by MTA in accordance with the agreement). More particularly, it obligates FCRC to build the platform in accordance with plans and specifications, and pursuant to a schedule, approved by MTA, and sets up a detailed process for the development of both the plans and specifications for the platform, and the schedule for its construction. It allows work on the platform to be “commenced, performed and completed” within up to three separate “Platform

⁶ The FCRC affiliate that is a party to this agreement is Atlantic Yards Development Company, LLC.

Construction Periods,” with the work within each phase being “designed, constructed and completed as a single coordinated development.” *See* Air Space Parcel Development Agreement at 18-19. The Air Space Subparcels involved in each Platform Construction Period must be “adjoining and contiguous” to each other, and the work in each subsequent Platform Construction Period must be contiguous to completed work. Id. The agreement allows the Platform Construction Periods to be “continuous with one another and [to] overlap in timing.” Id.

- The Agreement establishes an orderly process for the design and construction of the platform. With respect to design and planning prior to construction, it provides for:
 - Delivery to MTA of a “Platform Construction Period Notice,” in which FCRC conveys its intention to begin a phase of the platform work, identifies the affected Air Space Subparcels; and describes in narrative detail the work to be performed. If the notice is deemed acceptable, FCRC may begin to prepare plans and specifications for the work. Id. at 19.
 - Delivery of “Conceptual Plans”, to be submitted no later than 60 days following delivery of the Platform Construction Period Notice. Id. at 21.
 - Delivery of 30% plans, within 30 days after LIRR delivers comments to FCRC with respect to the Conceptual Plans. The 30% plans must reflect those comments. Id.
 - Delivery of 60% plans, within 60 days after LIRR delivers comments on the 30% plans. The 60% plans are to reflect LIRR’s comments on the 30% plans. Id.
 - Delivery of 90% plans, within 90 days after delivery of LIRR comments on the 60% Plans, responding to LIRR comments on the 60% plans. Id.
 - Delivery of 100% plans to LIRR for approval, within 90 days after delivery of LIRR comments on the 90% plans. Once approved, the Platform Work is to conform to these plans and specifications. Id.
- Similarly, an orderly process is set up for the development of a schedule for the construction of each phase of the platform work. A preliminary milestone schedule (including the schedule for requested track outages) is to be submitted to LIRR for its review and approval along with the 60% plans. The preliminary schedule is then to be refined as the design for the work evolves. More specifically, an updated “proposed construction schedule,” reflecting LIRR comments,

is to be submitted and refined at the 90% plans stage and when 100% plans are submitted. Id. at 23-24. Further updates are required as the date for commencement of construction approaches. Id. at 24. The final schedule is to be based on calendar dates.

- Prior to the commencement of construction, FCRC must secure LIRR's final approval of the "Baseline Construction Schedule." Id. at 25. The schedule may include a "contingency period reasonably satisfactory to the Developer" to account for unforeseen construction delays. The agreement identifies the time between the dates set forth in the Baseline Construction Schedule for commencement of construction and substantial completion as the "Permitted Platform Construction Period." Id. After LIRR has signed off on the Baseline Construction Schedule, and throughout the period of construction, FCRC is obligated to provide updates and modifications in a series of 6 month "Look Ahead" and 12 week "Rolling" schedules." Id. at 43, 44.
- Upon the satisfaction of numerous additional conditions, the MTA Parties are to deliver a "Release to Proceed," allowing construction work to begin on a particular phase. Id. at 32. Among those conditions are that FCRC shall have: (i) provided satisfactory evidence that it has secured financing sufficient to fund the complete construction of the entire work included in the relevant Platform Construction Period; (ii) delivered a "Platform Completion Guaranty," from a guarantor reasonably acceptable to MTA, that guarantees "absolutely, unconditionally and irrevocably" the "timely and continuous" performance of the work to substantial completion or in the event FCRC defaults on its obligations, that partially completed work will be removed; and (iii) provided LIRR with performance security (in the form of payment and performance bonds issued by acceptable sureties) for all major contracts. Id. at 32-33, *see also* Air Space Parcel Development Agreement, Exhibit F (Form of Platform Completion Guarantee).
- FCRC is obligated to meet the Baseline Construction Schedule established for each phase of the platform work, subject to day-to-day extensions for delays by reason of force majeure, railroad emergencies, delays caused by the MTA Parties and "commercially reasonable interruptions." Id. at 35. It is an event of default if it fails to do so. It is also an event of default for FCRC to fail to construct the entire

⁷ The agreement sets up the same sort of design review and approval process for other "Air Space Improvements," the construction of which could have a material impact on the Yards Parcel, the platform or the operation of the LIRR system (e.g., any improvement the construction of which requires entry into the Yard Parcel).

platform within 25 years from the “Project Effective Date” of May 12, 2010, subject to the same day-to-day extensions. In the event of a default, MTA may “exercise any and all of their rights and remedies under this Agreement, at law, in equity or otherwise, including without limitation their right to suspend performance under or terminate this Agreement, to receive compensation for damages, to obtain mandatory, injunctive or other equitable relief, to receive liquidated damages [and exercise other remedies].” Id. at 62-63.

- Since the agreement imposes a number of time-consuming tasks upon LIRR, it provides that LIRR is to make arrangements to dedicate sufficient personnel performing those tasks, at the expense of FCRC. Id. at 23, 38.

(c) Declaration of Easements by MTA for LIRR Vanderbilt Yard, Brooklyn, Block 1120, Lot 1 and Block 1121, Lots 1, 42, and 47

The Declaration of Easements is a document by which MTA grants an easement with respect to the above referenced property (the “Premises”) to facilitate the construction of certain elements of the Project on that property. Its key provisions are summarized below:

- MTA, as the “Declarant,” executed the Declaration “to facilitate development at the Premises,” while providing for LIRR and its successors or assigns to continue to use and occupy specified portions of the Premises for “Yards Parcel Operations.” Declaration at 2.
- Under the Declaration, MTA subdivided the affected property into a “Yards Parcel” lying below a specified horizontal plane and an “Air Space Parcel” lying above that plane. Id. at 21. The Declaration gives the owner of the Air Space Parcel “the right from time to time” to sever that parcel into separate “Air Space Subparcels” and to convey such subdivided Air Space Parcels to new owners. Id. at 21-22.
- The Declaration includes numerous provisions relating to the design, construction and maintenance of the platform over the Yards Parcel, designed to accommodate implementation of the Air Space Development Agreement. Among other things, under the Declaration, each “Air Space Subparcel Owner” is required to cause the “Platform Component” for its subparcel to be constructed in accordance with plans and specifications approved by the MTA Parties pursuant to the Air Space Development Agreement. The Declaration further requires each Air Space Subparcel Owner to contribute to the continued maintenance of the platform after it is constructed. In order to

facilitate the performance of the maintenance obligations of the Air Space Subparcel Owners, the Declaration calls for the establishment, immediately upon the sale of the second Air Space Subparcel, of an Air Space Subparcel Owners Association (the “ASSP Owners Association”) to “assume and perform all of the obligations” of the Air Space Subparcel Owners with respect to the “operation, repair, alteration, improvement, replacement, [r]estoration, maintenance and management” of the platform. Id. at 23. Each individual owner is required to fund its allocable share of the costs and expenses incurred by the ASSP Owners Association, in an amount reflecting the GSF Allocation Percentage. Id. A reserve fund for ongoing platform maintenance is to be established with an “Aggregate Minimum Reserve Base Amount” in the initial sum of \$3,300,000, which is to thereafter be adjusted to reflect actual annual maintenance costs and the Consumer Price Index. Id. at 3-4, 11, 53. This reserve obligation is allocated among the subparcels pursuant to the GSF Allocation Percentage. Id. The ASSP Owners Association, as well as each Air Space Subparcel Owner, are obligated to maintain the platform in good order and repair. Id. at 51.

- The Declaration creates a number of specific easements in the Yards Parcel and the Air Space Parcel for the initial construction and subsequent operation and maintenance of the platform and Air Space Subparcel improvements (*i.e.*, Project buildings). The easements include an “Easement for Initial Construction of Platform Component,” “Easement for Initial Construction of Air Space Subparcel Improvements,” “Easement for Location of Support Facilities,” “Easement for Location of Ventilation Systems,” “Easement for Inspection, Repair, Maintenance and Capital Improvements” and “Easements for Vertical and Lateral Support,” among others. Id. at 28-32. The easements that allow entry upon or the performance of work within the Yards Parcel are subject to certain notice requirements, work rules and regulations and other restrictions assuring continued safe and efficient rail operations.
- The Declaration requires each Air Space Subparcel Owner to contribute its allocable share of the increased costs associated of the operation of the Vanderbilt Yard as a result of the platform, as determined by an engineering report prepared in accordance with the Declaration. Id. at 39.

(d) Yard Relocation and Construction Agreement

The Yard Relocation and Construction Agreement sets forth the terms and conditions for the construction of the New Yard within the Vanderbilt Yard. The parties to the agreement are MTA, LIRR and FCRC. Its relevant provisions are set forth below:

- This agreement imposes specific Design and Construction requirements for the construction of the New Yard, which are attached as exhibits to the agreement. *See* Yard Relocation and Construction Agreement at 15-16. It also puts into place a detailed process for the review and approval of the design for the New Yard, with rounds of submittals to, and comments from, MTA/LIRR at the 30%, 60%, 90% and 100% stages of design completion. *Id.* (MTA/LIRR may retain, at FCRC's expense, an independent design consultant to assist in reviewing the plan submissions.) Mandatory milestone dates are established for the submission of each phase of the design, with the 100% complete design due on the later of July 1, 2011 or 90 days after FCRC receives MTA/LIRR's comments on the 90% Plans. *Id.* If FCRC fails to deliver any plans or specifications by the dates required, an event of default occurs, which may be cured on a one time basis by the submission of, and adherence to, a recovery plan approved by MTA/LIRR. The New Yard must be constructed in accordance with the plans that are finally approved by MTA/LIRR.
- At the 60% complete plan stage, FCRC is to submit a "Preliminary Construction Schedule," with milestone dates for building the major yard components. The Schedule is thereafter to be refined as the design evolves to the 100% complete plan stage. A final updated schedule is due no later than forty-five business days prior to the actual commencement of construction. *Id.* at 21.
- Several preconditions must be satisfied before construction may commence, including the delivery of a guarantee of the performance of the work from Forest City Enterprises, Inc. (a publicly traded Ohio corporation) and the posting of a letter of credit. *Id.* at 33. Construction must begin "on or prior to the Construction Commencement Deadline," which is identified under the agreement as June 30, 2012, subject to extension due to force majeure, owner's delay or railroad emergency. *Id.* at 34. Construction must thereafter be prosecuted "with all reasonable diligence and without interruption," subject to extension for the same defined circumstances. *Id.* The "New Yard Construction Completion Deadline" under the agreement

⁸ The FCRC affiliate that is a party to this agreement is Atlantic Rail Yards, LLC.

is September 1, 2016, subject to the same allowed extensions. Id. at 35. In the event that the New Yard is not substantially completed by the New Yard Construction Completion Date (and that date has not been extended for the above-defined reasons), FCRC is to pay liquidated damages at the rate of \$5,000 per day for up to 90 days. Id. An event of default will not arise if the New Yard is substantially completed during that “New Yard Substantial Completion Liquidated Damages Period.” Id.

- FCRC must “utilize all commercially reasonable efforts to complete the construction of the New Yard” in accordance with the milestones contained in the approved schedule. Id. at 36. If a milestone is missed at any point during the course of construction, FCRC must submit a proposed plan to get back on track, which is to include, without limitation the use of overtime and premium labor, so that the project will be completed by the end of the liquidated damages period. Id. at 37.
- An event of default occurs, and MTA/LIRR is entitled to “exercise any and all of its rights and remedies under the Agreement, at law, in equity,” including self help, if FCRC fails to achieve substantial completion of the New Yard by the New Yard Construction Completion Date (subject to the allowed extensions) and that failure continues beyond the 90 day period of liquidated damages. Id. at 60-61. Failure to complete the New Yard by this deadline is a cross-default under the Air Space Parcel Purchase and Sale Agreement (*see* page 30 of that agreement), providing MTA/LIRR with the right to terminate FCRC’s ability to purchase the air rights over the rail yard, under certain conditions.

(e) Sale Purchase Agreement between MTA, FCRC and ESDC (Tax Block 1119 Lot 7).

This agreement sets forth the terms and conditions for the sale from MTA to ESDC of the portion of the Vanderbilt Yard (*i.e.*, Block 1119, Lot 7) within the Arena Block. The purchase price for the property, which was paid for by FCRC, was approximately \$20,000,000. This transaction closed on March 4, 2010. The provisions of this agreement are not relevant to the issues addressed in the Remand Order.

⁹ The FCRC affiliate that is a party to the Sale Purchase Agreement is Brooklyn Arena LLC.

C. Explanation of ESDC's Findings

1. **The Development Contracts do not have a material effect on whether it is reasonable to use a 10-year construction schedule for the purpose of assessing the environmental impacts of the Project.**

As summarized above, the Development Contracts have outside dates that extend up to an additional 16 years beyond 2019 (or potentially more than 16 years in certain limited circumstances). Thus, the outside date for completion of the New Yard is 2016; the outside date for the non-Arena buildings included in Phase I of the Project is 2022; and the outside date for completion of both the platform under the MTA Agreements and the Project under the Development Agreement is 2035. All of these dates are subject to extensions for specified exigencies. However, outside dates incorporated into complex, heavily negotiated development agreements do not reflect reasonable business projections as to the actual timetable for completing the project under discussion. Rather, they reflect the prudent business judgment of the parties and their transactional lawyers seeking to anticipate any and all of the possible risks, however unlikely, that potentially could arise as a project goes forward, including how and when a project may be deemed failed or incomplete. Thus negotiated contractual deadlines are not synonymous with reasonably expected project completion dates.

Here, a close reading of the Development Contracts establishes that their design is not to extend the schedule for construction of the Project to the outside dates. Rather, the Development Contracts create a legally binding framework of rights and obligations designed to: (i) require construction to proceed towards completion of the Project at a commercially reasonable pace, with the goal being completion in 2019; and (ii) in addition, establish deadlines to define the outer allowable limits for Project completion. With respect to the first requirement, the Development Agreement is explicit that FCRC must “use commercially reasonable effort” to substantially complete the Project by 2019. The agreement is also clear that the outside dates do not supersede this requirement. *See* Development Agreement § 8.1(d) (providing that the commercially reasonable effort obligation is not modified, limited or impaired by the outside date provisions of the agreement). The Development Agreement further obligates FCRC to use “prudent and reasonable business practices in the performance of [its] obligations ... under this Agreement,” and those obligations include the duty to work in a commercially reasonable manner towards achieving Project completion in 10 years. Thus, the Development Agreement establishes a two-tiered duty with respect to the schedule for the Project. First, FCRC must use commercially reasonable efforts to achieve completion of the Project by 2019, and second it may not, in any event, go beyond the outside limits set forth in the agreement (except for specifically defined reasons).

This two-tiered structure with respect to FCRC's schedule obligations is also evident in the MTA Agreements. The Air Space Development Agreement imposes an outside date for completion of the platform of 25 years from the “Project Effective Date” of

May 12, 2010, thereby creating a deadline of 2035 for platform completion. However, the agreement (at page 24) *also* contemplates the development of the *actual* schedules for the construction during each of the three Platform Construction Periods, “based upon the Developer’s then current estimate of the date for Commencement of Construction and final completion of the Platform Work.” There is nothing in this provision to suggest that such schedules are to be tied to the outside completion date. Moreover, once FCRC’s preliminary schedules are refined into “Baseline Construction Schedules” approved by the MTA Parties, “time is of the essence” in meeting those schedules (page 36). Thus, the agreement imposes a dual obligation on FCRC: to (i) “Substantially Complete ... each portion of the Platform Work associated with each Platform Construction Period in a timely, diligent and continuous manner” in accordance with the approved Baseline Schedule, subject to contingencies, including commercially reasonable interruptions (page 35) and (ii) in any event, complete all platform work by 2035.

A similar two-track structure is put into place by the Yard Relocation Agreement. That agreement imposes a deadline of 2012 for the commencement of construction and an outside date for substantial completion of the Yard of 2016. At the same time, it calls for the submission of a “proposed preliminary schedule” by FCRC, showing “the approximate date that Developer expects to begin construction,” as well as the “anticipated duration” for construction of various critical elements of the New Yard. As with the other MTA agreements, there is nothing that ties the proposed *actual* schedule for the performance of the work to the *outside* date in 2016. Moreover, upon the refinement and approval of the construction schedule, it becomes mandatory. Under the agreement (page 34), “[c]onstruction of the New Yard shall be ... prosecuted by Developer (subject to Force Majeure, Railroad Emergency and Owner’s Delay) with all reasonable diligence and without interruption (with the Construction Milestones at various stages each being substantially completed in accordance with the Construction Schedule).” More particularly, FCRC must “utilize all commercially reasonable efforts to complete the construction of the New Yard” in accordance with the milestones contained in the approved schedule (page 36).

Moreover, the agreements are structured to *facilitate* construction of the Project at a commercially reasonable pace. From a general perspective, it was to get the Project going in a difficult economic climate that ESDC and MTA agreed to allow FCRC to purchase Project property in pieces and to proceed with the platform construction in three distinct phases. More specifically, the Air Space Development Agreement streamlines the design review process by including specific time limits for LIRR’s review and approval of the evolving plan submissions. Under that timetable, LIRR must provide comments within 21 days after most major submittals, or 30 days after submittal of conceptual plans and 30% plans. Given the administrative burden these deadlines impose on LIRR, the agreement provides for the dedication of LIRR staff to the Project, at FCRC’s expense. Likewise, FCRC must meet specified deadlines in producing subsequent rounds of submittals, measured from its receipt of LIRR comments. The design review process created under the Yard Relocation Agreement is even more exacting, imposing specific calendar dates for FCRC submittals. In addition, measures have been established to assure proper

coordination between FCRC and LIRR during the course of the design and construction of the work. For example, the Air Space Development Agreement requires FCRC to continuously update the construction schedule as field work progresses, by submitting 6 month “Look-ahead” schedules and 12 week “Rolling” schedules, with those schedules being reviewed at “meetings held weekly or at such other intervals as the parties may mutually agree.”

The agreements also put into place the safeguards needed to assure that the work, once commenced, is pursued and completed on time. Among the preconditions required for the issuance of a notice to proceed are the delivery of appropriate labor and material payment and performance bonds, performance guarantees, letters of credit, and other financial assurances. With respect to the platform work, FCRC must also have provided the MTA Parties with evidence that financing “sufficient to fund the complete construction of the entire platform work” has been secured for the relevant Platform Construction Period.

It bears noting that the Development Agreement imposes stipulated penalties of up to \$10,000 per day for breach of the covenant to use “commercially reasonable effort” to complete the Project within the 10 year timetable, Development Agreement § 17.2(d); and that these remedies are not exclusive, in that ESDC is specifically entitled also to pursue its common law and equitable remedies, if it elects to do so. *Id.* § 17.2(a). ESDC recognizes that the amount of such stipulated penalties is less than the penalties that could be invoked for certain other events of default, including the failure to meet the outside dates. It further understands the complexities it would face in pursuing its common law and equitable remedies, particularly in establishing FCRC’s failure to proceed with the Project in a commercially reasonable manner. At the same time, ESDC is aware that FCRC has invested hundreds of millions of dollars in the Project and has a significant incentive, separate and apart from ESDC remedies, to pursue it to a successful and speedy conclusion because undeveloped land, the acquisition cost of which has been borne entirely by FCRC, does not earn any substantial return. In the context of this heavily negotiated, complex and large-scale real estate development, ESDC does not believe that more substantial stipulated penalties or additional enforcement remedies are needed to require and induce FCRC to pursue the Project with commercially reasonable diligence.

In sum, the Development Contracts do not preclude the Project from being constructed in 10 years and both require and encourage construction to take place at a commercially reasonable pace. In light of these considerations, the Development Contracts are not inconsistent with a ten year schedule for Project construction.

2. **As of the date of these findings, it appears unlikely that the Project will be constructed on a 10-year schedule, because the construction of the Project's residential buildings has lagged behind the 10-year schedule provided by FCRC to ESDC in 2009, and because of continuing weak general economic and financial conditions.**

Prior to ESDC's approval of the Project in September, 2009, FCRC delivered a schedule prepared by its construction management firm, setting forth how FCRC would build the Project on a ten-year timetable. ESDC was advised by its own construction experts that this schedule was reasonable from a constructability perspective. At the same time, ESDC considered, with the assistance of its financial consultant, the projected population growth in the Borough of Brooklyn, the current need for affordable and market-rate housing and the long term prospects of the real estate market over the next 10 years. On that basis, it determined that FCRC's 10-year schedule was reasonable. ESDC also acknowledged that the Project schedule could be delayed.

As of December 2010, the Project is not proceeding on the schedule reviewed by ESDC in 2009, or on a timetable consistent with a 10-year build out. For example, the 10-year construction schedule presented in the 2009 Technical Memorandum assumed that by the end of 2011, three or four non-Arena buildings would be under construction at the site. Currently, based on the information provided to ESDC by FCRC, it appears likely that only one non-Arena building will be under construction at that time. As of today, FCRC has not started construction of any of the non-Arena buildings.

Moreover, the commencement date of October 30, 2012 assumed for the construction of the platform on Block 1120 in the 2009 construction schedule precedes that schedule's completion date for the New Yard by approximately eight months. This sequence of activities does not, in one respect, conform to the requirements of the MTA Agreements as finally negotiated, which require that the New Yard be constructed before work begins on the platforms. (This information about the MTA Agreements – which were negotiated after the 2009 MGPP was approved – was not available to ESDC at the time it approved the 2009 MGPP because this term was not included in the MTA staff summary.) Although eight months is not on its face a significant discrepancy, the 10-year schedule for construction assumed in the 2009 Technical Memorandum would require adjustment to correct that discrepancy. Accordingly, as of the date of these findings, it is likely that the 10-year schedule for construction of the Project will be extended.

¹⁰ The 2009 Technical Memorandum, in Table 2, indicates that the commencement date for platform construction on Block 1120 under the 10-year schedule is 2011, but that table uses the term "platform" broadly to encompass both the demolition of the remaining buildings on Block 1120 and the construction of the platform. The more detailed underlying schedule upon which Table 2 was based did not assume that the actual platform on Block 1120 would commence construction until October 30, 2012.

3. **A delay in the 10-year construction schedule, through and including a 25-year final completion date, would not result in any new significant adverse environmental impacts not previously identified and considered in the FEIS and 2009 Technical Memorandum and would not require or warrant an SEIS. The analysis of the potential environmental impacts of a 25-year construction schedule confirms the conclusion reached by ESDC in 2009 that an SEIS is not required or warranted for the 2009 MGPP. Similarly, the Development Contracts do not require or warrant an SEIS.**

Notwithstanding the delay analysis set forth in the Technical Memorandum, project opponents and members of the public have expressed concern with respect to the potential for additional delays beyond 2024. ESDC believes that it had a rational basis in 2009 for: (i) the 10-year schedule assumed in the 2009 Technical Memorandum; (ii) the delay analysis also presented in the 2009 Technical Memorandum; and (iii) the conclusion that it reached in 2009 that the potential for a delay in the Project would not itself require or warrant an SEIS. Nevertheless, to comply with that aspect of the Remand Order requiring a determination as to whether an SEIS is warranted in light of the outside dates of the Development Contracts, ESDC has performed SEQRA analyses that put aside any consideration of FCRC's contractual and financial incentives to bring the Project to completion on a more expeditious schedule, and instead focus the technical portion of the SEQRA analyses on the 25-year outside date in the Development Agreement. This analysis of a very lengthy 25-year build out allows ESDC to determine whether the 2024 Build year assumption in the 2009 Technical Memorandum was critical to that document's conclusion that a delay in the Project's 10-year construction schedule would not result in significant adverse environmental impacts not identified in the FEIS.

Accordingly, ESDC requested its environmental consultant (AKRF, Inc.) to consider the potential effects of a delay extending beyond the 2024 date previously considered in the 2009 Technical Memorandum and to assume for analysis purposes that construction would continue until 2035. The results of that analysis are set forth in the report titled "Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project" (the "Technical Analysis") attached hereto and which is incorporated by reference herein. ESDC concludes that the assessment presented in the Technical Analysis confirms ESDC's determination in 2009 that an SEIS was neither required nor warranted to study the 2009 MGPP or the potential for a delay in construction of the Project beyond the 10-year timetable. ESDC also concludes that the Development Contracts, which are consistent with the 2009 MGPP, do not require or warrant an SEIS.

ESDC staff has worked closely with its consultant in the preparation of the Technical Analysis. It also has consulted with representatives of FCRC in order to obtain the information necessary to develop the conceptual sequence of activities assumed in assessing the impacts of constructing the Project according to a hypothetical schedule ending

in 2035 (referred to in the Technical Analysis as the “Extended Build-Out Scenario”), and in order to secure other information with respect to Project implementation. In conducting its inquiry, ESDC considered the detailed analyses previously set forth in the FEIS. Those previously conducted analyses identified several significant environmental impacts related to construction of the Project, and ESDC has taken such impacts, and how they would be affected by an additional delay, into careful account in reaching the conclusions set forth in these findings.

a. The Memorandum of Environmental Commitments

In considering the effects of an extended build out of the Project, ESDC is mindful of the measures that have been developed over the course of the SEQRA process to minimize or avoid the impacts of the construction and operation of the Project. FCRC is obligated to implement such measures, which are set forth in the “Memorandum of Environmental Commitments” that is attached to the Development Agreement. (This document is referred to as the “Amended Memorandum of Environmental Commitments” in the Technical Analysis, because it amended an earlier memorandum prepared in connection with the SEQRA Findings Statement in 2006.)

Among other things, FCRC must:

- undertake a comprehensive program to minimize the potential for dust generated by construction activities to affect the surrounding area; that program includes a mandatory speed restriction of 5 mph for vehicles operating within the construction site, and requirements for wetting down unpaved surfaces, covering or water-misting stockpiled materials, washing the tires of vehicles exiting the site, and inspecting departing trucks for proper sealing or covering of loose materials;
- implement a diesel emissions reduction program requiring the use of ultra-low sulfur diesel fuel and best available tailpipe emissions reduction technologies, enforced idling restrictions and the placement to the extent practicable of stationary engines at a minimum of 50 feet from sensitive locations, and the use of electric engines, rather than diesel equipment, where practicable;
- put into place a community air monitoring plan to be implemented when a contractor is engaged in excavation activities;
- undertake a comprehensive program to minimize noise from Project construction, including the use and proper maintenance of equipment with noise emission levels conforming to those specified in the FEIS and the provision of 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 (and operation of noisy vehicles, such as concrete-mixing trucks, behind the barriers);

- at the option of potentially affected residents, provision of double-glazed or storm windows and alternative ventilation for those residential locations where the FEIS identified significant noise impacts, where such windows and air conditioning units are not currently installed;
- develop Maintenance and Protection of Traffic (“MPT”) plans in consultation with the New York City Department of Transportation (“DOT”), to minimize the effects of construction activities on the flow of vehicular and pedestrian traffic in the vicinity of construction sites;
- implement specified permanent roadway improvements designed to reduce traffic impacts during construction and operation, subject to DOT approval;
- maintain on-site designated staging areas throughout the construction period to store materials and accommodate construction vehicles that require early arrival and marshalling for immediate material delivery to high-demand construction areas, in order to reduce the presence of construction vehicles on local streets;
- provide on-site parking for construction workers at levels appropriate in light of the number of workers employed at the site during different stages of construction, to minimize construction worker parking on local streets;
- equip interim construction staging and parking areas with directional lighting angled to limit light intrusion beyond the site and provide screening of interim parking areas and construction staging areas;
- develop and implement a construction protection plan to prevent impacts on historic resources within 90 feet of any construction;
- implement vibration monitoring;
- develop and implement a construction health and safety plan to prevent potential impacts related to contamination that could be encountered during the course of environmental remediation and excavation;
- implement a rodent control program, prior to the commencement of construction activities in a particular area; and

- reimburse ESDC for the cost of its environmental monitor, who has been inspecting the Project site on a regular basis and will continue to do so, to ensure that FCRC and its contractors comply with the commitments set forth in the Memorandum of Environmental Commitments.
- b. General Approach of the Technical Analysis

The Technical Analysis notes that the scheduling of construction activities for a major project is an exceedingly complex endeavor, with conceptual schedules for construction made early on in project planning evolving over the course of the design and development process. It recognizes, therefore, that the “Extended Build-Out” Scenario assumed for purposes of the analysis would be subject to modification as the Project evolves. Nevertheless, the assumptions incorporated into that scenario allow for a reasonable assessment of the potential consequences of a lengthy delay in the construction schedule for the Project. As noted in the Technical Analysis, the sequence of development assumed for the Extended Build-Out Scenario accounts for certain constraints that have been put into place by the Development Contracts subsequent to the time when the 2009 Technical Memorandum was prepared. For example, the assumed sequence calls for commencement of construction of the platform after the New Yard has been completed. It also assumes that the platform can be constructed in up to three contiguous phases, and that commencement of construction of a building on Block 1129 will begin by 2020.

The Technical Analysis further assumes that construction of the Project will proceed in the Extended Build-Out Scenario on a sequential basis, with each building being individually designed, financed, and built. It also accounts for the fact that during certain periods more than one building can be expected to be under construction simultaneously. The illustrative sequencing of building construction assumed in the Extended Build-Out Scenario is also consistent with the general approach of developing the Project from west to east, with more buildings completed in the early stages of construction. The Technical Analysis notes that even though the sequence for the actual build out of the Project may deviate from the assumptions underlying the Extended Build-Out Scenario, such variations would not be expected to result in material differences in the overall assessment of potential impacts as set forth in the Technical Analysis.

Rather than examining site conditions separately upon completion of each of the 17 Project buildings, the Technical Analysis assesses such conditions at seven stages of Project completion. These seven stages (described and depicted in the Technical Analysis as “Stages” 1 through 7) are used as “snapshots” in time, showing how the Project site would appear, and would affect the surrounding area, at certain points in the construction process, with each stage depicting which Project elements would have been completed, which would be under construction, and which would not have been started.

The Technical Analysis notes that although the overall construction of the Project would be delayed under the Extended Build-Out Scenario, the time involved in

constructing each component of the Project would not be substantially affected. Thus, the amount of time and effort devoted to the construction of each of the Project buildings would be approximately the same as assumed in the FEIS, regardless of the calendar year in which such buildings are constructed. The analysis also accounts for the fact that the program and use contemplated for the Project would be unchanged under the Extended Build-Out Scenario. Thus, notwithstanding the date the Project is completed, it would need to be consistent with the 2009 MGPP, 2006 Design Guidelines and Memorandum of Environmental Commitments. Therefore, any difference in the Project's impacts *upon its completion* would result from changes in background conditions occurring during the period of extended delay.

The Technical Analysis addressed three sorts of impacts that could arise from the Extended Build-Out Scenario: (i) impacts that could occur upon completion of the Project in 2035; (ii) the effects of construction activities taking place over an extended period of time; and (iii) impacts associated with the appearance and use of the Project site during the extended period of construction. Each of those potential impact categories are addressed specifically below.

c. Operational Impacts upon Completion of the Project in 2035

Since the date for completion of the Project would not affect its ultimate program, site plan or building bulk and configuration, the Technical Analysis concluded that the Project, once completed under the Extended Build-out Scenario, would not have significant adverse impacts not previously addressed in the FEIS in the areas of Land Use and Public Policy, Socioeconomic Conditions, Open Space, Shadows, Historic Resources, Urban Design and Visual Resources, Hazardous Materials, Infrastructure, Air Quality, Noise, Neighborhood Character or Public Health. The Technical Analysis examined carefully the operational effects of the Extended Build-Out Scenario on Community Facilities, Traffic, Parking, Transit and Pedestrians.

Community Facilities

With respect to Community Facilities, the Technical Analysis noted that the FEIS had found that the additional students generated by the Project would have a significant adverse impact on public elementary and intermediate schools. In accordance with the SEQRA Findings, the Memorandum of Environmental Commitments requires FCRC to provide space, at the option of the School Construction Authority ("SCA"), for a public school on the Project site. The Technical Analysis considered more recent Board of Education projections, but those projections were found not to alter the conclusions of the 2009 Technical Memorandum, which continued to identify a significant adverse impact, at least with respect to elementary schools. The Technical Analysis found that a delay in Project construction under the Extended Build-Out Scenario would affect the timing within which a significant adverse impact to public schools would occur, because the number of new public school students generated by the Project will increase only as new residential units come on line. However, the ultimate FEIS conclusion that the Project will result in a

significant adverse impact to public schools, and FCRC's obligation to provide space for a public school on the Project site at SCA's option, would not be altered.

The Technical Analysis also considers the potential impacts of the Project under the Extended Build-Out Scenario on publicly funded child care facilities. It notes that the analysis performed with respect to such facilities in the 2009 Technical Memorandum found that the updated background conditions and updated methodologies (*i.e.*, the new CEQR generation rates for child care eligible children in effect at the time of the 2009 Technical Memorandum) would result in additional demand for publicly funded child care facilities in the study area as compared to the FEIS analysis, which could result in a shortfall of child care slots in the 2019 future with the Project. To meet the additional demand, the project sponsor was required, in the Memorandum of Environmental Commitments, to construct on the project site and arrange for the long-term operation of a licensed day care center accommodating at least 100 children and, if necessary, work with the New York City Administration for Children's Services 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 to the extent required to avoid a significant environmental impact. On that basis, the 2009 Technical Memorandum concluded that there would be no new significant adverse impacts on publicly funded child care facilities in the study area. FCRC's obligation under the Memorandum of Environmental Commitments to monitor the need for additional slots as Project implementation progresses and to provide for facilities that meet such need at the level necessary to avoid a significant adverse impact on publicly funded child care facilities, would remain the same under the Extended Build-Out Scenario.

Traffic, Parking, Transit and Pedestrians

In general, the conclusions of the FEIS with respect to the impacts of the Project on traffic were based upon an analysis that: (i) identified existing traffic conditions in the study area during each of the relevant peak hours; (ii) made a projection as to how traffic conditions would evolve without the Project by the 2016 build year (the "No Build" condition); (iii) estimated the additional trips that would be expected to be generated by the Project upon completion; (iv) superimposed that additional traffic on the affected roadway network as of the Project's build year; and (v) assessed the impact of the Project-generated traffic on the No Build traffic conditions that would otherwise exist in the build year. Since a delay in the year of Project completion would not increase the overall size or mix of uses proposed for the Project, such a delay would not change the number of Project-generated trips in any of the analyzed peak hours at full build-out. Accordingly, any additional traffic or parking impacts associated with the Project under the Extended Build-Out Scenario would be caused by a worsening of the No Build conditions in the years up to 2035. The Technical Analysis assesses this issue and concludes that the FEIS – when assessed in light of more recent traffic data (which show that traffic volumes in 2010 are less than the 2005 traffic volumes used as the basis for the FEIS), the changes in the other projects that are expected to be constructed in the transportation study area and a change in the City's projections of the long-term background growth rate for Brooklyn – made sufficiently

conservative assumptions as to the 2016 No Build network that the Extended Build-Out Scenario would not be expected to change materially the conclusions regarding its traffic impacts. In this regard, it is noteworthy that the FEIS disclosed that the Project would result in significant adverse traffic impacts at numerous intersections and required traffic mitigation (which would only partially mitigated the adverse traffic impacts) that will be implemented in close cooperation with and as approved by DOT; the traffic mitigation measures would continue to be implemented as approved by DOT in the Extended Built-Out Scenario. The Technical Analysis also assesses parking, transit and pedestrian impacts and concludes that the Extended Build-Out Scenario would not result in adverse impacts in these technical areas upon Project completion.

d. Construction Period Impacts – Introduction

The Technical Analysis also assessed the potential for the Extended Build-Out Scenario to result in environmental impacts not adequately addressed in the FEIS that would occur during the construction period. Two related but discrete issues were assessed: (i) how environmental impacts associated with construction activities would change under a scenario in which they would take place over a longer period of time (25 years instead of 10 years), but would also be generally less intense (because fewer buildings would be under simultaneous construction at the site); and (ii) whether and how the environmental impacts of the Project would change as a result of a delay in the construction of certain Project buildings and the open space. Each of these issues is discussed separately below.

e. Impact of Construction Activities In The Extended Build-Out Scenario

The FEIS analyzed the environmental impacts of: (i) construction-related traffic, taking into account potential impacts associated with construction trucks and construction-worker vehicles; (ii) construction-related air emissions, focusing primarily on fine particulate matter emitted from the operation of construction equipment, and the dust associated with the disturbance of site soils and the movement of construction vehicles; and (iii) construction-related noise associated with the operation of construction equipment and construction-related traffic. The FEIS assessed each of these areas using quantitative models based on identified peak periods of construction during a 10 year construction period, when multiple buildings were assumed to be under simultaneous construction in close proximity to each other at the site. In connection with these analyses, the FEIS identified and assessed one or more peak periods for both Phase I and Phase II of the Project when construction would be taking place at a level most likely to result in the potential for significant adverse traffic, air and noise impacts. In addition to these technical areas, the discussion below also summarizes the conclusions of the Technical Analysis with respect to neighborhood character. The Technical Analysis also examines other construction-related issues.

Construction-Related Traffic

With respect to traffic, the FEIS concluded that the construction of the Project would result in significant adverse impacts at a number of intersections in the area.

The Technical Analysis concludes that under the Extended Build-Out Scenario the volume of construction-related traffic would be reduced during much of the construction period, because approximately the same total volume of construction trucks and construction-worker vehicles would be spread out over 25 years, instead of over 10 years. The construction of the Project over 25 years would continue to result in significant adverse traffic impacts, as in the 10-year scenario analyzed in the FEIS, but the traffic impacts in the Extended Build-Out Scenario are likely to be at fewer intersections and result in less incremental delay time at the affected traffic movements at these intersections. As noted above, the SEQRA Findings Statement and Memorandum of Environmental Commitments imposed extensive traffic mitigation measures for the Project, and, in general, concluded that these measures would also address, to the maximum extent practicable, the significant construction-related traffic impacts. Pursuant to the Memorandum of Environmental Commitments and discussions with FCRC and DOT earlier this year, the network-related traffic mitigation will be implemented by the Arena opening date, and will therefore mitigate traffic conditions to the extent practicable during the construction period thereafter. In addition, the Technical Analysis notes that, in accordance with the Memorandum of Environmental Commitments and DOT regulations, an MPT plan will be developed and implemented for each construction site, in order to maintain public safety during construction and to minimize impacts to traffic and pedestrians. Each MPT plan would be prepared at the time that a permit is required for a new major phase of construction activity, such as starting a new building. For the foregoing reasons and based upon the additional information provided in the Technical Analysis, 2009 Technical Memorandum and FEIS, ESDC concludes that an SEIS is not required or warranted to further study construction-related traffic impacts.

Construction-Related Noise

The FEIS concluded that the construction of the Project would also result in significant adverse noise impacts at a number of noise receptor locations, and adjacent areas that are specifically identified in the FEIS and SEQRA Findings Statement. The FEIS focused on noise emanating from construction equipment, because operating construction equipment was identified as the predominant source of noise during the period of construction. The Technical Analysis concludes that construction of the Project under the Extended Build-Out Scenario would, in general, reduce the volume of construction-related equipment that would be in operation at any one time at the Project site because fewer buildings would be under concurrent construction. However, an extended build-out would also prolong the period of time that construction-related noise would occur at the site.

The Technical Analysis identified which of the noise receptor locations examined in the FEIS would experience significant adverse noise impacts during each of the seven stages analyzed in the Extended Build-Out Scenario. That analysis indicated that, although certain receptors would be adversely affected over multiple stages of construction, the noise-related impacts of construction activities generally would move from one area to another as those activities progress across the 22 acre site. Thus, the Technical Analysis

indicates that under the Extended Build-Out Scenario most receptor locations would experience construction-related noise impacts only during certain stages of the construction schedule, when construction work (such as excavation and building shell construction) is being performed in proximity to the noise receptor, rather than for the entire duration of the 25-year period. Moreover, periods of high noise levels can be expected to be episodic at the affected receptors, because many Project buildings would be constructed sequentially and high levels of noise do not occur throughout the entire period during which a building is under construction.

A prolonged construction schedule may prolong the duration during which certain receptor locations would experience significant adverse construction-related noise impacts. However, the significant adverse noise impacts would not be expected to occur at receptor locations not previously identified in the FEIS as locations that would experience such significant impacts. The SEQRA Findings Statement imposed comprehensive noise mitigation measures to address the noise related to Project construction to the maximum extent practicable. These requirements have been incorporated into the Memorandum of Environmental Commitments whose measures FCRC is required to follow pursuant to the Development Agreement, as noted above. Among other things, FCRC is obligated to provide double-glazed windows and alternative means of ventilation at residences nearby significantly impacted receptor locations. The Technical Analysis, like the FEIS, indicated that such measures would be effective in reducing interior noise levels at the residences opting to accept them. Such mitigation measures would continue to address the noise impacts of construction under the Extended Build-Out Scenario, to the extent practicable. For the foregoing reasons and based upon the additional information provided in the Technical Analysis, 2009 Technical Memorandum and FEIS, ESDC concludes that an SEIS is not required or warranted to further study construction-related noise impacts.

Construction-Related Air Impacts

The FEIS concluded that the construction of the Project would not result in significant adverse air quality impacts, even during the peak periods of construction when multiple buildings in close proximity to each other were assumed to be under construction concurrently. The FEIS analysis with respect to fine particulate emissions was based on the assumption that FCRC's contractors would implement a state-of-the-art emission reduction program (including but not limited to the use of diesel particulate filters on major construction equipment and concrete trucks). Accordingly, the Memorandum of Environmental Commitments requires FCRC to comply with the FEIS commitment to implement such a program. ESDC's environmental monitor has been closely monitoring the construction work with respect to compliance with these measures, and the Memorandum of Environmental Commitments requires FCRC to reimburse ESDC for the cost of that monitor; accordingly, ESDC's oversight, with the assistance of its environmental monitor, will continue for the entire duration of the Project's construction work, regardless of any delay in the construction schedule.

According to the air quality assessment in the FEIS for construction-related air impacts, fine particulate matter concentrations of potential concern at individual receptor locations, should they occur, would be due to emissions from construction equipment operated in close proximity to the receptor location. The Technical Analysis examines construction activities in each of the seven stages, and concludes that the Extended Build-Out Scenario – although prolonging the overall duration of construction across the 22 acre site – would not increase the duration of the construction work on individual Project elements, and therefore would not prolong intense construction operations near individual receptor locations. The Technical Analysis supports the conclusion that a prolonged construction schedule would not be expected to increase the frequency, duration or intensity of elevated concentrations at individual receptor locations and, as in the 10-year FEIS construction scenario, would not result in significant adverse impacts to air quality.

The Technical Analysis also assessed the potential impacts of a prolonged construction schedule on nuisance dust from the construction work, an issue the FEIS and Memorandum of Environmental Commitments also address. FCRC's compliance with the required dust control measures are being monitored carefully, and will continue to be monitored carefully, by ESDC's environmental monitor. Although the potential for dust would continue in the general vicinity of the construction area for a longer duration since the Extended Build-Out Scenario would have a longer construction schedule, concentrations would not persist in any particular location because the activities generating dust would not occur continuously at any single location throughout construction. In addition, since there would be less simultaneous work on multiple sites and buildings and more time in between the start of each building's construction activities, the overall dust emissions at any stage in the Extended Build-Out Scenario would be expected to be less than that analyzed in the FEIS. The Technical Analysis concludes that a prolonged construction schedule – which would not materially change the total amount of soil excavation or construction traffic required to build the Project – would not exacerbate nuisance dust from the construction site so as to result in dust-related significant adverse environmental impacts. For the foregoing reasons and based upon the additional information provided in the Technical Analysis, 2009 Technical Memorandum and FEIS, ESDC concludes that an SEIS is not required or warranted to further study construction-related air quality impacts.

Neighborhood Character

The FEIS concluded that intensive construction activities carried on over a ten year duration would result in significant localized adverse impacts to neighborhood character in the areas, such as those along Dean Street, Pacific Street and Carlton and Flatbush Avenues, in the immediate vicinity of the Project site. The FEIS noted that in addition to being exposed to the effects of prolonged construction activity, during certain phases of the construction work, these areas would be inconvenienced by construction-related closures of the Carlton Avenue Bridge and 6th Avenue Bridge over the rail yard and would also experience significant impacts from construction traffic and noise. As noted in the 2009 Technical Memorandum, since the FEIS, it has been determined that it will no

longer be necessary to demolish and replace the 6th Avenue Bridge; this change will reduce the impacts of such closure on the area. Also, a delay in the construction of the Project would not affect the duration of the closure of the Carlton Avenue Bridge, because the 2009 MGPP requires the Carlton Avenue Bridge to be re-built and operational by the Arena opening condition.

As noted in the Technical Analysis, a more prolonged construction schedule would not increase the duration of the construction activity associated with individual Project buildings. Thus, residences immediately across the street from the building sites will not experience a more prolonged construction period for any specific building. But certain areas adjacent to the Project site are near several building sites; for example, the residences on the northeastern edge of Block 1128, on Carlton Avenue, are across the street from the sites of Buildings 7 and 14, and diagonally across from the sites of Buildings 6 and 8. Under the Extended Build-Out Scenario, such areas would experience less intense construction (because fewer buildings would be under concurrent construction) but would experience construction of at least one building in the immediate vicinity for a more prolonged time period. As noted above, the FEIS already disclosed a significant localized adverse impact to neighborhood character at the areas adjacent to the Project site, and identified construction-related mitigation measures to minimize these impacts to the greatest extent practicable, all of which have been imposed on FCRC pursuant to the Memorandum of Environmental Commitments made enforceable through the Development Agreement. For the foregoing reasons and based upon the additional information provided in the Technical Analysis, 2009 Technical Memorandum and FEIS, ESDC concludes that an SEIS is not required or warranted to further study construction-related neighborhood character impacts.

f. Impact Of The Delay In The Construction Of Project Buildings In The Extended Build-Out Scenario

A delay in Project construction would also result in a delay in the realization of the benefits of certain of the Project elements. Among other issues, the Technical Analysis addressed the effect of the Extended Built-Out Scenario on one key component of the Project: the provision of 8 acres of publicly accessible open space, which would be developed incrementally during Phase II as buildings during this phase are completed. The FEIS identified a temporary significant adverse open space impact in the non-residential (1/4-mile) study area between the completion of Phase I and the completion of Phase II. In considering this temporary impact, ESDC takes note of the qualitative consideration set forth in the FEIS of the availability of large nearby open spaces like Prospect Park and Fort Greene Park. Moreover, the Extended Build-Out Scenario would affect the timing of the open space development, but not the ultimate layout of the 8 acres of publicly accessible open space or the project's population, which would remain the same as described in the FEIS. The Extended Build-Out Scenario would prolong the temporary significant adverse open space impact in the non-residential (1/4-mile) study area identified in the FEIS – especially if all of the Phase I buildings were to be constructed before any of the Phase II open space is made available – but would not result in new significant adverse impacts not

addressed in the FEIS. Moreover, the Phase II open space would be provided incrementally as the Phase II buildings are constructed, as required by and in conformance with the Design Guidelines. The open space deficit would also be partially addressed, during certain interim delay periods in the Extended Build-Out Scenario, through the provision of the publicly accessible plaza at the Building 1 site and the publicly accessible open space at the Building 3 site; these temporary open spaces, however, would be eliminated upon the construction of Buildings 1 and 3, respectively. As noted in the FEIS, however, Building 1 will include the Urban Room, which the FEIS characterized as a public amenity that was considered qualitatively in its open space assessment. ESDC concludes that an SEIS is not required or warranted to further study a potential delay-related prolongation of the open space impact in the non-residential (1/4-mile) study area caused by a potential gap between the construction of the Phase I buildings and the Phase II open space in the Extended Build-Out Scenario.

The Technical Analysis assessed the urban design, neighborhood character, open space and other impacts of the delay in the construction of the Project buildings in the Extended Built-Out Scenario, principally through its discussion of the “Stages” that serve as the analysis tool used in its assessment. To synthesize this information, the impact of such delays are summarized below, proceeding generally from the western end of the Project site eastward. The discussion below is intended to supplement, not replace, the discussion set forth in the Technical Analysis.

A delay in the construction of the building on Site 5 would likely result in the existing condition (two retail stores) operating for a longer time period at this location. Such a delay would postpone the benefits of the Project building to be constructed at Site 5 but would not warrant preparation of an SEIS.

Building 1, at the southeast corner of Flatbush and Atlantic Avenues, is a multi-use building with a significant commercial office component. The building cannot be financed until an anchor tenant is identified, which has not yet occurred. The delay in the construction of Building 1 will delay the construction of the Urban Room, which is one of the Project’s public benefits. In the interim condition, however, an urban plaza and the new subway entrance are being constructed at this location, and the arena signage and design have been developed to take into account the delay in the construction of Building 1. Such a delay would postpone the benefits of the Urban Room and the economic development benefits of its new commercial office space, but does not warrant preparation of an SEIS. The delay in the construction of Building 1 would not result in significant adverse impacts; moreover, the preparation of an SEIS would not provide information that would be useful in addressing the conditions caused by a delay in the construction of Building 1, particularly in light of the public plaza that will be constructed at this location until construction of Building 1.

Building 2, which will be located on Dean Street adjacent to the arena, is expected to be the first residential building at the Project site. Its construction is expected to begin in 2011 and is therefore not expected to be delayed significantly under the Extended Build-Out Scenario.

One important effect of the delay in Building 3 is that a portion of the permanent buffer that would be provided by constructing residential buildings between the arena and the residential area to the south along Dean Street will not be in place until such building is constructed. However, construction of Building 2 would provide a partial buffer, and the publicly accessible interim open space planned for this location prior to the construction of Building 3 is a public amenity that would somewhat buffer the arena at the location of Building 3. An SEIS would not provide information that would be useful in addressing a delay in the construction of Building 3.

The effect of a delay in Building 4, at the northeastern corner of the arena, would be that the existing below-grade rail yard cut at this location would be in place for a longer period of time. This is a continuation of the historic condition of the Building 4 site. Such a delay would delay the benefits of Building 4, but would not warrant an SEIS. The delay in the construction of Building 4 would merely cause a perpetuation of the long-existing condition at this location. Although Building 4, when constructed, would partially buffer the arena to the north of the Project site, that area is a predominantly commercial area of Atlantic Avenue and would not be significantly affected by the absence of Building 4 and the resulting unbuffered views of the arena's northeast corner, particularly since Atlantic Avenue itself is a major thoroughfare. Moreover, an SEIS would not provide information that would be useful in addressing the delay in the benefits from a delay in the construction of Building 4.

The effect of a delay in Buildings 5, 6 and 7 – to be located on Block 1120 over the rail yard and on the land adjacent to Atlantic Avenue – is, in general, that the existing historic condition at Block 1120, which is predominantly characterized by the below-grade open rail cut, would be in place for a longer period of time. Lot 35, however, would be in use for construction staging and access to the below-grade rail yard to enable FCRC to build the permanent rail yard. The delay in the construction of Buildings 5, 6 and 7 would cause a perpetuation of the long-existing condition on Block 1120 and would not warrant an SEIS, which is not likely to provide useful information as to what measures could be taken, if any, to speed the construction of an at-grade platform, buildings and open space on Block 1120 to cover the rail yard.

The effect of a delay in Buildings 8, 9 and 10 – to be located on Block 1121 over the rail yard and on the land adjacent to Vanderbilt Avenue – is, in general, that the existing historic condition at Block 1121, which is predominantly characterized by the below-grade open rail cut, would be in place for a longer period of time. The delay in the construction of Buildings 8, 9 and 10 would cause a perpetuation of the long-existing condition on Block 1121 and would not warrant an SEIS, which is not likely to provide useful information as to what measures could be taken, if any, to speed the construction of an at-grade platform, buildings and open space on Block 1121 to cover the rail yard.

The effect of a delay in Buildings 11, 12, 13 and 14 – to be located on Block 1129 – would be that the interim surface parking facility to be constructed at this location

would be in place for a longer period of time. Prior to the work on the Project, Block 1129 was a blighted area, characterized by a mix of abandoned industrial buildings, occupied residential and commercial buildings, a homeless shelter and much smaller surface parking lots. The interim surface parking lot on Block 1129 will be screened by landscaping and a 10' tall semi-transparent fence. In the interim condition, the parking lot on Block 1129 will be large – holding as many as 1100 vehicles – and, as disclosed in the FEIS analysis, this condition will result in significant adverse traffic impacts during peak travel periods. Upon Project completion, however, Block 1129 will have 2070 below-grade parking spaces; thus, vehicular traffic associated with the interim surface parking lot of 1100 spaces is expected to be less than the traffic impacts associated with the larger parking lot on Block 1129 in the Phase II completion condition analyzed in the FEIS. The FEIS has already considered the traffic impacts of a parking lot on Block 1129 thoroughly; the traffic impacts are not exacerbated by a delay in the construction of Buildings 11, 12, 13 and 14 on Block 1129. The interim surface parking on Block 1129 will have an effect on the residential blocks in the immediate vicinity of Block 1129, but would not change the character of the larger neighborhoods surrounding the Project site. Moreover, the Development Agreement requires that FCRC begin construction of a least one building on Block 1129 by 2020. FCRC has advised ESDC that the first building to be constructed on Block 1129, in the Extended Build-Out Scenario, would likely be Building 14, which is on the western end of the block. The construction of Building 14 would help screen the residential buildings on Carlton Avenue from the interim surface parking lot that would remain on other areas of Block 1129 after Building 14 is constructed. A delay in Buildings 11, 12, 13 and 14 would delay the benefits of these buildings, but would not create significant adverse neighborhood character or other impacts not disclosed in the FEIS, especially when considered in light of the blighted condition of Block 1129 prior to ESDC's acquisition of the Project site and the localized nature of the visual impact of a surface parking lot. Moreover, an SEIS would not identify additional measures to reduce the impacts of the surface parking on Block 1129 because FCRC has already committed to improving the perimeter of the parking lot with screening and to using directional lighting to minimize light intrusion on nearby buildings, and the FEIS already provides for traffic mitigation to address vehicular traffic associated with the parking lot. Accordingly, an SEIS is not warranted to study the impact of a potential delay in the construction of buildings on Block 1129.

A delay in the construction of Building 15 – a building on a relatively small portion of the western end of Block 1128 – would delay the benefits of Building 15, but would not result in significant adverse impacts that would warrant an SEIS.

¹¹ ESDC has already acquired Block 1129 through the exercise of eminent domain, at FCRC's expense. Thus, this land is available to FCRC for development pursuant to the 2009 MGPP and the Development Agreement without any incremental cost for property acquisition, since FCRC has already incurred the costs of acquiring the right to develop 1.257 million square feet of residential development on Block 1129. *See* 2009 MGPP, Exhibit C. A delay in the development of Block 1129 is not anticipated.

For the foregoing reasons and based upon the additional information provided in the Technical Analysis, 2009 Technical Memorandum and FEIS, ESDC concludes that an SEIS is not required or warranted to further study the effect of a potential delay in the construction of the Project buildings.

For the foregoing reasons, and based on the information in the FEIS, 2009 Technical Memorandum and Technical Analysis, ESDC further concludes that the Technical Analysis confirms ESDC's conclusion made in 2009 that the 2009 MGPP did not require or warrant an SEIS. Similarly, the Development Contracts did not require or warrant an SEIS. Moreover, ESDC determines that an SEIS would not provide information that would be of material utility in identifying the environmental impacts of the Project or practicable measures to minimize or avoid such impacts beyond those already imposed in the SEQRA Findings Statement and the Memorandum of Environmental Commitments made enforceable by the Development Agreement.

EXHIBIT F

SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: MARCY S. FRIEDMAN

PART 57

Index Number : 114631/2009

DEVELOP DON'T DESTROY

vs.

EMPIRE STATE DEVELOPMENT CORP

SEQUENCE NUMBER : 006

ARTICLE 78

INDEX NO. _____

MOTION DATE _____

MOTION SEQ. NO. 006

MOTION CAL. NO. _____

supplemental
petition
his motion ~~is~~ for Art. 78

PAPERS NUMBERED

1, 1A
2, 2A, 3, 3A

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits ...

Answering Affidavits — Exhibits _____

Replying Affidavits _____

Memos from 41-44

Cross-Motion: Yes No

Upon the foregoing papers, it is ordered that this ~~motion~~

supplemental petition is decided in accordance with the accompanying decision and order of the same date.

ENTER:

FILED

JUL 19 2011

COUNTY CLERK'S OFFICE
NEW YORK

RECEIVED

JUL 13 2011

NEW YORK COUNTY CLERK
120 NASSAU ST. 12TH FL.
NEW YORK, NY 10038

Dated: 7-13-11

Marcy Friedman
MARCY S. FRIEDMAN c.

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION

Check if appropriate: DO NOT POST REFERENCE

SUBMIT ORDER/ JUDG. SETTLE ORDER/ JUDG.

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE FOR THE FOLLOWING REASON(S):

E
7/14/11
ec

SUPREME COURT OF THE STATE OF NEW YORK — NEW YORK COUNTY

PRESENT: MARCY S. FRIEDMAN

PART 57

116323/09

Index Number : 114631/2009
DEVELOP DON'T DESTROY
 VS.
EMPIRE STATE DEVELOPMENT CORP
 SEQUENCE NUMBER : 006
 ARTICLE 78

INDEX NO. _____
 MOTION DATE _____
 MOTION SEQ. NO. 005
 MOTION CAL. NO. _____
supplemental
petition
 his motion for Art. 78

11/4/11 ec

PAPERS NUMBERED

1, 1A
2, 2A, 3, 3A

Notice of Motion/ Order to Show Cause — Affidavits — Exhibits ...
 Answering Affidavits — Exhibits _____
 Replying Affidavits _____

Memo from M1-M4

Cross-Motion: Yes No

Upon the foregoing papers, it is ordered that this ~~motion~~

supplemental petition is decided in accordance with the accompanying decision and order of the same date.

ENTER:

FILED

JUL 19 2011

COUNTY CLERK'S OFFICE
NEW YORK

Dated: 7-13-11

Marcy Friedman
MARCY S. FRIEDMAN c.

Check one: FINAL DISPOSITION NON-FINAL DISPOSITION
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 SUBMIT ORDER/ JUDG. SETTLE ORDER/ JUDG.

MOTION/CASE IS RESPECTFULLY REFERRED TO JUSTICE FOR THE FOLLOWING REASON(S):

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK – PART 57

PRESENT: Hon. Marcy S. Friedman, JSC

DEVELOP DON'T DESTROY (BROOKLYN),
INC., et al.,

Index No.: 114631/09

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT
CORPORATION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

PROSPECT HEIGHTS NEIGHBORHOOD
DEVELOPMENT COUNCIL, INC., et al.,

Index No.: 116323/09

Petitioners,

For a Judgment Pursuant to Article 78 of the Civil
Practice Law and Rules,

DECISION/ORDER

- against -

EMPIRE STATE DEVELOPMENT
CORPORATION and FOREST CITY RATNER
COMPANIES, LLC,

Respondents.

JUN 18 2011

Procedural History

These Article 78 proceedings, brought under the State Environmental Quality Review Act (SEQRA), challenge modification of the plan for development of the Atlantic Yards Project in Brooklyn. In prior proceedings, petitioner Develop Don't Destroy (Brooklyn), Inc. (DDDB) and petitioners Prospect Heights Neighborhood Development Council, Inc. and others (collectively PHND) challenged the affirmance, on September 17, 2009, by respondent New York State Urban Development Corp., doing business as the Empire State Development Corp. (ESDC), of the modified general project plan (2009 MGPP) for the Project, which is to be constructed by respondent Forest City Ratner Companies or its affiliates (FCRC). By decision and order dated March 10, 2010, this court denied the petitions. By decision and order dated November 9, 2010, the court granted leave to reargue and renew. On reargument, the court held that ESDC did not provide a reasoned elaboration for its continuing use of a 10 year build date for the Project and its determination not to require a Supplemental Environmental Impact Statement (SEIS), based on its wholesale failure to address the impact on the build date of the complete terms of its Development Agreement with FCRC and of a renegotiated Agreement between the Metropolitan Transportation Authority (MTA) and FCRC. The court remanded the matter to ESDC for findings on the impact of the Agreements on ESDC's continued use of the 10 year build date, and on whether an SEIS is warranted or required pursuant to SEQRA. (Nov. 9, 2010 Decision at 18.)

In December 2010, in response to the court's order, ESDC's environmental consultant, AKRF, Inc., prepared a Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project (Technical Analysis) (Supplemental Administrative Record

[SAR] 7637 et seq.) (fn 1) ESDC also issued a document entitled ESDC Response to Supreme Court's November 9, 2010 Order (ESDC Response) (SAR 7728 et seq.) By resolution dated December 16, 2010, ESDC concluded:

- “1. The Development Agreement and MTA Agreement (collectively, the “Development Contracts”) do not have a material effect on whether it is reasonable to use a 10-year construction schedule for the purpose of assessing the environmental impacts of the Project
2. As of the date of these findings, it appears unlikely that the Project will be constructed on a 10-year schedule. . . .
3. A delay in the 10-year construction schedule, through and including a 25-year final completion date, would not result in any new significant adverse environmental impacts not previously identified and considered in the FEIS [Final Environmental Impact Statement] and 2009 Technical Memorandum and would not require or warrant an SEIS”

(Dec. 16, 2010 Resolution, SAR at 7631.) ESDC further resolved that “such findings do not require any modification to the Tech Memo, and do not disturb the prior determination of the Corporation that no Supplemental Environmental Impact Statement is required for the Project’s Modified General Project Plan.” (Id.) Petitioners’ Supplemental Petitions challenging ESDC’s December 16, 2010 findings followed.

The Atlantic Yards Project has been described as “the largest single-developer project in New York City history.” (Matter of Develop Don’t Destroy [Brooklyn] v Urban Dev. Corp., 59 AD3d 312, 326 [1st Dept 2009] [Catterson, J. concurring] [DDDB I], lv denied 13 NY3d 713, rearg denied 14 NY3d 748 [2010].) The Project extends over 22 acres and is to be built in two phases. Phase I includes a sports arena that will serve as the new home of the New Jersey Nets, four to five buildings in the vicinity of the arena, a new MTA/Long Island Railroad (LIRR) rail yard, and transit access improvements including a new subway entrance. Phase II covers construction of 11 of the Project’s 16 hi-rise buildings, which will contain commercial space and

approximately 5,000 to 6,000 residential units, 2,250 of which will be affordable housing units. Phase II also includes development of eight acres of publicly accessible open space.

Petitioners contend that the MTA Agreement and the Development Agreement, negotiated by ESDC at the time of the 2009 MGPP, have significantly extended the time frame for the build-out of Phase II of the Project, rendering the 10 year build date an impermissible basis for environmental analysis. Respondents dispute the impact of the Agreements on the build date. They contend that it was reasonable for them to rely on the 10 year build date, which ESDC used as the basis for its analysis in the 2006 FEIS prepared in connection with the original plan, and continued to use in the 2009 Technical Memorandum prepared in connection with the 2009 MGPP.

ESDC claims, and petitioners do not dispute, that even under a prolonged build-out, the timing of completion of the arena, one of the buildings in the vicinity of the arena, and the other Phase I construction would not be “materially” affected. (Technical Analysis, SAR at 7638.)

The court refers to its March 10 and November 9, 2010 decisions for an extensive discussion of the parties’ claims and of the bases for the court’s prior determinations.

Use of 10 Year Build Date

Petitioners’ initial challenge to the 2009 MGPP was based on the MTA’s renegotiation in June 2009 of its agreement with FCRC to sell FCRC the air rights to the rail yard owned by the MTA. These air rights are necessary to construct 6 of the 11 Phase II buildings which are to be built on a platform to be constructed over the MTA rail yard. Under the agreement between the MTA and FCRC that was in effect at the time of ESDC’s approval of the Project plan in 2006, FCRC was required to pay \$100 million to the MTA at the inception of the Project for the air



rights. Under the renegotiated agreement, FCRC will pay \$20 million for acquisition of the property interests necessary for the development of the arena block, will provide the MTA with a letter of credit to secure the obligation to build an upgraded MTA/LIRR rail yard, and will pay the balance of the \$100 million on an installment schedule that affords FCRC until 2030 to acquire the air rights necessary for construction of 6 of the Phase II buildings, although it permits FCRC to acquire the air rights for each of the 6 parcels as the full price for the parcel is paid. (See Mar. 10, 2010 Decision at 3-4.) In connection with ESDC's approval of the 2009 MGPP, ESDC's staff characterized the change in site acquisition as a "major change" to the Project. (June 23, 2009 Memorandum, AR at 4677-4678.)

In its decision denying the petitions, this court held that under the applicable standard for SEQRA review, ESDC's elaboration of its reasons for continuing to use the 10 year build-out was supported, albeit minimally, by the factors articulated by ESDC, including its intent to obtain a commitment from FCRC, in a Development Agreement under negotiation, to use commercially reasonable effort to complete the Project in 10 years. (Mar. 10, 2010 Decision at 11.)

On the reargument motion, petitioners argued that the continuing use of the 10 year build-out was belied not only by the MTA Agreement but by the detailed terms of the Development Agreement that ESDC actually negotiated, including significantly extended dates for Phase II construction. In remanding to ESDC for findings on the reasonableness of its continuing use of the 10 year build date, this court reasoned that in approving the 2009 MGPP, ESDC claimed to have relied on a provision in the Development Agreement being negotiated with FCRC which would require FCRC to use "commercially reasonable effort" to complete the Project within 10 years, by 2019. The court found, however, that ESDC knew at the time of its approval of the



MGPP, but did not bring to the court's attention, that the Development Agreement would require the arena and Phase I buildings on the arena block to be substantially completed within or reasonably soon after the 10 year build date, but would provide for a significantly extended outside substantial completion date of 25 years, or 2035, for the Phase II construction (11 of the 16 residential hi-rise buildings on the Project site). (Nov. 9, 2010 Decision at 4-5.) The court also discussed at length the substantially greater penalties provided for delays in Phase I construction than for delays in Phase II construction, or for failure to use commercially reasonable effort to complete the Project by 2019, as well as the stringent deadlines for commencement of Phase I construction and the absence of deadlines, with limited exceptions, for commencement of Phase II construction. (Id. at 6-9.)

In determining that reargument should be granted, the decision concluded: The Development Agreement has cast a completely different light on the Project build date. Its 25 year outside substantial completion date for Phase II and its disparate enforcement provisions for failure to meet Phase I and II deadlines, read together with the renegotiated MTA Agreement giving FCRC until 2030 to complete acquisition of the air rights necessary to construct 6 of the 11 Phase II buildings, raise a substantial question as to whether ESDC's continuing use of the 10 year build-out has a rational basis. (Id. at 16-17.)

In its findings on the remand, ESDC claims that it disclosed, at the time of its approval of the 2009 MGPP, that the outside dates for construction would extend "well beyond 10 years." (Dec. 16, 2010 Resolution, SAR at 7631.) As discussed at length in the court's November 9, 2010 decision, that claim is patently incorrect. In what the court termed a failure of transparency, ESDC made no mention of the provision in the Development Agreement for a 25 year substantial



completion date for Phase II and, instead, repeatedly cited the provision requiring FCRC to use commercially reasonable effort to complete the Project in 10 years. (Nov. 9, 2010 Decision at 10-11, 16.) (fn 2)

In remanding the matter to ESDC for further findings on the effect of the MTA and Development Agreements on the reasonableness of the 10 year build date, the court afforded ESDC an opportunity to correct its failure to address the impact of these Agreements, and to respond to this court's preliminary reading, in the November 9, 2010 decision, of the terms of the Development Agreement affecting deadlines for construction of the Project. Significantly, in its findings on the remand, ESDC does not differ with the court's reading of the Development Agreement as providing detailed timetables and firm commencement dates for the arena and Phase I work; no commencement dates for Phase II work, other than the platform which is not required to be commenced until 2025, and one Phase II building on Block 1129 which is not required to be "initiated" until 2020; and far stricter penalties for delays in Phase I work than for delays in Phase II work. (Nov. 9, 2010 Decision at 9-10; ESDC Response, SAR at 7734-7737; Technical Analysis, SAR at 7639 [Block 1129].) Nor does ESDC contest the court's conclusion (Nov. 9, 2010 Decision at 8-9) that ESDC would face significant legal difficulties or, as ESDC puts it, "complexities . . . in establishing FCRC's failure to proceed with the Project in a commercially reasonable manner" so as to meet the 10 year build out. (See ESDC Response, SAR at 7748.) (fn 3)

ESDC nevertheless insists that it was reasonable for it to continue to rely on the Development Agreement provision requiring FCRC to use commercially reasonable effort to meet the 10 year deadline. (ESDC Response, SAR at 7746.) In support of this contention,



ESDC relies on its characterization of the outside dates for Phase II construction in the Development Agreement as the mere creation of “transactional lawyers” anticipating risks (id. at 7746), and its wan assertion that the MTA and Development Agreements do not “preclude” or are not “inconsistent” with a 10 year build-out. (Id. at 7748.) While it is correct that the Agreements do not prevent a build-out in 10 years, ESDC itself acknowledges that the negotiation of the MTA and Development Agreements was necessary due to the weak state of the economy. ESDC thus represents that the Agreements were “structured” in order “to get the Project going in a difficult economic climate,” by “allow[ing] FCRC to purchase Project property in pieces and to proceed with the platform construction in three distinct phases.” (Id. at 7747.) ESDC also acknowledges, as of the date of the findings on the remand (December 16, 2010), that “it appears unlikely that the Project will be constructed on a 10-year schedule, because the construction of the Project’s residential buildings has lagged behind the 10-year schedule provided by FCRC to ESDC in 2009, and because of continuing weak general economic and financial conditions.” (Id. at 7749.) Its suggestion that it was unaware, when it entered into the Development Agreement and approved the 2009 MGPP, that the same economic downturn would prevent a 10 year build-out, strains credulity at best. ESDC’s further assertion that that FCRC has the financial incentive to pursue the Project to a “speedy conclusion” is unsupported by any financial analysis. (Id. at 7748.) Moreover, while FCRC asserts its intent to comply with its commitment to use commercially reasonable effort to complete the Project in 10 years (Gilmartin Aff. dated Dec. 9, 2010, ¶ 27 [FCRC Aff. In Opp., Ex. A]), its papers in these proceedings are devoid of any detail showing its ability to do so. (fn 4)

In short, ESDC’s invocation of the commercially reasonable effort provision rings hollow



in the face of the specific deadlines in the Development Agreement – discussed at length in the November 9, 2010 decision and not disputed by ESDC on the remand – which clearly contemplate a schedule for construction of the post-arena phase of the Project that may not see even one Phase II building “initiated” until 2020, that does not require commencement of the construction of the platform on which 6 of the 11 Phase II buildings will be built until 2025, and that may extend beyond the purported 2019 build date for 16 years, until 2035.

The court accordingly finds that ESDC’s use of the 10 year build date in approving the 2009 MGPP lacked a rational basis and was arbitrary and capricious. In so holding, the court recognizes, as the Appellate Division held in a prior litigation involving the Atlantic Yards Project, that a mere inaccuracy in the build date will not invalidate the basic data used in the agency’s environmental assessment. (See DDDB I, 59 AD3d at 318. See also Committee to Preserve Brighton Beach v Council of City of New York, 214 AD2d 335 [1st Dept 1995], lv denied 87 NY2d 802.) However, as the Court also held, ESDC’s choice of the build year is not immune to judicial review but, rather, is subject to review under the rational basis or arbitrary and capricious standard that is applicable to judicial scrutiny of any agency action in an Article 78 proceeding. (DDDB I at 318.) In the instant case, ESDC’s continuing use of the 10 year build date was not merely inaccurate; it lacked a rational basis, given the major change in deadlines reflected in the MTA and Development Agreements.

SEIS

Having concluded that ESDC’s use of the 10 year build date lacked a rational basis, the court turns to the issue of whether ESDC was required to prepare a Supplemental Environmental Impact Statement prior to its approval of the 2009 MGPP. In concluding that an SEIS was not



required, ESDC relies on a Technical Analysis prepared by its environmental consultant in December 2010 after the remand, and on the 2006 FEIS and the Technical Memorandum prepared at the time of the approval of the 2009 MGPP. The Technical Memorandum concluded, and the Technical Analysis affirms, that the 2009 MGPP will not result in any significant adverse environmental impacts that were not already disclosed in the FEIS. The Technical Memorandum assumed a 10 year build-out but examined environmental impacts on certain conditions such as traffic and transit under a delay scenario, due to adverse economic conditions, extending to 2024. The Technical Analysis purports to examine an “Extended Build-Out Scenario” to 2035. (Technical Analysis, Section E, “Construction Period Impacts,” SAR 7669, *et seq.*)

The conclusion in the Technical Analysis that an extended delay to 2035 would not have significant adverse environmental impacts that were not addressed in the FEIS is, in turn, based on the repeated assertions that the delay in the build-out would result in prolonged but less “intense” construction, and that most environmental impacts are driven by intensity rather than duration. As the Technical Analysis states, “the determination of significant adverse impacts during construction relies mainly on the intensity of construction activities and their potential effects on the environment. Since these activities would move through the development area as Project components are being constructed, they would not have prolonged effects on individual uses in the area. Therefore, most areas of environmental concern would be independent of the overall duration of Project construction under the Extended Build-Out Scenario.” (Technical Analysis, SAR at 7670; 7685 [“[W]ith the prolonged schedule, there would be less overlap of [construction] activities for different buildings, resulting in overall lower intensity in construction



activities on the Project site.”].) The Technical Analysis concludes that for such areas of environmental concern as traffic, noise, and air quality, the adverse environmental impacts would be the same as, or less than, those identified in the FEIS. (Id. at 7689-7694 [traffic]; 7698-7704 [noise]; 7694-7698 [air quality].)

The Technical Analysis, which was prepared with marked speed in the month after the remand, does not support these findings with any technical studies on the effects of significantly prolonged construction on various areas of environmental concern. Rather, it appears to take the position that it is a matter of common sense that less intense construction will result in lower impacts for conditions such as traffic, noise, and air quality.

Even assuming *arguendo* that ESDC’s common sense assumption is correct, under established standards for environmental impact analysis, the duration of construction activities is a factor that is required to be taken into account in assessing the impacts on both environmental conditions such as traffic, noise, and air quality, which are amenable to quantitative analysis, and conditions such as neighborhood character, open space, and socioeconomic conditions, which are largely subject to qualitative analysis. ESDC does not dispute that the CEQR Technical Manual establishes an accepted analytical framework for government agencies in assessing a project’s likely environmental effects. (See Ch. 2 at 2-1.) This Manual, which provides for the “reasonable worst case scenario” to be used for the analysis (id. at 2-3), repeatedly refers to the duration of the construction as a factor to be considered in performing the environmental assessment. As to conditions such as traffic, air quality, and noise, the Manual states that duration is not the sole factor but is to be considered among other factors, including construction intensity and project location. (Ch. 22 at 22-4, 22-6.) As to neighborhood character, the Manual

provides that a construction impact analysis “looks at the construction activities that would occur on the site (or portions of the site) and their duration.” (Id., at 22-6.) Similarly, the Manual provides that “[a] construction impacts analysis for open space should be conducted . . . if access to the open space would be impeded for an extended period during construction activities.” (Id. at 22-7.) As to socioeconomic conditions, the Manual states that “[i]f the proposed project would entail construction of a long duration that could affect the access to and therefore viability of a number of businesses, and the failure of those businesses has the potential to affect neighborhood character, a preliminary assessment for construction impacts on socioeconomic conditions should be conducted.” (Id. at 22-6.)

Notwithstanding these established guidelines for environmental analysis, the Technical Analysis does not undertake a meaningful assessment of the impacts of the potentially vastly extended period of construction on the various areas of environmental concern. As indicated above, it takes the position that the impacts on most areas of environmental concern will be “independent” of duration. (See supra at 10). Although it purports to examine construction delays to 2035 under its Extended Build-Out Scenario, in discussing areas such as traffic, noise and air quality, it in fact assumes, as did the Technical Memorandum, that Phase II construction will not be stalled or deferred for years, but will proceed continuously on a parcel-by-parcel basis, and that the impacts will accordingly be less “intense” or will move throughout the Project, minimizing the impacts. (Technical Analysis, SAR at 7683, 7685; 7689-7690 [traffic and transportation]; 7694-7696 [air quality]; 7698 [noise]. See Technical Analysis, SAR at 7677-7680 [summarizing Technical Memorandum].)

The Technical Analysis takes a similar approach to other areas of environmental concern

which were the subjects largely of qualitative analysis. The Technical Analysis does not undertake any analysis of extensive delays between the completion of the arena, anticipated for 2012, and Phase II construction – the commencement of which, as indicated by the Development Agreement, may be delayed until 2020 for the first Phase II building on Block 1129, and until 2025 for the beginning of Phase II construction of the platform that will support 6 of the 11 Phase II buildings; and the completion of which, as indicated by the Development Agreement, may be delayed until 2035. Notably, the Technical Analysis is silent as to the impacts on neighborhood character and socioeconomic conditions of vacant lots, above-ground arena parking, and construction staging which may persist not merely for a decade but, as petitioners aptly put it, for a generation.

More particularly, as to neighborhood character, the Technical Analysis fails to evaluate the impact of extensive delays in the build-out of Phase II. The Technical Analysis concludes that construction impacts on neighborhood character under the Extensive Build-Out Scenario would remain “localized” in the immediate vicinity of construction, but “would be less intense because there would be less simultaneous activity on the site.” (SAR at 7704.) Again, the Technical Analysis focuses on intensity of the construction, and does not address the impacts of a construction period that could extend not merely for a decade but for 25 years. As to the above-ground parking lot and construction staging area on Block 1129, the Technical Analysis rests on the bare assertion that although it “would be prolonged with the Extended Build-Out Scenario, it would not be occupied by a 1,100-car surface parking lot for the entire construction duration. As sites are developed on Block 1129, the above-ground interim parking lot would be reduced as parking is provided below-grade. Furthermore, construction of at least one of the four buildings

on Block 1129 would be started by 2020.” (Id. at 7705.) The Technical Analysis asserts that 2020 is merely an “outside date” (id.), and does not evaluate the impacts of the potential 8 year or more delay between the construction of the arena and the commencement of any construction of underground parking for the arena.

As to open space, the Technical Analysis notes that the provision of eight acres of publicly accessible open space is a “key component of the Project.” (Id. at 7686.) As touted in the FEIS, the open space element of the Project will connect the neighborhoods to the north and south of Atlantic Avenue, for the first time in a century. (FEIS, Ch. 16, AR at 1061.) The Technical Analysis further notes that the FEIS identified a “temporary significant adverse open space impact . . . between the completion of Phase I and the completion of Phase II.” (SAR at 7686.) However, the analysis of the impact of significantly delayed construction on open space is limited to the conclusory assertion that “[w]ith the Extended Build-Out Scenario, the temporary impact identified in the FEIS would extend longer, but would continue to be addressed by the incremental completion of the Phase II open space. As each of the Phase II buildings is completed, the adjacent open space would be provided in conformance with the 2006 Design Guidelines.” (Id.) Again, although the Technical Analysis purports, under its Extended Build-Out Scenario, to examine the impacts of a delay until 2035 in building the Project, it assumes, as did the Technical Memorandum, that the Phase II buildings will be proceed on a parcel-by-parcel basis, and does not examine the impacts of years of potential delays before the commencement of any of the Phase II buildings.

In concluding that preparation of an SEIS is not warranted, the Technical Analysis also repeatedly cites mitigation measures imposed by the FEIS and by an Amended Memorandum of

Environmental Commitments (Amended Memo) made as part of the approval process for the 2009 MGPP. (See Technical Analysis, SAR at 7680; Amended Memo, SAR at 8034.) However, these measures were adopted to mitigate the adverse environmental impacts identified in the FEIS and Technical Memorandum, which assumed that the build-out of the Project would take 10 years. The Technical Analysis does not consider the adequacy of these mitigation measures for a significantly prolonged construction period.

The regulations which implement SEQRA provide that the lead agency – here, ESDC – “may require a supplemental EIS, limited to the specific significant adverse environmental impacts not addressed or inadequately addressed in the EIS that arise from: [a] changes proposed for the project; or [b] newly discovered information; or [c] a change in circumstances related to the project.” (6 NYCRR 617.9[a][7][i][a]-[c].) As discussed in the prior decisions, the court’s review of a SEQRA determination “is limited to whether the agency identified the relevant areas of environmental concern, took a ‘hard look’ at them, and made a ‘reasoned elaboration’ of the basis for its determination.” (Matter of Riverkeeper, Inc. v Planning Bd. of Town of Southeast, 9 NY3d 219, 231-232 [2007] [citing Matter of Jackson v New York State Urban Dev. Corp., 67 NY2d 400, 417 [1986].) An agency’s determination whether to require an SEIS is discretionary. (Id. at 231.) “The lead agency . . . has the responsibility to comb through reports, analyses and other documents before making a determination; it is not for a reviewing court to duplicate these efforts.” (Id. at 232.) The agency’s determinations under SEQRA “must be viewed in light of a rule of reason. Not every conceivable environmental impact, mitigating measure or alternative must be identified. . . The degree of detail with which each factor must be discussed obviously will vary with the circumstances and nature of the proposal.” (Matter of Jackson, 67 NY2d at

417 [internal quotation marks and citations omitted]. Accord Matter of Eadie v Town Bd. of the Town of N. Greenbush, 7 NY3d 306, 318 [2006].)

As the Court of Appeals has repeatedly emphasized, “the courts may not substitute their judgment for that of the agency for it is not their role to weigh the desirability of any action or to choose among alternatives.” (Riverkeeper, Inc., 9 NY3d at 232 [internal quotation marks, citations, and brackets omitted].) Nevertheless, judicial review must be “meaningful.” (Id. at 232.) It is the court’s responsibility to “ensure that, in light of the circumstances of a particular case, the agency has given due consideration to the pertinent environmental factors.” (Akpan v Koch, 75 NY2d 561, 571 [1990].)

Thus, a determination not to undertake a full environmental review will be set aside where the agency fails to address affected areas of environmental concern. (See e.g. Matter of Chatham Towers v Bloomberg, 18 AD3d 395 [1st Dept 2005], modfg on other grounds 6 Misc 3d 814 [Sup Ct, NY County 2004], lv denied 6 NY3d 704 [2006] [negative declaration held improper]; Matter of Segal v Town of Thompson, 182 AD2d 1043, 1046 [3d Dept 1992] [negative declaration improper where “little or no consideration was given to a variety of potential environmental impacts”].) An agency determination under SEQRA will also be set aside where the agency’s review of the environmental impacts is unsupported by studies and data or is conclusory. (See e.g. Tupper v City of Syracuse, 71 AD3d 1460 [4th Dept 2010], lv denied 74 AD3d 1880; Matter of Baker v Village of Elmsford, 70 AD3d 181 [2d Dept 2009]; Matter of Serdarevic v Town of Goshen, 39 AD3d 552 [2d Dept 2007].)

Here, ESDC’s hastily prepared Technical Analysis performs a perfunctory analysis of the impacts of the extended delay in constructing the Project. As discussed above, the Technical

Analysis assumes, without any corroborating studies, that the environmental impacts will largely be independent of the duration of construction. It thus fails to undertake a meaningful analysis of the effects, on such important areas of environmental concern as neighborhood character, of the potentially protracted delays, identified in the Development Agreement, of 8 or more years after completion of the arena in commencing Phase II construction, and of more than 15 years, or until 2035, in completing Phase II construction. The court accordingly holds that ESDC failed to comply with its obligation under SEQRA to take a hard look at the environmental impacts of the 2009 MGPP, and that it must prepare an SEIS addressing the potential delays, identified in the Development Agreement, in Phase II construction. (See generally Matter of E.F.S. Ventures Corp. v Foster, 71 NY2d 359, 373 [1988] [environmental review on modification of plan should be addressed to environmental impact of proposed modification, not perceived problems which should have been or were addressed earlier in the environmental review process].)

The court notes that its directive to ESDC to prepare an SEIS is not based on the mere fact that the MTA Agreement permits FCRC's phased acquisition of the air rights necessary for construction of 6 of the Phase II buildings, rather than requiring it to acquire all of the air rights at the outset, as had been provided for in the original plan. Such a change, without more, would not require a de novo environmental review. (See Matter of Wilder v New York State Urban Dev. Corp., 154 AD2d 261 [1st Dept 1989], lv denied 75 NY2d 709 [1990].) Nor would further environmental review be required based on routine delays in the construction process or delays occasioned by the SEQRA review process. (See Matter of Jackson, 67 NY2d at 425.)

An SEIS is required here because the phased acquisition authorized by the MTA Agreement, and the extended deadlines contemplated by the Development Agreement, made a

major change to the construction schedule for Phase II of the Project, but ESDC has failed to give adequate consideration to the environmental impacts resulting from this change.

Under the established standards for SEQRA review, the court must not, and does not, take a position on the desirability of the Project or the environmental impacts of the extension of the construction schedule. It is for ESDC to determine, after performing an adequate environmental review, whether the extension has significant adverse environmental effects not identified in the FEIS, or requires further mitigation measures. It is, however, the court's responsibility to ensure that ESDC performs its responsibility to comply with the statutory mandate that it take a hard look at the impacts and provide a reasoned elaboration of the basis for its decision. In approving the 2009 MGPP, ESDC failed to do so. It performed an inadequate analysis of the effects of the change in schedule on neighborhood character, although the MTA and Development Agreement potentially more than doubled the build-out of the Project. An SEIS is required under these circumstances. The public relies on a meaningful environmental review process, and SEQRA requires no less.

Stay

Although the court has determined that ESDC must prepare an SEIS, the court is unpersuaded that the Project should be invalidated and construction of the arena and other Phase I construction halted, as petitioners request, pending ESDC's further environmental review. Phase I construction is already well under way, with completion of the arena anticipated in 2012. It is undisputed that infrastructure for the Project commenced in 2007 and is nearly complete, extensive excavation and foundation work on the arena has already been performed, work on a new subway entrance is in progress, and a temporary rail yard for the MTA has been completed,

with remediation work in progress on the site of the permanent rail yard that FCRC is required to construct. (Gilmartin Aff. dated Feb, 16, 2011, ¶¶ 6-8 [FCRC Aff. In Opp.].) Extensive public and private funds have already been committed to Phase I construction.

Significantly, this is not a case in which the Project has been implemented without any prior “valid environmental review.” (Compare Chinese Staff & Workers Assn. v City of New York, 68 NY2d 359, 369 [1986]; Matter of Tri-County Taxpayers Assn. v Town Bd. of Town of Queensbury, 55 NY2d 41 [1982].) The 2006 plan for the Project was approved only after preparation of an FEIS and a public hearing, the sufficiency of which was affirmed on appeal. (DDDB I, 59 AD3d 312, supra.) While the 2009 MGPP made certain design changes to Phase I of the Project, including the design of the arena facade and a possible reconfiguration of the “Urban Room” subway entrance (see Technical Memorandum, AR at 4749, 4752), these changes are not the subject of petitioners’ challenge. It is also undisputed that the 2009 MGPP did not change the design, configuration, or uses of the Phase II buildings. (Technical Memorandum, AR at 4749.) Nor did the MGPP change the Project’s “land uses, building layout, density, [or] the amount of affordable housing and publicly accessibly open space.” (Id. at 4759.) This case therefore does not involve a claim that further environmental review is required of the essential substantive features of the Project – review that ordinarily would not be permitted after-the-fact, in the event of a finding of non-compliance with SEQRA. (See Chinese Staff & Workers Assn., 68 NY2d at 369.)

Nor is environmental review required due to changes to the timing of Phase I of the Project. Although, as held above, the 2009 MGPP made a major change to the construction schedule of Phase II, petitioners do not claim that the MGPP effected a material change to the

build-out of the arena or other Phase I construction. (See supra at 4.)

Given the extent to which construction of Phase I has already occurred, under a plan which has been subjected to and withstood challenge, the court declines to stay Phase I of the Project. (See e.g. Matter of Chatham Towers v Bloomberg, 18 AD3d 395, supra; Matter of Silvercup Studios, Inc. v Power Auth. of State of New York, 285 AD2d 598 [2d Dept 2001]; Golden v Metropolitan Transp. Auth., 126 AD2d 128 [2d Dept 1987].)

It is noted that Phase I use of Block 1129 for a temporary above-ground parking lot for the arena is a use that was specifically contemplated in the FEIS (see AR at 845), and that ESDC has required certain mitigation measures for the parking lot, such as fencing and landscaping. (See Amended Memo, SAR at 8055.) As this parking lot is part of the plan that was approved for Phase I, a stay would not be appropriate at this time. However, given the potential delays in Phase II construction, including construction of underground parking that would replace the above-ground lot, further environmental review must be undertaken, in the SEIS that the court has directed, of the impacts of such delays and of whether additional mitigating measures or alternatives are needed for the Block 1129 lot.

Finally, a stay of Phase II construction would be premature, as it is undisputed that Phase II work will not commence for many years. ESDC will have an ample opportunity, before commencement of Phase II construction, to review the environmental impacts of the delay in the Phase II build-out. In the unlikely event that FCRC is ready to proceed with Phase II before the environmental review has been completed, petitioners may renew their request for a stay.

It is accordingly hereby ORDERED that the Supplemental Petitions are granted to the following extent:

It is ORDERED and ADJUDGED that the matter is remanded to ESDC 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.

This constitutes the decision, order, and judgment of the court.

Dated: New York, New York
July 13, 2011

ENTER:



MARCY FRIEDMAN, J.S.C.



Clerk of the Court

FILED
JUL 19 2011
COUNTY CLERK'S OFFICE
NEW YORK

Footnotes

fn 1 The Supplemental Administrative Record (SAR) refers to exhibits submitted in connection with the Supplemental Petitions. The Administrative Record (AR) refers to exhibits submitted in connection with the prior Article 78 proceedings under the same index numbers.

fn 2 To the extent that ESDC claims that the MTA Agreement or development leases gave notice of a 2030 outside date for completion of the Project, ESDC took a completely contrary position in its original opposition to the petitions, claiming that “a sunset provision establishing the date on which the relationship between the developer and ESDC would come to an end with respect to a specific development parcel, whether or not a Project building has been successfully constructed on that parcel, sheds no light on the schedule for construction anticipated by the parties.” (Nov. 9, 2010 Decision at 13.) In any event, as discussed in the text, ESDC was silent as to the outside date for Phase II in the Development Agreement, and the other disparities between Phase I and Phase II deadlines.

fn 3 As more specifically discussed in the prior decision:

“As the issue before this court is the impact of the Development Agreement on ESDC’s determination to use the 10 year build-out and to approve the 2009 MGPP without requiring an SEIS, the detailed provisions of the Development Agreement regarding scheduling of the construction must be reviewed: The Agreement provides for commencement and construction of the Arena well within the 10 year period. (§ 8.4; Appendix A [requiring the Arena to be the first or second building for which construction is commenced, and requiring the substantial completion of the Arena by the Outside Arena Substantial Completion Date, defined as the sixth anniversary of the Project Effective Date or by 2016].) (fn 7) It also provides for commencement of the Phase I buildings on the Arena Block well within the 10 year period (§ 8.6[d] [providing, subject to certain exceptions, for commencement of Phase I buildings

within 3 to 10 years of the Project Effective Date or from 2013 to 2020)), and for substantial completion of the Phase I buildings within a 12 year period. (§8.6 [providing for substantial completion of the Phase I construction within 12 years of the Project Effective Date or by 2022, subject to Unavoidable Delays].) (fn 8) The Agreement defines as Events of Default failure to commence or substantially complete the Arena within the preceding deadlines (§ 17.1[b], [d]) and failure to commence or substantially complete the Phase I construction within such deadlines. (§ 17.1[i], [l].) Upon the occurrence of these Events of Default, FCRC is required to pay substantial liquidated damages (Schedule 3 liquidated damages). For the Arena, these damages are set at \$75 million for failure to timely commence construction. (Schedule 3 at 1.) They may amount to as much as \$341 million for failure to meet the outside substantial completion deadline, depending on the length of the default. (Id. at 2-3.) For Phase I, the damages for failure to timely commence construction may reach \$5 million per building per year. (Id. at 4-5.) The damages for failure to meet the outside substantial completion date are based on a formula that takes into account the length of the default and the Phase I square footage that has been completed. The Phase I damages shown in the example range from \$586,000 per year to \$5.5 million. (See § 17.2[a][ii]; Schedule 3 at 8-10.)

In contrast, the Development Agreement does not provide for dates for commencement of Phase II construction other than for commencement of the platform which is needed to support the construction of certain Phase II buildings. The commencement of the platform is not required until the 15th anniversary of the Project Effective Date or 2025 (§ 8.5.) While failure to commence construction of the platform is defined as an Event of Default (§17.1[g]), the significant Schedule 3 liquidated damages are not a remedy for such default. (§ 17.2[a][ii].) The Development Agreement requires Phase II Construction to be substantially complete, subject to Unavoidable Delays, by the Outside Phase II Substantial Completion Date, which is defined as 25 years following the Project Effective Date or 2035. (§ 8.7.) Failure to substantially complete the Phase II construction is defined as an Event of Default (§ 17.1[m]), but is not a basis for the payment of Schedule 3 liquidated damages. (§ 17.2[a][ii].) Rather, the remedy for such default is ESDC's option to terminate the applicable Project Lease for any portion of the Project site on which construction of improvements has not commenced. (§ 17.2[a][vi].)

The Development Agreement contains the following provision requiring FCRC to use commercially reasonable efforts to complete the project by December 31, 2019: “[The FCRC developer entities] agree to use commercially reasonable effort 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 [defined in § 8.7 as 25 years following the Project Effective Date], in each case as extended on a day-for-day basis for any Unavoidable Delays.” (§ 2.2.) The Development Agreement provides that the Article VIII

deadlines for the performance of Phase I and II work shall not “modify, limit or otherwise impair” FCRC’s obligations under the preceding provision. (§ 8.1[d].) However, the remedies provided for failure to use commercially reasonable efforts to complete the Project by 2019 are uncertain or appear to be significantly less stringent than the remedies provided for FCRC’s failure to meet the deadlines for Phase I work.

The Development Agreement provides that in the event of FCRC’s failure to use commercially reasonable efforts, ESDC may resort to remedies available through litigation – i.e., “any and all remedies available to ESDC at law or in equity under or in connection with this Agreement,” including specific performance and damages. (§ 17.2[d].) If ESDC were to claim a breach of the commercially reasonable efforts provision, a mixed issue of fact and law would be presented. While courts are adept at interpreting legal standards, determination of this issue would be complicated by the absence of settled authority. There is a substantial body of case law, under UCC 9-627, interpreting the term commercially reasonable manner in connection with dispositions of collateral. (See e.g. Bankers Trust Co. v J.V. Dowler & Co., 47 NY2d 128 [1979].) However, this authority is not factually relevant to the construction context. The parties have not cited, and the court’s research has not located, case law articulating standards for awarding damages or equitable relief for failure to use commercially reasonable efforts to meet construction deadlines. (Cf. 330 Hudson Owner, LLC v The Rector, Church-Wardens & Vestrymen of Trinity Church, 2009 NY Slip Op 51018[U], 23 Misc 3d 1131[A] [Sup Ct, New York County].)

The Development Agreement also does not define the failure to use commercially reasonable efforts as an Event of Default for which Schedule 3 liquidated damages are available. (§ 17.2[a][ii].) It does appear that such failure would qualify as an Event of Default for which a notice to cure is required under a catch-all provision for not otherwise specified defaults. (§ 17.1 [r].) For these unspecified defaults, the Development Agreement provides for liquidated damages in the amount of \$10,000 per day until the defaults are cured, or the reduced amount of \$1,000 per day if, in ESDC’s “reasonable determination,” the default would not have a material adverse effect on the value or use of the Project site, or result in a condition hazardous to human health, or put the Project site in danger of being forfeited, or subject ESDC to criminal or civil liability or penalties. (§ 17.2[a][x].) (fn 9) These damages are significantly lower than the Schedule 3 damages available for other specified Events of Default. In addition, imposition of these damages would require a predicate finding, subject to the legal uncertainties discussed above, that the commercially reasonable efforts provision had been breached.”

(Nov. 9, 2010 Decision at 6-9 [footnotes omitted].) The November 9, 2010 decision should have added that the Development Agreement also provides for commencement of construction of one Phase II building on Block 1129 by 2020.

fn 4 In continuing to rely on the 10 year build date, ESDC also cites the feasibility of physically building the Project in 10 years, and the ability of the market to absorb the housing, especially in light of the strong demand for affordable housing units. (ESDC Response, SAR at 7748, 7749.) Petitioners have never disputed the unexceptional propositions that a 10 year construction schedule is physically possible or that the market can readily absorb affordable housing.

Index No. 114631 Year 2009

AFFIDAVIT OF SERVICE BY MAIL

STATE OF NEW YORK } S.S.
COUNTY OF }

being duly sworn, deposes and says; that deponent is not a party to the action, is over 18 years of age and resides at

That on the _____ day of _____ 20

deponent served the within

upon

DEVELOP DON'T DESTROY (BROOKLYN) INC.,
COUNCIL OF BROOKLYN NEIGHBORHOODS, INC.,
ATLANTIC AVENUE BETTERMENT ASSOCIATION, INC.,
BROOKLYN BEARS COMMUNITY GARDENS, INC.,
BROOKLYN VISION FOUNDATION, INC.,
CARLETON AVENUE ASSOCIATION, INC.,
CENTRAL BROOKLYN INDEPENDENT DEMOCRATS,
by its Presidency Lucy Kotzen Crown Herats Noeth
Petitioners

EMPIRE STATE DEVELOPMENT CORPORATION; attorneys(s) for
FOREST CITY RATNER COMPANIES, LLC RESPONDENT in this action, at

the address designated by said attorney(s) for that purpose by depositing a true copy of same enclosed in a postpaid properly addressed wrapper, in an official depository under the exclusive care and custody of the United States post office department within New York State

FILED

JUL 19 2011

11:15 AM
U.S. CO. CLERK

Sworn to before me this _____ day of _____ 20

NOTICE OF ENTRY OR SETTLEMENT
(check and complete appropriate box and section)

PLEASE TAKE NOTICE that a

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duly entered in the within named court 20

NOTICE OF SETTLEMENT
be presented for settlement to the Hon.

of the judges of the within named court at
courthouse at

20

o'clock M

20

Yours, etc.

BRYAN CAVE LLP

attorney(s) for
Office and Post Office Address
1290 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10104

attorney(s) for

JUDGMENT

BRYAN CAVE LLP
Attorneys for EMPIRE STATE DEVELOPMENT CORPORATION
Office and Post Office Address RESPONDENT

1290 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10104
(212) 541-2000

To _____
Attorneys for _____
Service of a copy of the within _____
is hereby admitted.

20

Dated, _____

Attorneys for _____

Index No. 116303 Year 2009

NOTICE OF ENTRY OR SETTLEMENT
(Check and complete appropriate box and section)

Sir(s):
PLEASE TAKE NOTICE that a
of which the within is a (true) (certified) copy
 NOTICE OF ENTRY
was duly entered in the within named court
on 20
 NOTICE OF SETTLEMENT
will be presented for settlement to the Hon.

one of the judges of the within named court at
the Courthouse at

on 20
at o'clock M. 20
Dated.

Yours, etc.
BRYAN CAVE LLP
Attorney(s) for
Office and Post Office Address
1290 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10104

To
Attorney(s) for

Year 2009

In the Matter of the Application of
PROSPECT HEIGHTS NEIGHBORHOOD
DEVELOPMENT COUNCIL, INC., et al.,
Petitioners
-vs-
EMPIRE STATE DEVELOPMENT
CORPORATION, et al.

EMPIRE STATE DEVELOPMENT
CORPORATION, et al.

JUDGMENT

BRYAN CAVE LLP
Attorneys for EMPIRE STATE DEVELOPMENT CORPORATION
Office and Post Office Address
1290 AVENUE OF THE AMERICAS
NEW YORK, NEW YORK 10104
(212) 541-2000

To
Attorneys for

Service of a copy of the within

is hereby admitted,

Dated, 20
Attorneys for

AFFIDAVIT OF SERVICE BY M.
STATE OF NEW YORK } S.S.
COUNTY OF

being duly sworn, deposes and says; that he
not a party to the action, is over 18 years of
resides at

That on the day of 2

deponent served the within
upon

attorney(s) for

in this action, at

the address designated by said attorney(s)
purpose by depositing a true copy of same
a postpaid properly addressed wrapper, in
depository under the exclusive care and c.
the United States post office department
New York State.

Sworn to before me

this day of

FILED

JUL 19 2011

U.S.A.

EXHIBIT G

construction of the Atlantic Yards Arena Redevelopment Project and to make further findings on whether to approve the 2009 Modified General Project Plan for Phase II of the project, unanimously affirmed, without costs.

The Atlantic Yards Arena and Redevelopment Project is to be constructed in two phases. Phase I encompasses the construction of a sports arena, a new MTA/Long Island Rail Road rail yard, and improvements in transit access, including a new subway entrance. Phase II encompasses the construction of 11 of the Project's 16 high-rise commercial and residential buildings. In 2006, ESDC prepared a Final Environmental Impact Statement (FEIS) based on the 2006 Project Plan, using a 2016 build year (the year by which Phase II is predicted to be "substantially operational" [see *Matter of Develop Don't Destroy (Brooklyn) v Urban Dev. Corp.*, 59 AD3d 312, 318 (2009), *lv denied* 13 NY3d 713 (2009)]). The 2009 Modified General Project Plan (MGPP) for the Project was written after the downturn in the real estate market and the related unavailability of bank financing left respondent Forest City Ratner Companies (FCRC), the Project developer, unable to meet its obligation under the 2006 Plan to acquire the entire 22-acre site at the inception of the Project.

Pursuant to the MGPP, FCRC is required to acquire at the

inception of the Project only the portion of the site needed for the construction of the arena. It has until 2030 to obtain all the property interests necessary for Phase II construction. Moreover, in a Development Agreement executed after the MGPP was approved by ESDC, FCRC was given until 2035 to substantially complete Phase II construction. The Development Agreement sets forth no specific commencement dates for the construction, other than for the construction of the platform on which 6 of the 11 Phase II buildings will be built, which is not required to be commenced until 2025, and the construction of one Phase II building on Block 1129, which is not required to be "initiated" until 2020.

However, in assessing the potential environmental impacts of the changes to the Project wrought by the MGPP, ESDC used a build date based on the same 10-year completion schedule for the Project as was used in the 2006 Plan, and determined that it was not required to prepare a SEIS before approving the MGPP.

We agree with Supreme Court that ESDC's use of a 10-year build date under these circumstances lacks a rational basis and is arbitrary and capricious.

When it approved the MGPP, ESDC was aware that, under a new agreement with the MTA, FCRC had until 2030 to acquire the air

rights necessary for the Phase II construction. ESDC knew that the then forthcoming Development Agreement would provide for a significantly extended substantial completion date of 2035, 25 years from then, for the Phase II construction. Moreover, ESDC has acknowledged that it is unlikely that the Project will be constructed on a 10-year schedule because the construction lagged behind the schedule provided in 2009 and because of continuing weak general economic conditions. When it approved the MGPP, ESDC certainly was aware that the same economic downturn that necessitated the negotiation of new agreements would prevent a 10-year build-out.

Nevertheless, ESDC relied on a provision in the MGPP and, later, in the Development Agreement that required FCRC to use "commercially reasonable efforts" to meet the 10-year deadline and complete the Project by 2019 (there had been a shift in the 10-year estimated construction schedule from 2016 to 2019). ESDC also maintained that FCRC had a financial incentive to complete the Project by 2019. However, the term "commercially reasonable efforts" is not defined in either the MGPP or the Development Agreement. While the Development Agreement provides specific dates for the construction of the arena and Phase I buildings, it does not provide specific commencement dates for Phase II

construction, other than those noted above, and, while it provides for damages for delays in Phase I construction, it does not provide for significant financial penalties for delays in Phase II construction. Moreover, respondents failed to show that FCRC had the financial ability to complete the Project in 10 years.

Contrary to FCRC's contention, Supreme Court properly considered the Development Agreement, although the Agreement did not yet exist when ESDC approved the MGPP (*see Matter of Featherstone v Franco*, 95 NY2d 550, 554 [2000]). ESDC repeatedly informed the court that it relied on the terms of the Development Agreement in approving the MGPP. Thus, it was necessary that the court review the Development Agreement to conduct a meaningful review of ESDC's determination. Indeed, the court found that the Development Agreement made meaningful review possible by "correct[ing] ESDC's incomplete representations concerning the Agreement's terms regarding construction deadlines and their enforcement."

We further agree with Supreme Court that ESDC failed to take a "hard look" at the relevant areas of environmental concern and failed to make a "reasoned elaboration" of the basis for its determination that it was not required to prepare an SEIS before

approving the MGPP (see *Matter of Riverkeeper, Inc. v Planning Bd. of Town of Southeast*, 9 NY3d 219, 231-232 [2007] [citation omitted]; *Matter of Jackson v New York State Urban Dev. Corp.*, 67 NY2d 400, 417 [1986]).

ESDC relied on its 2009 Technical Memorandum, which used a build date of 2019, based on a shift in the 10-year estimated construction schedule from 2016 to 2019, and analyzed certain environmental impacts beyond that only until 2024. Despite ESDC's cognizance of the essential new terms in the Development Agreement, the Technical Memorandum did not consider the changes in the Project schedule, which provided for construction beyond 2019 - indeed, potentially to 2035. Thus, the Technical Memorandum failed to consider the "Reasonable Worst Case Development Scenario," as required by the City Environmental Quality Review (CEQR) Technical Manual (at Chapter 2). Moreover, ESDC maintained that the construction impacts of a 10-year build-out would be the same as or even more severe than the construction impacts of a 25-year build-out because the construction would be less "intense" if it were delayed. However, the Technical Memorandum contained no comparison of the

environmental impacts of "intense" construction over a 10-year period with the environmental impacts of construction that continues for 25 years.

In 2010, in response to a prior court order in these proceedings, ESDC prepared a "Technical Analysis of an Extended Build-Out of the Atlantic Yards Arena and Redevelopment Project," which concluded that a 2035 build-out would have no significant adverse environmental impacts that were not addressed in the Final Environmental Impact Statement (FEIS) for the 2019 build-out. The Technical Analysis provides no more support for ESDC's determination than the Technical Memorandum did. Its conclusion is not based on any technical studies of the environmental impacts of protracted construction. It is supported by the mere assertion that the build-out will result in prolonged but less "intense" construction and that most environmental impacts are driven by intensity rather than duration.

Moreover, the Technical Analysis assumed that Phase II construction would not be stalled or deferred for years and that it would proceed continuously on a parcel-by-parcel basis. Thus, it failed to consider an alternative scenario in which years go by before any Phase II construction is commenced - a scenario in which area residents must tolerate vacant lots, above-ground

arena parking, and Phase II construction staging for decades.

ESDC relies on mitigation measures adopted to address the impacts found in the FEIS in 2006. However, the Technical Analysis did not consider whether those measures were adequate in the case of a protracted period of construction.

We have considered respondents' remaining contentions and find them unavailing.

THIS CONSTITUTES THE DECISION AND ORDER
OF THE SUPREME COURT, APPELLATE DIVISION, FIRST DEPARTMENT.

ENTERED: APRIL 12, 2012


CLERK

EXHIBIT H

STATE OF NEW YORK SUPREME COURT
APPELLATE DIVISION FIRST DEPARTMENT

-----X
In the Matter of

DEVELOP DON'T DESTROY (BROOKLYN), INC.,
COUNCIL OF BROOKLYN NEIGHBORHOODS, INC.,
ATLANTIC AVENUE BETTERMENT ASSOCIATION,
INC., BROOKLYN BEARS COMMUNITY GARDENS,
INC., BROOKLYN VISION FOUNDATION, INC.,
CARLTON AVENUE ASSOCIATION, INC.,
CENTRAL BROOKLYN INDEPENDENT DEMOCRATS,
by its President Lucy Koteen, CROWN HEIGHTS NORTH
ASSOCIATION, INC., DEAN STREET BLOCK
ASSOCIATION, INC., DEMOCRACY FOR NEW YORK
CITY, EAST PACIFIC BLOCK ASSOCIATION, INC.,
FORT GREENE ASSOCIATION, INC., FRIENDS AND
RESIDENTS OF GREATER GOWANUS, PARK
SLOPE NEIGHBORS, INC., PROSPECT HEIGHTS
ACTION COALITION, by its President Patricia Hagan,
PROSPECT PLACE OF BROOKLYN BLOCK
ASSOCIATION, INC., SOCIETY FOR CLINTON HILL,
INC., SOUTH OXFORD STREET BLOCK ASSOCIATION,
AND SOUTH PORTLAND BLOCK ASSOCIATION, INC.

Petitioners-Respondents,

For a Judgment Pursuant to Article 78 of the
Civil Practice Law and Rules,

- against -

EMPIRE STATE DEVELOPMENT CORPORATION,
FOREST CITY RATNER COMPANIES, LLC,

Respondents-Appellants.
-----X

NOTICE OF ENTRY

Index No.: 114631/09
IAS Part 57

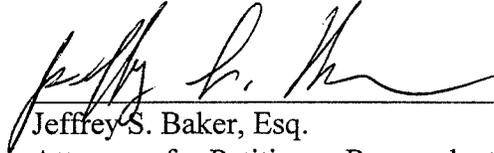
PLEASE TAKE NOTICE that the within is a true copy of the April 12, 2012 Decision and

Order of this Court, which was duly entered in the office of the clerk on April 12, 2012.

Dated: April 12, 2012

YOUNG/SOMMER LLC

By:



Jeffrey S. Baker, Esq.

Attorneys for Petitioner-Respondents

Executive Woods

5 Palisades Drive

Albany, New York 12205

(518) 438-9907 ext 226

TO: PHILIP E. KARMEL, Esq.
Bryan Cave LLP
Attorneys for Respondent-Appellants
Empire State Development Corporation
1290 Avenue of the Americas
New York, NY 10104

JEFFREY L. BRAUN, Esq.
Kramer, Levin, Naftalis & Frankel, LLP
Attorneys for Respondent-Appellant
Forest City Ratner Companies, LLC
1177 Avenue of the Americas
New York, NY 10036

RICHARD G. LELAND, Esq.
Fried, Frank, Harris, Shriver & Jacobson, LLP
Attorneys for Respondent-Appellant
Forest City Ratner Companies, LLC
One New York Plaza
New York, NY 10004