Two Bridges LSRD
Draft Scope of Work for Preparation of a
Draft Environmental Impact Statement

A. INTRODUCTION

This Draft Scope of Work outlines the technical areas to be analyzed in the preparation of an Environmental Impact Statement (EIS) for the proposed development of three new mixed-use buildings within the Two Bridges Large Scale Residential Development (LSRD) in the Lower East Side neighborhood of Manhattan (see **Figures 1 and 2**). The three applicants—Cherry Street Owner, LLC, an affiliate of JDS Development Group, and Two Bridges Senior Apartments LP; Two Bridges Associates, LP, a joint venture between CIM Group and L+M Development Partners; and LE1 Sub LLC—each seek separate minor modifications to the existing LSRD to allow for the development of the proposed buildings.

The New York City Department of City Planning (DCP), acting on behalf of the City Planning Commission (CPC), will be the lead agency for the environmental review. Based on the prepared Environmental Assessment Statement (EAS), the lead agency has determined that the proposed projects have the potential to result in significant adverse environmental impacts, requiring that an EIS be prepared. This Draft Scope of Work outlines the technical areas to be analyzed in the preparation of a Draft EIS (DEIS) for the proposed projects. Scoping is the first step in the preparation of the EIS and provides an early opportunity for the public and other agencies to be involved in the EIS process. It is intended to determine the range of issues and considerations to be evaluated in the EIS. This Draft Scope of Work includes a description of the proposed projects and the actions necessary for their implementation, presents the proposed framework for the EIS analysis, and discusses the procedures to be followed in the preparation of the DEIS. The *City Environmental Quality Review (CEQR) Technical Manual* will serve as a general guide on the methodologies and impact criteria for evaluating the proposed projects' effects on the various environmental areas of analysis.

B. PROJECT DESCRIPTION

ACTIONS NECESSARY TO FACILITATE THE PROPOSAL

The proposed projects each require a minor modification to the previously-approved Two Bridges LSRD (originally approved by CP-21885; last amended by M 120183 ZSM—see **Table A**, LSRD Zoning Calculations in **Appendix A**). The proposed modifications to the LSRD site plan would allow for the development of three new mixed-use buildings within the Two Bridges LSRD. The new mixed use developments on each of the three project sites would comply with the underlying district regulations applicable to the sites under the Zoning Resolution, and no use or bulk waivers would be required to facilitate the proposed projects. However, the Two Bridges LSRD regulates the maximum developable floor area, lot coverage, and other features of development on LSRD sites as shown in **Table A**, LSRD Zoning Calculations in **Appendix A**. To facilitate the proposed

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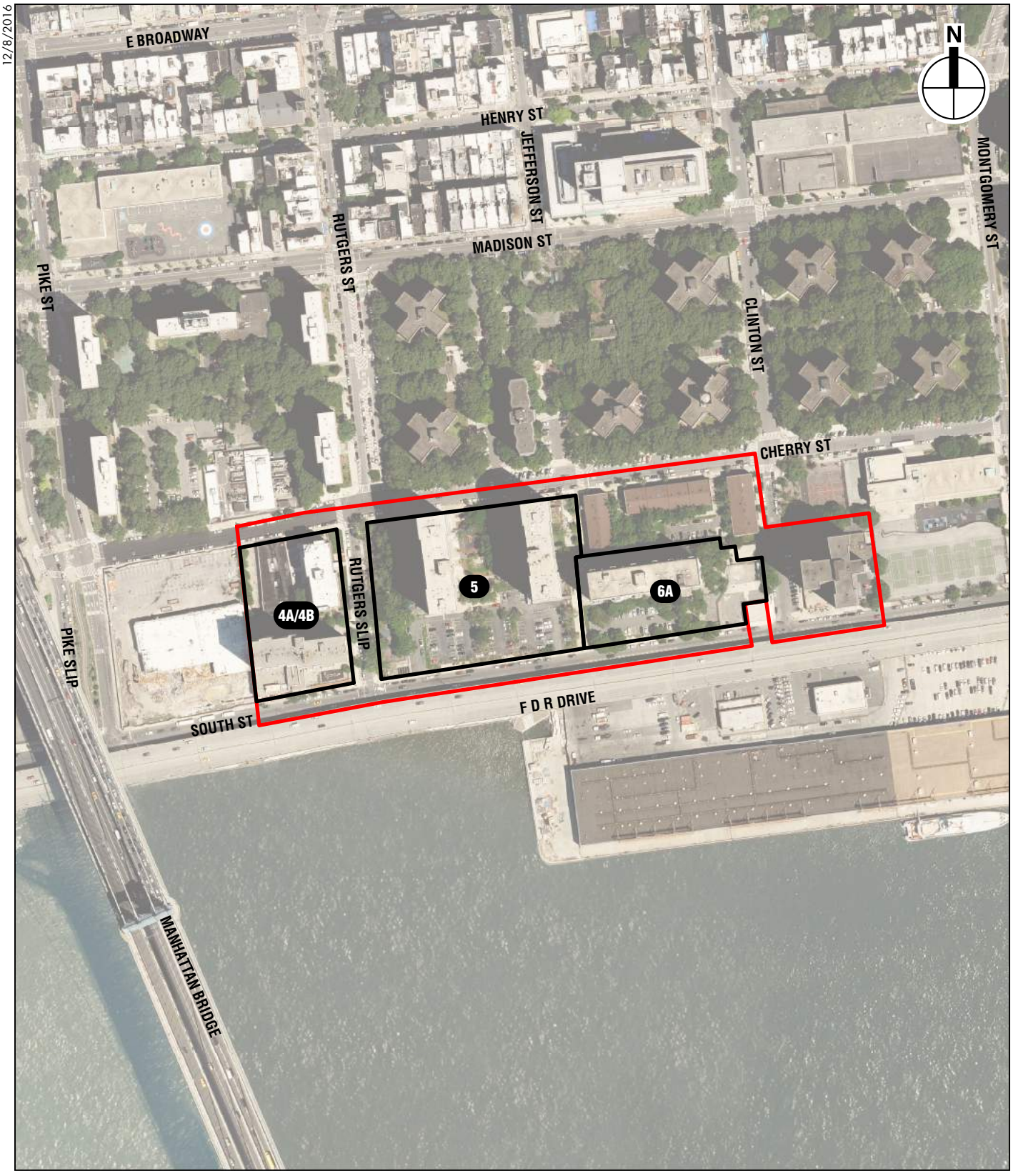

Project Sites

Boundary of Two Bridges LSRD

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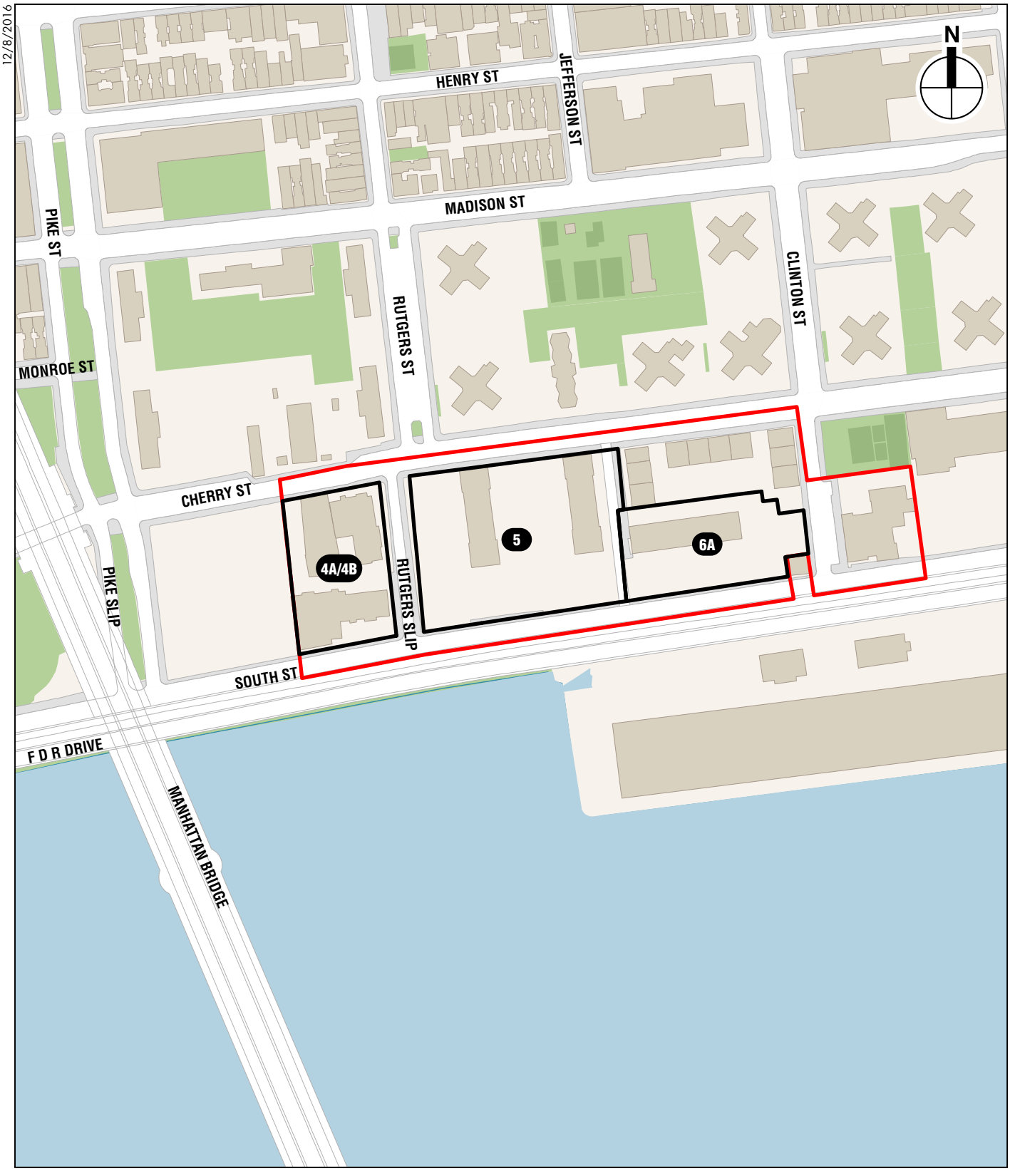
TWO BRIDGES LSRD

Aerial Map
Figure 1



TWO BRIDGES LSRD

Project Location
Figure 2

projects, modifications to the Two Bridges LSRD Plan are being requested from the City Planning Commission (CPC), as described below and as summarized in **Table 1** below.

Table 1
Proposed Projects

Use (GSF)	Site 4 (4A/4B)[1]	Site 5[3]	Site 6A[6]	Total
Use Group 2 (Residential)	617,464 gsf[2]	1,227,932 gsf[4]	655,463 gsf	2,503,365 gsf
Residential Units	660 DUs	1,350 DUs (100 senior)	765 DUs (100 senior)	2,775 DUs (200 senior)
Affordable Unit Count	25 percent (up to 165 DUs)	25 percent (up to 338 DUs)	25 percent (up to 191 DUs)	Up to 694 DUs
Use Group 6 (Retail)	3,124	5,258 gsf	2,506	10,888 gsf
Community Facility	None	17,028 gsf	None	17,028 gsf
Accessory Parking	None	103 *below-grade*	None	103 *below-grade*
Private Open Space	None	19,579[5]	3,200	22,779
Maximum Building Height	±1,008'	±800'	±724'	
Maximum Building Width	±121'	±283'	±137'	
Maximum Building Depth	±85'	±110'	±150'	

Notes:

1. Does not include the existing development on Site 4 (4A/4B) (85,615 gsf [109 units] residential, 3,928 sf open space, and 4 surface parking spaces at 80 Rutgers Slip/Lot 70; 227,895 gsf residential [198 units], 27,552 gsf community facility, 11 enclosed accessory parking spaces, and 11,660 sf open space at 82 Rutgers Slip/Lot 15; and 11,575 gsf retail and 280 sf open space at 235 Cherry Street/Lot 76). In the No Action condition, existing development on Site 4 (4A/4B) would remain, with minor changes to the existing 80 Rutgers Slip/Lot 70 building, and the existing retail in the Lot 76 building would be re-tenanted. In the With Action condition, 10 existing units from the 80 Rutgers Slip building would be relocated into the new building, for a total of 99 remaining units at 80 Rutgers Slip, and up to 670 new units would be developed in the new building (including the 10 relocated senior housing units). The existing retail at 235 Cherry Street would be re-tenanted in the With Action condition, and the 15,868 sf of existing open space on Lots 15, 70, and 76 would be improved. The existing residential building with accessory parking at 82 Rutgers Slip/Lot 15 would remain in the With Action condition, but the 4 parking spaces at 80 Rutgers Slip/Lot 70 would be removed.
2. For the purposes of determining the number of units to be analyzed, 8,079 gsf of community room and 5,113 gsf of ground-floor common area were subtracted from this total.
3. Does not include the existing development on Site 5 (633,523 gsf residential [490 units] and 2,085 gsf retail at 265-275 Cherry Street), which would remain the same in the No Action and With Action condition.
4. For the purpose of determining the number of units to be analyzed, 81,683 gsf of residential amenity space, which includes building amenities (±55,356) and cellar level parking (±26,327) was subtracted from the total residential gsf, resulting in 1,146,249 gsf, with ±1,350 DU at 850 sg/DU.
5. New open space. The existing open space on Site 5 (approx. 64,152 sf) would also be improved.
6. Does not include the existing development on Site 6A/Lot 1 (262,877 gsf residential [256 units] and 35 accessory surface parking spaces at 275 South Street), which would remain the same in the No Action and With Action condition.

The proposed minor modification for Site 4 (4A/4B) would: revise the LSRD parcel boundaries to combine Parcels 4A and 4B into new Parcel 4; permit the location and envelope of the new building; permit additional floor area at the development site; and permit additional lot coverage at the development site. No new parking would be provided. These modifications would facilitate the development of a new residential building with ground floor retail on a portion of Lot 70, cantilevering over existing buildings on Lots 70 and 76 and would provide open space improvements on Lots 15, 70, and 76. The existing buildings on Lots 15, 70, and 76 would be retained; however, the ground floor and westernmost portion of the existing building on Lot 70 (80 Rutgers Slip) would be reconfigured to allow for the introduction of ground floor retail and to accommodate the new development.

The proposed minor modification for Site 5 would revise the Two Bridges LSRD Special Permit and calculations in the LSRD to allow additional residential, commercial, and community facility floor area and increased lot coverage on Lots 1 and 2, and relocation of 103 existing accessory parking spaces. These modifications would facilitate the development of a new mixed-use building with residential and community facility uses located in two towers on a shared base.

The development would also provide on-site relocation of 103 existing parking spaces from surface parking lots to a new below grade garage in the new building; however, no new parking would be created. The existing buildings would be retained, and ground floor retail space along Cherry Street would be enlarged. In addition, the courtyard would be relandscaped and the open space amenities on Rutgers Slip would be improved.

The proposed minor modification for Site 6A would revise the LSRD calculations to allow additional floor area at the development site; permit the locations and envelope of the new building; and permit additional lot coverage at the development site. These modifications would facilitate the development of a new building on Lot 5 with retail and residential space. No new parking would be provided. The existing building at 275 South Street on Lot 1 would remain.

The proposed projects would comply with the underlying district regulations applicable to the sites under the Zoning Resolution, and no special permits, authorizations, or certifications are required other than the minor modifications to the LSRD described herein.

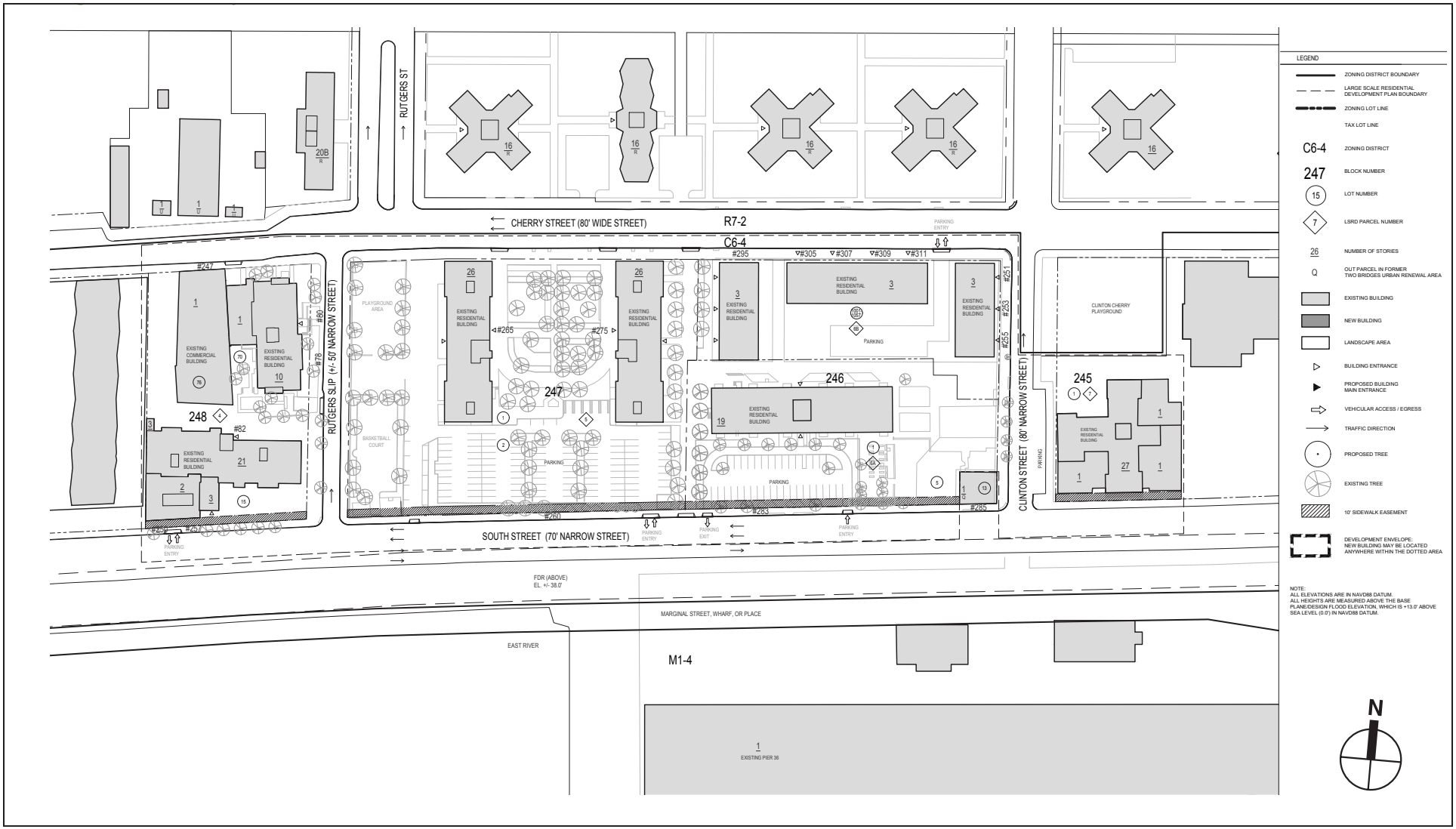
DESCRIPTION OF THE PROJECT SITES

The project sites are located in the Lower East Side neighborhood of Manhattan in Community District (CD) 3, within the boundaries of the former TBURA (see **Figures 1 and 2** above). The former TBURA was designated as an urban renewal area on January 15, 1961. This area covered 14 acres along the East River in Lower Manhattan bounded by Market Street to the west, South Street to the south, Montgomery Street to the east, and Cherry Street to the north. Development in the former TBURA was governed by the Two Bridges Urban Renewal Plan (TBURP), the goals of which included eliminating blight and restoring the residential character of the area; providing well-designed low, moderate, and middle income housing; providing convenient recreational, commercial, and community facility uses; achieving high quality urban design, architecture, street and open space elements; and strengthening the City's tax base by encouraging development and employment opportunities in the area. The TBURP was originally approved by the CPC and the Board of Estimate (BOE) in 1967. Over the years, the TBURP was amended and the TBURA was developed. The TBURP expired in June 2007.

The Two Bridges LSRD Special Permit was originally approved by the CPC on May 17, 1972 (CP-21885) and was last amended on August 23, 2013 (M120183 ZSM). The 2013 amendment was to allow for the development of a new mixed-use building on Site 5, as well as the enlargement of existing retail use and the relocation of 103 existing accessory surface parking spaces on that site. That proposed development did not occur. The Two Bridges LSRD includes six of the former TBURA parcels, which were initially developed in seven stages pursuant to the Two Bridges LSRD Special Permit. All of the project sites are located within a C6-4 zoning district (see **Figure 3**), a district that has been mapped in the project area since 1961. The boundaries of the Two Bridges LSRD are illustrated in **Figures 1 through 3** above. The LSRD Special Permit, as amended, remains in effect.

SITE 4 (4A/4B)

Site 4 (4A/4B) includes Block 248, Lots 15, 70, and 76 and contains a total lot area of 69,210 sf, with approximately 335,434 of existing zoning square feet (zsf) for a built FAR of 4.85, if assumed as a single zoning lot. Up to approximately 495,086 existing zsf remain unbuilt (based on a maximum of 12 FAR, with inclusionary housing). Lot 70 is owned by Two Bridges Senior Apartments LP and Lot 76 is owned by Two Bridges Housing Development Fund Company, Inc. Lot 76 and a portion of Lot 70 are under contract for purchase by applicant Cherry Street



Source: *SHoP Architects PC*

Existing Conditions Site Plan - All Projects

Figure 3

Owner, LLC (with Two Bridges Senior Apartments LP retaining ownership of the remainder of Lot 70). Lot 70 is occupied by an approximately 85,615-gsf (109-unit), 10-story residential (Use Group 2) building (80 Rutgers Slip) and has 4 surface parking spaces and 3,928 sf of open space. Lot 76 contains a partially-vacant, approximately 11,575-gsf one-story commercial building (235 Cherry Street) with Use Group 6 retail and 280 sf of open space. Lot 15 is occupied by an approximately 255,447-gsf (198-unit), 21-story mixed-use residential building (82 Rutgers Slip) with an 11-space enclosed accessory parking facility, and 11,660 sf of paved, private but publicly-accessible open space to the north of the building, adjacent to 235 Cherry Street and 80 Rutgers Slip. The existing residential buildings on Lot 70 (80 Rutgers Slip) and Lot 15 (82 Rutgers Slip) contain affordable housing. Site 4 (4A/4B) is located on the west side of Rutgers Slip, between Cherry Street to the north and South Street to the south. An as-of-right zoning lot merger will be required in order to facilitate this project. Lot 15 will be part of the zoning lot.

SITE 5

Site 5—owned by applicant Two Bridges Associates, LP—comprises Lots 1 and 2 of Block 247. Site 5 is 145,031 sf in size and is located between Cherry Street, South Street, Rutgers Slip, and the former alignment of Jefferson Street (demapped). Site 5 has approximately 615,071 of existing zsf, for a built FAR of 4.24. Up to approximately 1,125,301 zsf remain unbuilt (based on a maximum of 12 FAR, with inclusionary housing).

The CPC in 1977 permitted construction of the Land's End II development on Site 5. Completed in 1979, this complex includes two 26-story rental apartment buildings for low-income households at 265 and 275 Cherry Street (490 units total); a paved surface parking lot with 103 parking spaces on South Street; a paved area west of the 265 Cherry Street building; and private playgrounds and landscaped seating areas between the two buildings. The building at 265 Cherry Street includes a small amount of local retail use on the ground floor. Site 5 also includes a private open space along the Rutgers Slip block frontage that contains playgrounds, seating areas, and a basketball court.

(E) Designations Assigned to the Site

Lot 2 on the Site 5 project site is assigned an (E) designation for air quality, noise, and hazardous materials, listed in the DCP (E) designation database as E-312, established in the 2013 *Two Bridges (Health Care Chaplaincy) Environmental Assessment Statement* (CEQR No. 12DCP157M, M120183ZSM). The hazardous materials (E) designation requires that a Phase I of the site be submitted to OER for review and approval, along with a soil and groundwater testing protocol. OER will make a determination regarding whether remediation is necessary based on the results of the testing. If remediation is indicated from the test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER, and provide documentation that the work has been satisfactorily completed. In addition, an OER-approved construction-related health and safety plan would be implemented during excavation and construction activities.

The (E) designation for air quality requires that the proposed building on this site use natural gas as the only fossil fuel for any on-site heating and water systems, and must be located on the tallest portion of the proposed building. The proposed building's on-site heating and hot water systems also would be designed to ensure that maximum concentrations of nitrogen dioxide do not exceed the National Ambient Air Quality Standard (NAAQS) on a 1-hour average basis. To attain this standard, the proposed building's boilers used for space heating would have low-NO_x (<16 ppm) burners, the boilers used for hot water would utilize low-NO_x (<20 ppm) burners, and

the boilers would have a stack placement of a minimum of 260 feet from the lot line facing Cherry Street or a minimum of 236 feet from the lot line facing Rutgers Slip. The maximum capacity of equipment used for space heating and hot water would be 6 MMBTU/hour.

The (E) designation for noise requires that future community facility uses must provide up to 38 dBA of window/wall attenuation to achieve interior noise levels of 45 dBA.

SITE 6A

Site 6A comprises Block 246, Lots 1 and 5, with Lot 5 owned by LE1 Sub LLC. The development site is part of a merged zoning lot that also includes Lot 1. Site 6A is located on the west side of Clinton Street at South Street. Lot 5 is currently vacant; Lot 1 is occupied by a 19-story, 262,877 gsf (256-unit) residential building (275 South Street) and a 35-space accessory surface parking lot facing South Street. Two existing curb cuts provide access to this parking lot from South Street. Site 6A contains a total lot area of 71,357 sf, with approximately 251,829 of existing zsf, for a built FAR of 3.53. Approximately 593,407 zsf remain unbuilt (based on 12 FAR, with inclusionary housing).

DESCRIPTION OF THE SURROUNDING AREA

The area surrounding the project sites includes two New York City Housing Authority (NYCHA) housing complexes—the LaGuardia Houses, LaGuardia Addition, and Rutgers Houses—and other tower residential developments, including the 27-story residential tower at 286 South Street (see **Figure 1**).

A 79-story residential building is currently under construction directly west of Site 4 (4A/4B) at 250 South Street, outside the Two Bridges LSRD. The elevated Franklin Delano Roosevelt (FDR) Drive, which has been determined eligible for listing on the State and National Registers of Historic Places (S/NR-eligible) runs adjacent to South Street through the study area. A New York City Department of Sanitation facility is located south/southeast of the project sites at Pier 36, on the East River. Along the East River waterfront is the East River Esplanade, a bikeway located under the western cantilevered portion of the FDR Drive and waterfront walkway to the east of the FDR Drive. The closest subway station to the project sites is the East Broadway station (F line); followed by the Delancey Street/Essex Street (F, J, M, and Z lines) and Grand Street (B and D lines) stations; the closest bus route is the M22, which runs along Madison Street.

The area around the project sites south of Cherry Street is zoned C6-4. The area to the north of Cherry Street is zoned R7-2. The area to the south of the project sites (south of South Street) and west of the Manhattan Bridge is zoned M1-4. The area west of the Manhattan Bridge and south of the FDR Drive is zoned C2-8 (see **Figure 3** above).

DESCRIPTION OF THE PROPOSED PROJECTS

The three proposed projects are described in detail below. While the proposed projects require modifications to the LSRD controls, they would comply with and be allowed as-of-right under all provisions of the underlying district regulations for the sites.

SITE 4 (4A/4B) PROJECT

With the proposed project, Site 4 (4A/4B) would contain approximately 968,409 gsf of mixed-use, primarily residential development on Lots 15, 70, and 76. The new building, which would

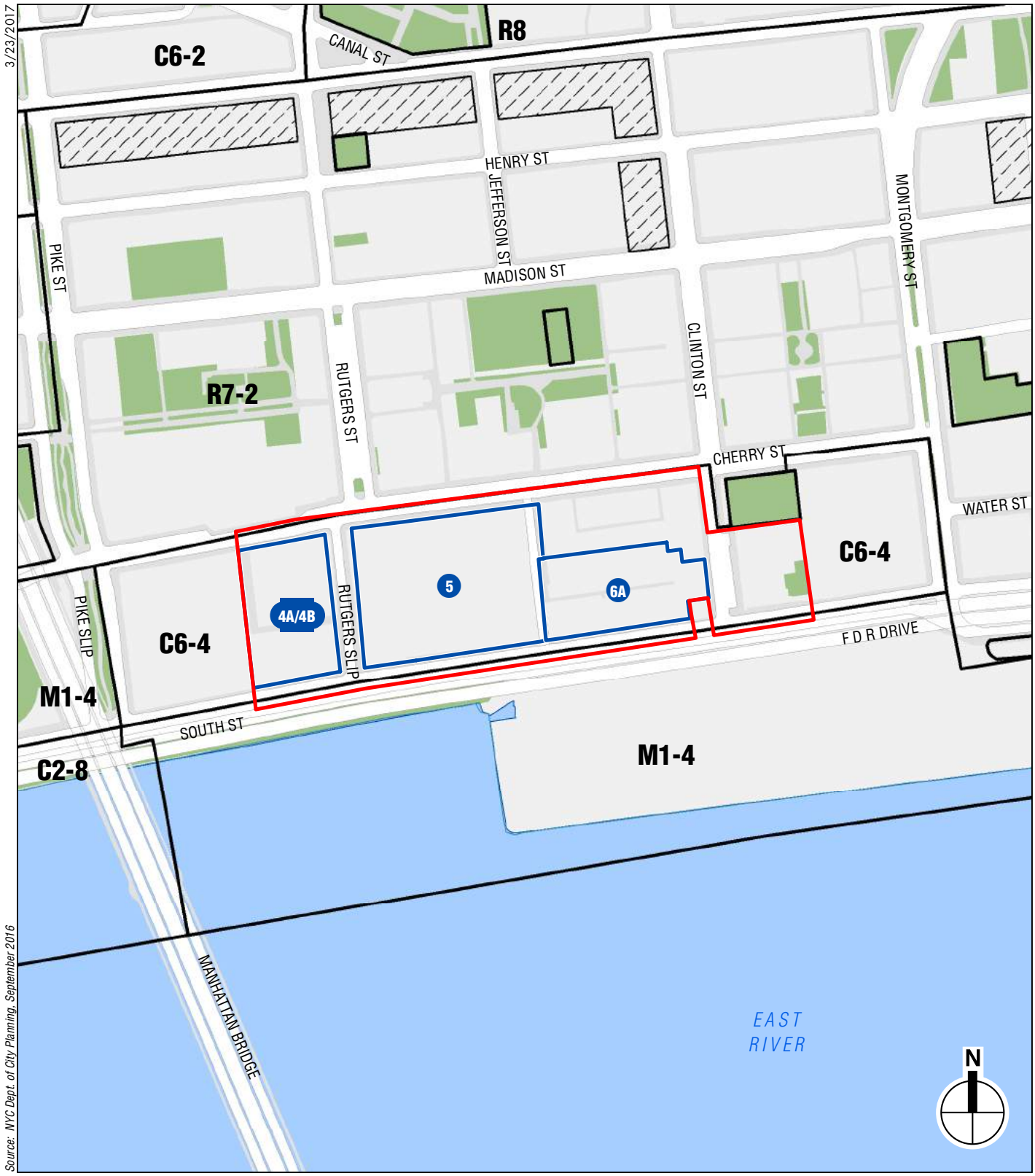
occupy portions of Lots 70 and 76, would cantilever over the existing one-story retail building on Lot 76 (235 Cherry Street) and the 10-story residential building on Lot 70 (80 Rutgers Slip). Portions of the existing 10-story building would be integrated into the new building, including 10 residential units and a community room, and ground-floor retail would be introduced into the existing 10-story building's ground floor. The new building would reach a height of approximately 79 stories (approximately 1,008 feet tall, including mechanical screen) and would provide approximately 617,464 gsf of residential use (in addition to the remaining 80,799 gsf of residential use at 80 Rutgers Slip). The new development would contain up to 660 new units (in addition to the 10 units that would be relocated from 80 Rutgers Slip to the new building),[1] 25 percent of which would be designated as affordable (up to 165 units). The 10 units relocated from 80 Rutgers Slip would be allocated for senior housing. The one-story, approximately 11,575 gsf retail building on Lot 76 would remain and be re-tenanted (see **Figures 4 through 8**). An additional approximately 3,124 gsf of retail space would be introduced in the base of 80 Rutgers Slip. The overall development on Site 4 (4A/4B) would total approximately 968,409 gsf, of which approximately 615,217 gsf would be in addition to existing development. The existing 21-story building located on Lot 15 (82 Rutgers Slip) would remain, and the open space on Lots 15, 70, and 76 would be improved. The existing curb cuts on Rutgers Slip and on Cherry Street would be removed; no new curb cuts would be required. The residential units within the existing buildings at on Lot 70 (80 Rutgers Slip) and Lot 15 (82 Rutgers Slip) would remain affordable, consistent with the existing regulatory agreements governing each building. During construction of the proposed project, the 10 units at 80 Rutgers Slip that would be relocated to the new building and 9 additional units would be renovated. It is anticipated that residents of these units would be relocated during construction to elsewhere within the building, as other residents leave, or to neighboring buildings. No residents would be permanently displaced from the building.

SITE 5 PROJECT

The proposed Site 5 project would be an approximately 1,244,960 gsf mixed-use development with two towers on a shared base. It would reach a height of approximately 69 stories (maximum 798 feet, including mechanical screen) along South Street (see **Figures 4 through 6, 9, and 10**). The proposed project would provide up to 1,350 residential units (average size 850 sf/unit),[2] 25 percent of which would be designated as affordable (up to 338 units, including 100 new units of low-income senior housing), and approximately 17,028 gsf of community facility use. The project would maintain the 103 surface parking spaces that currently exist on site, relocating these spaces to a garage in the lower level of the proposed building. The proposed project also would enlarge the ground floor retail fronting Cherry Street by approximately 5,258 gsf, in one-story expansions of the 265 and 275 Cherry Street buildings. The existing buildings (633,523 gsf residential and 2,085 gsf retail at 265-275 Cherry Street) would remain. The residential use in those buildings (490 units) would remain affordable, consistent with the long-term regulatory agreement for that development. The project also would improve the open space amenities along Rutgers Slip, including replacing an area between the private open space along Rutgers Slip and 265 Cherry Street which is currently occupied by surface parking, and providing new

[1] The Two Bridges LSRD table will limit the new residential development on Site 4(4A/4B) to 660 dwelling units, in addition to the 10 units that would be relocated from the existing building.[2] The Two Bridges LSRD table will limit the new residential development on Site 5 to 1,350 dwelling units.

[2] The Two Bridges LSRD table will limit the new residential development on Site 5 to 1,350 dwelling units.



TWO BRIDGES LSRD

Zoning
Figure 4

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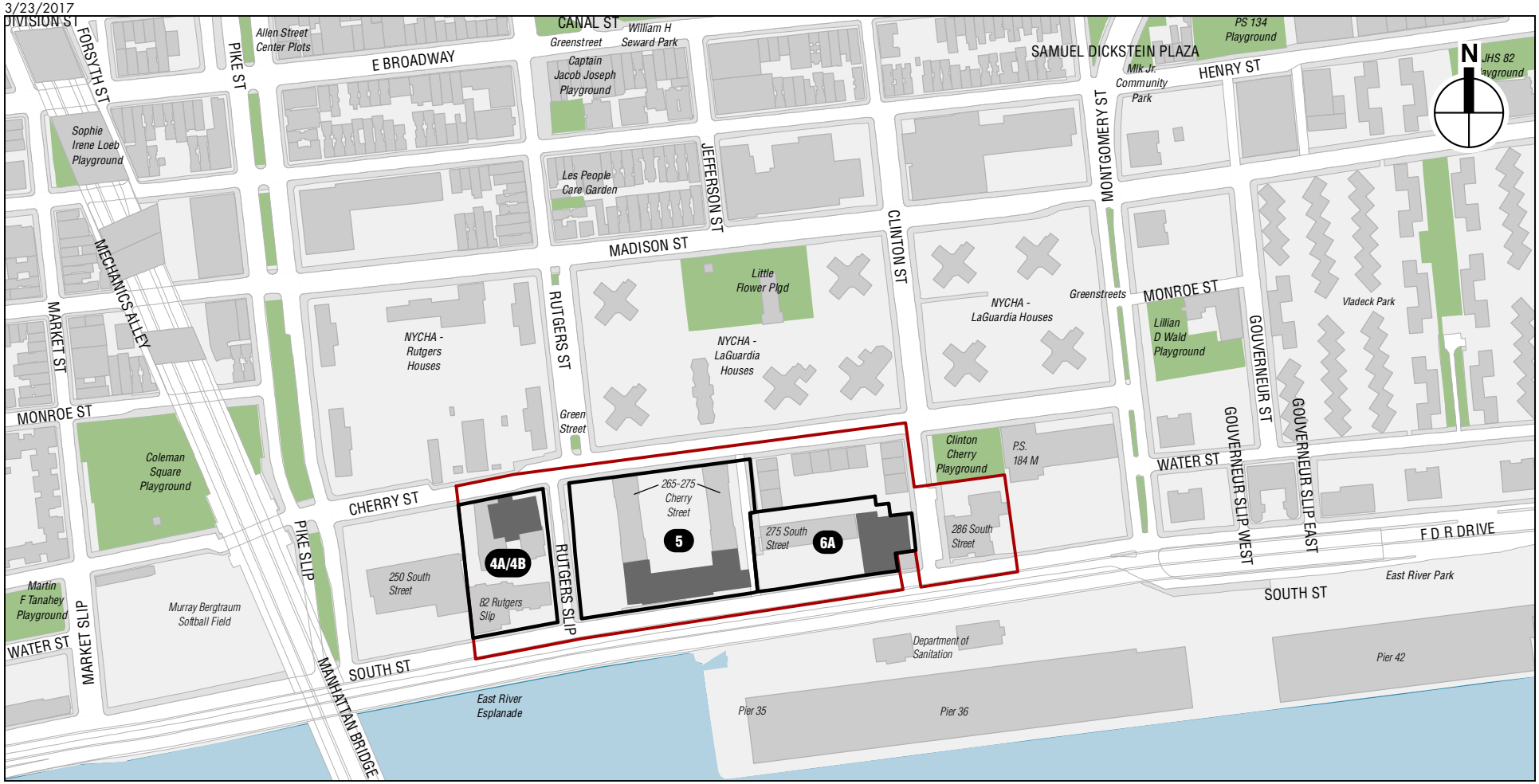
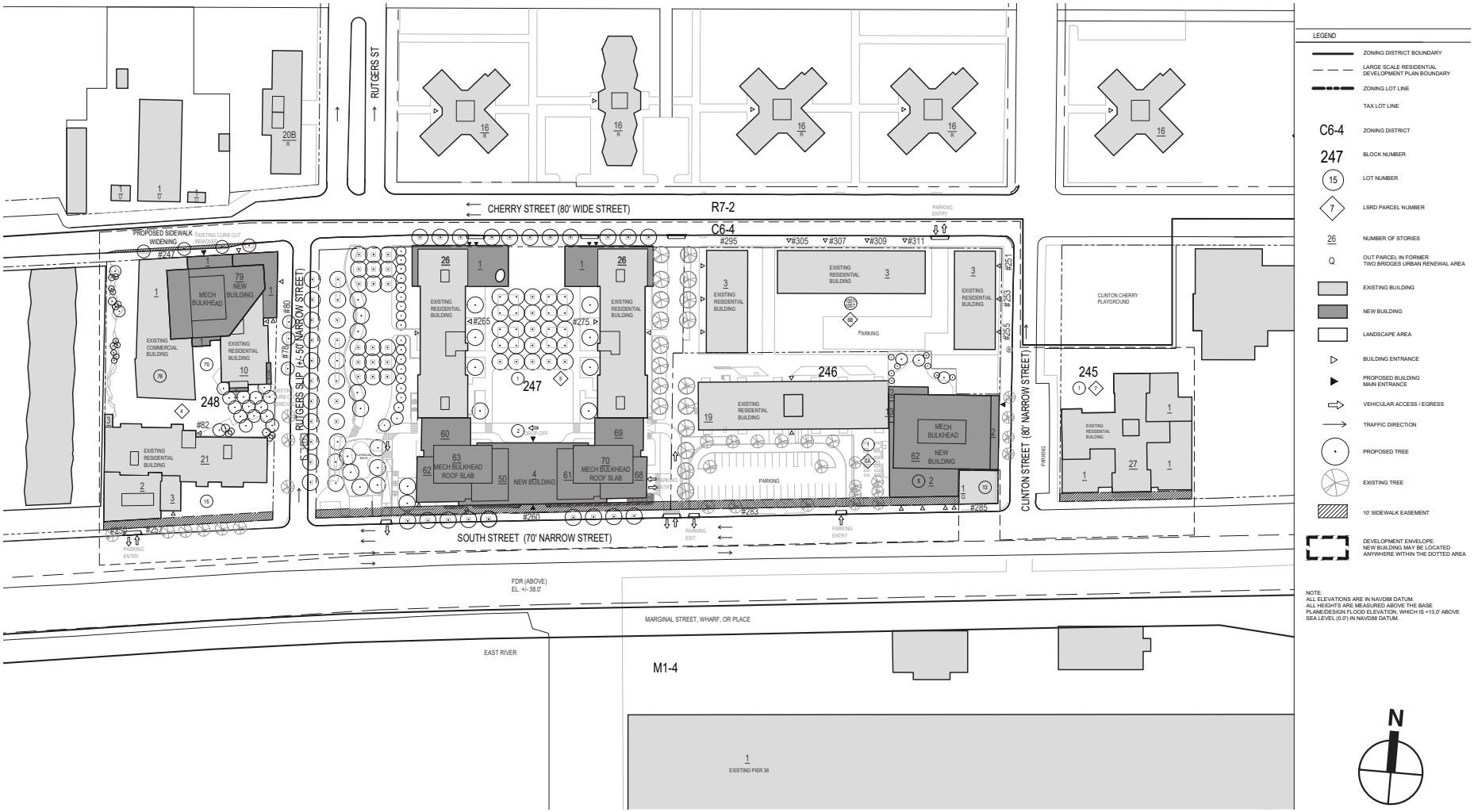


Project Sites
Boundary of Two Bridges LSRD
Proposed Buildings
Publicly Accessible Open Space

0 400 FEET

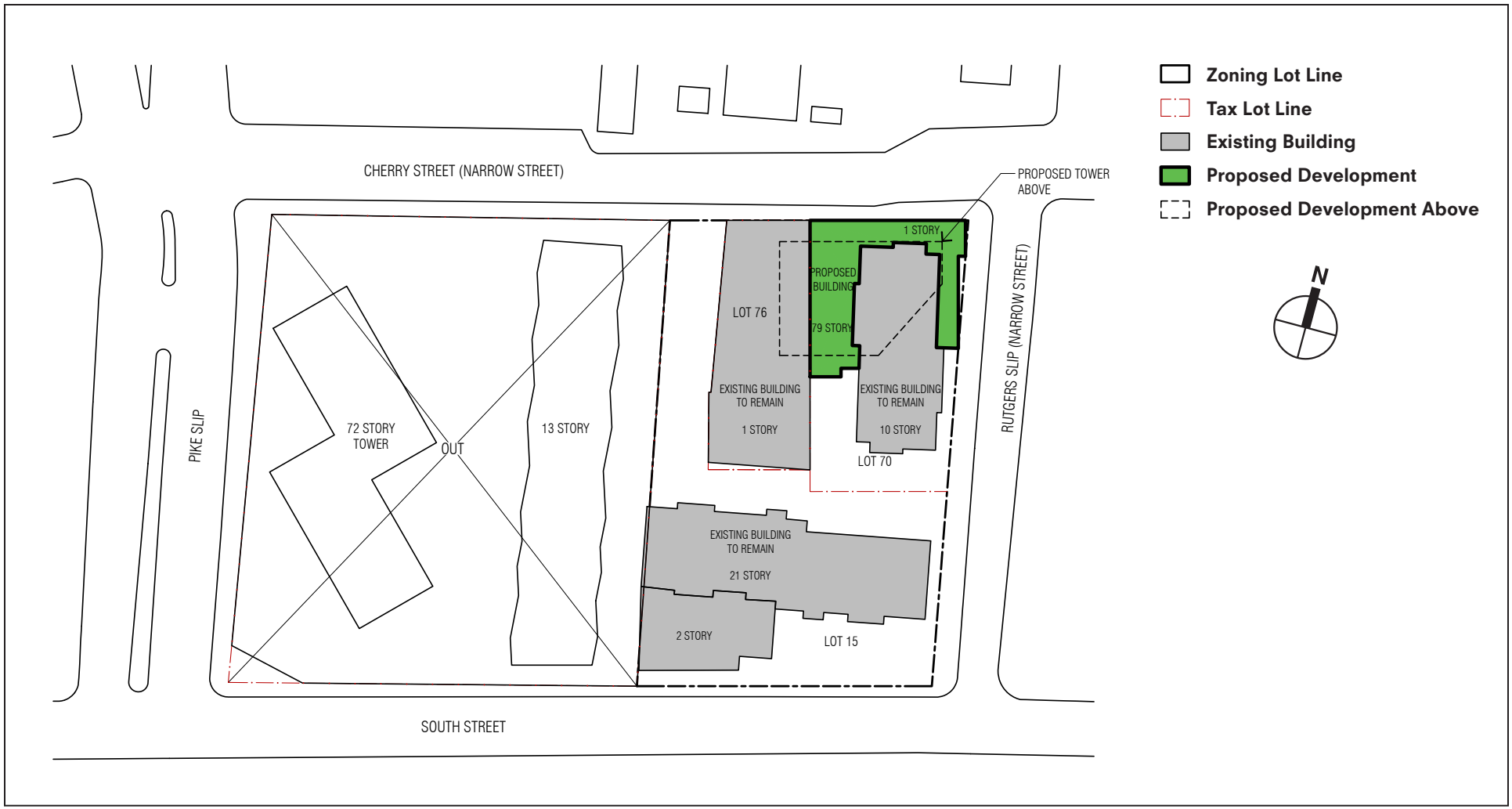
TWO BRIDGES LSRD

Proposed Developments
Figure 5



Proposed Site Plan-All Projects

Figure 6

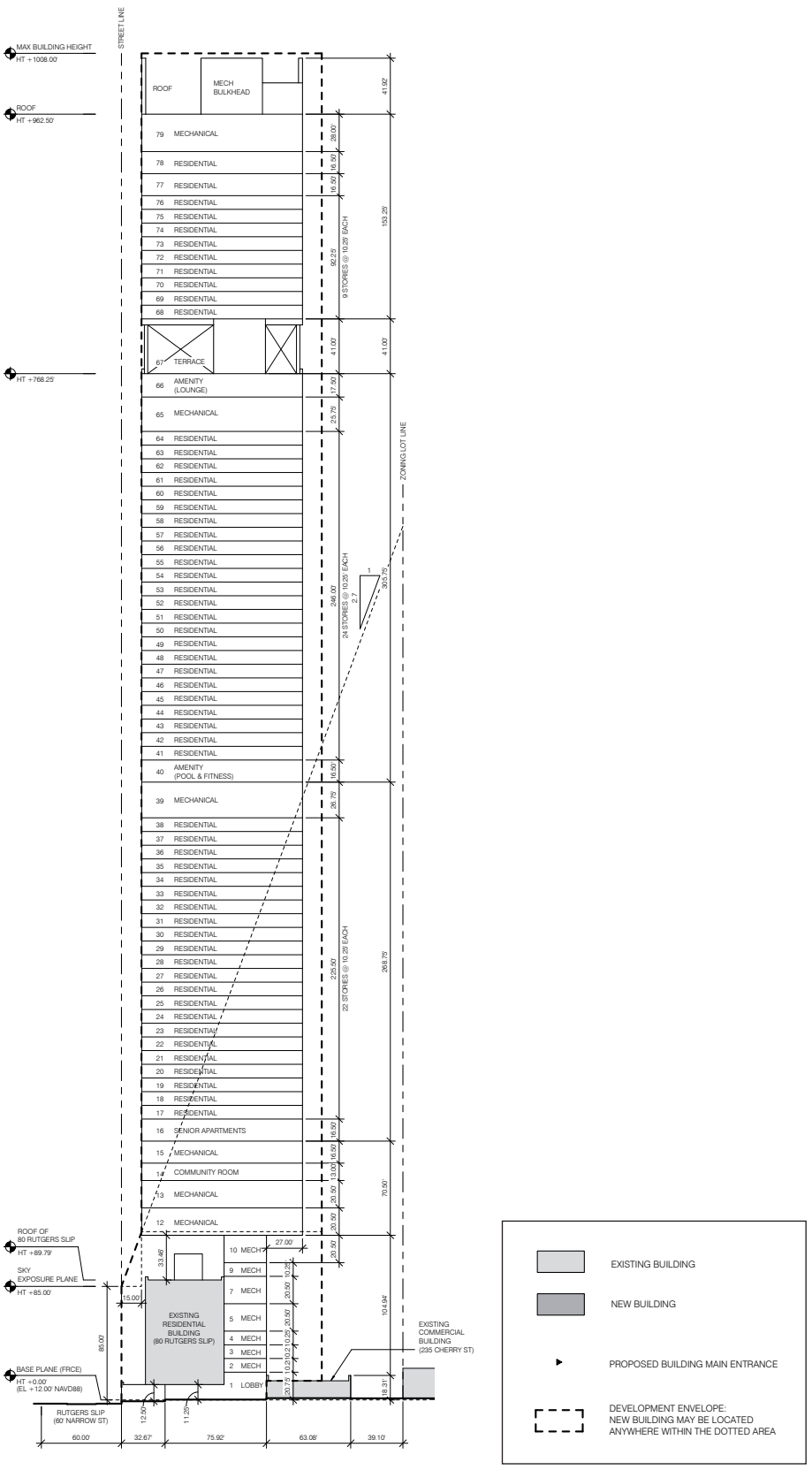


Source: *SHoP Architects, PC*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 4A/4B — Proposed Site Plan

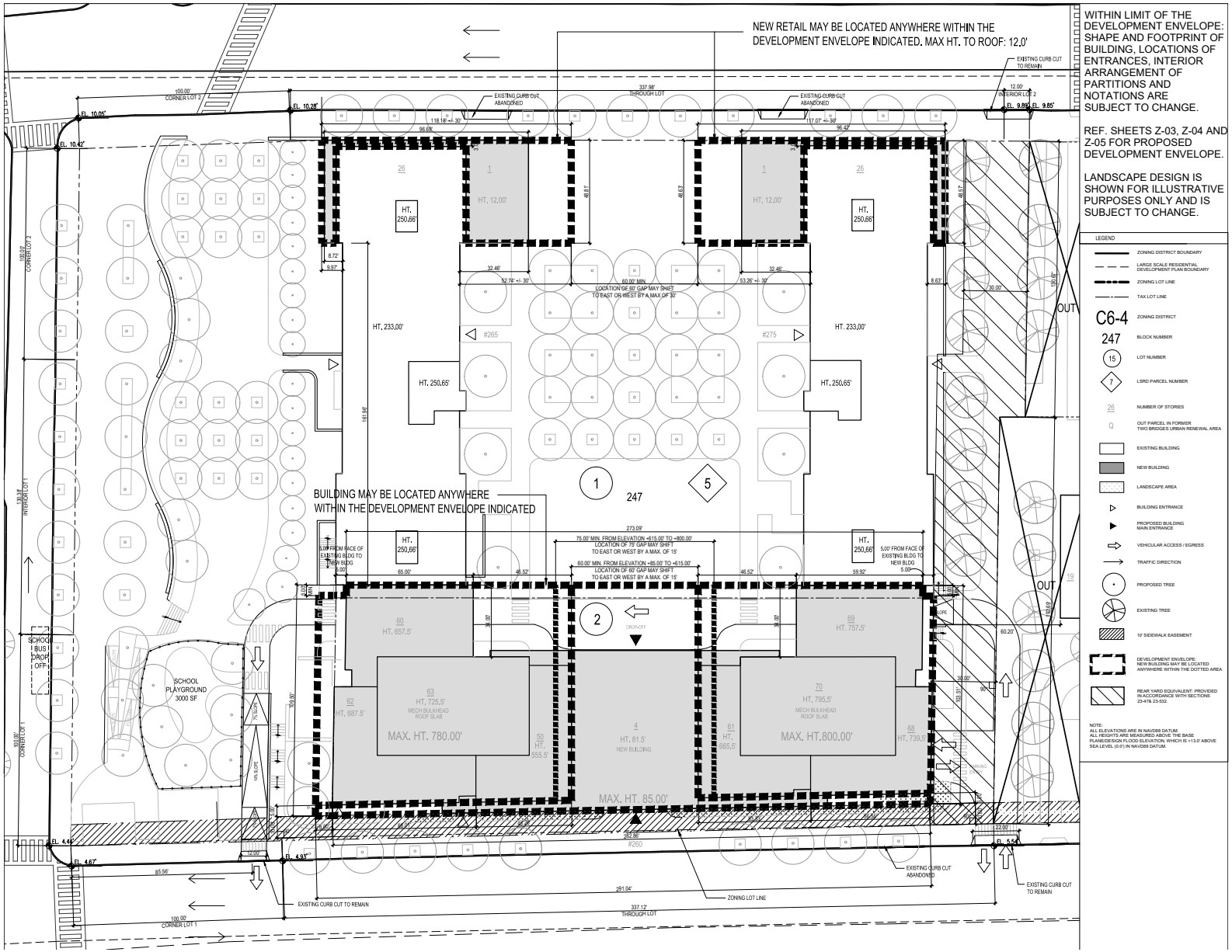
Figure 7



Source: *SHoP Architects, PC*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 4A/4B — Illustrative Section of Proposed Development (East–West)



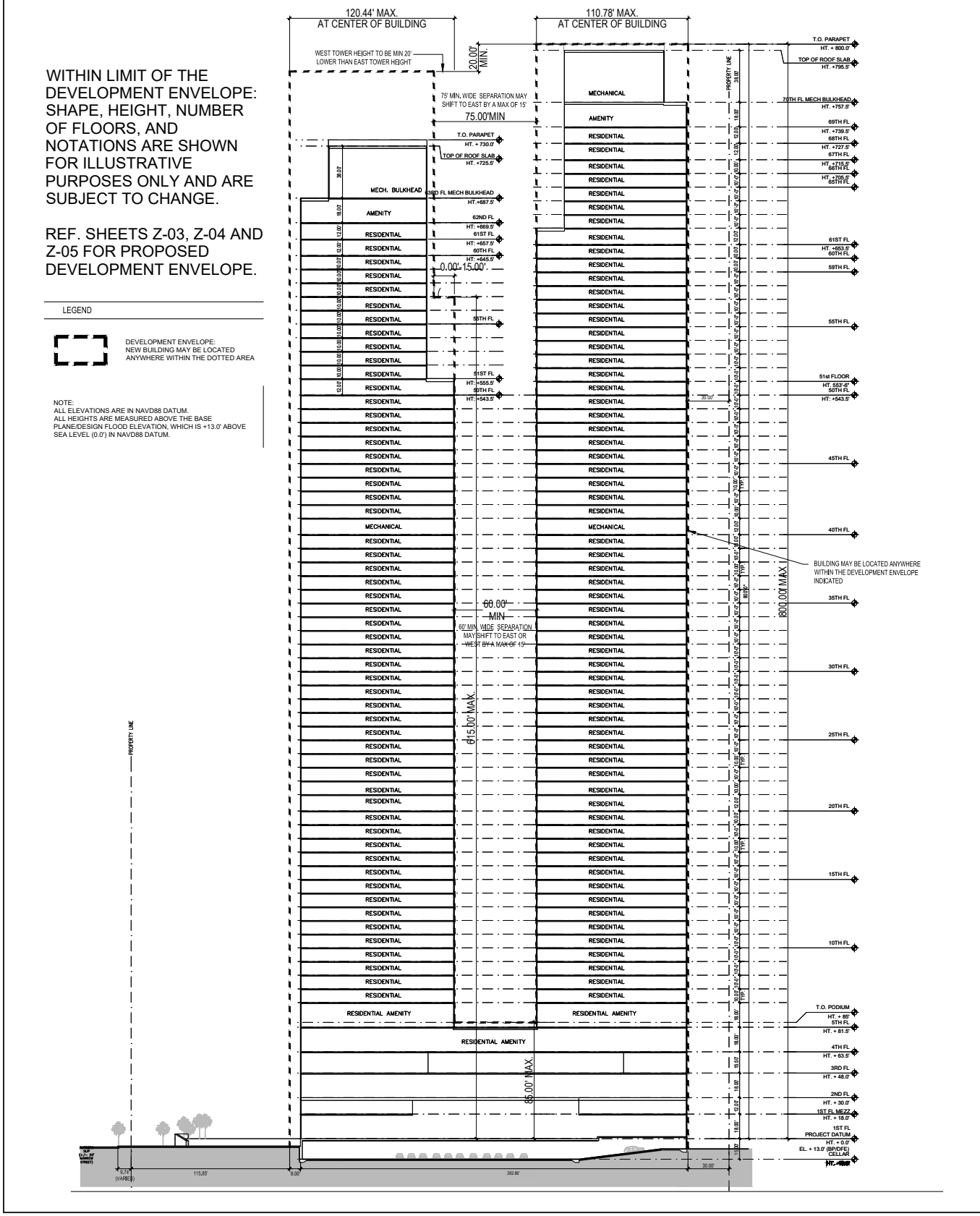
Source: *Handel Architects LLP*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 5 — Proposed Site Plan

TWO BRIDGES LSRD

Figure 9



Source: *Handel Architects LLP*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 5 — Ilustrative Section of Proposed Development (East–West)

landscaping, seating, and play areas in the private open space along Rutgers Slip and the open space between 265 and 275 Cherry Street. The existing curb cuts on Cherry and South Streets would be maintained and two existing curb cuts on South Street would be used to access the resident and visitor drop-off and the lower level parking garage in the new building. No new curb cuts would be required. The new development would be oriented perpendicular to the existing buildings at 265 and 275 Cherry Street and parallel to South Street.

SITE 6A PROJECT

The proposed Site 6A project would be an approximately 657,868 gsf mixed-use development on Lot 5. Based on current plans, the building is expected to reach a height of approximately 62 stories (approximately 724 feet tall, including mechanical screen) and would provide up to 655,463 sf of new residential use, (up to 765 residential units),[3] 25 percent of which would be designated as affordable (up to 191 units, 100 of which would be new low-income senior housing), as well as approximately 2,506 gsf of retail use (see **Figures 4 through 6, 11, and 12**). The Site 6A project also would provide approximately 3,200 sf of new open space on site. The existing building and accessory surface parking lot on Lot 1 would remain. The existing curb cuts on South Street would remain; no new curb cuts would be required.

Table 1 summarizes the proposed projects.

BUILD YEAR

The proposed projects each would be developed in a single phase; the construction period for each is anticipated to be between 30 and 36 months. Therefore, a future build year of 2021, when the projects are anticipated to be complete and operational, will be examined to assess the potential impacts of the proposed actions.

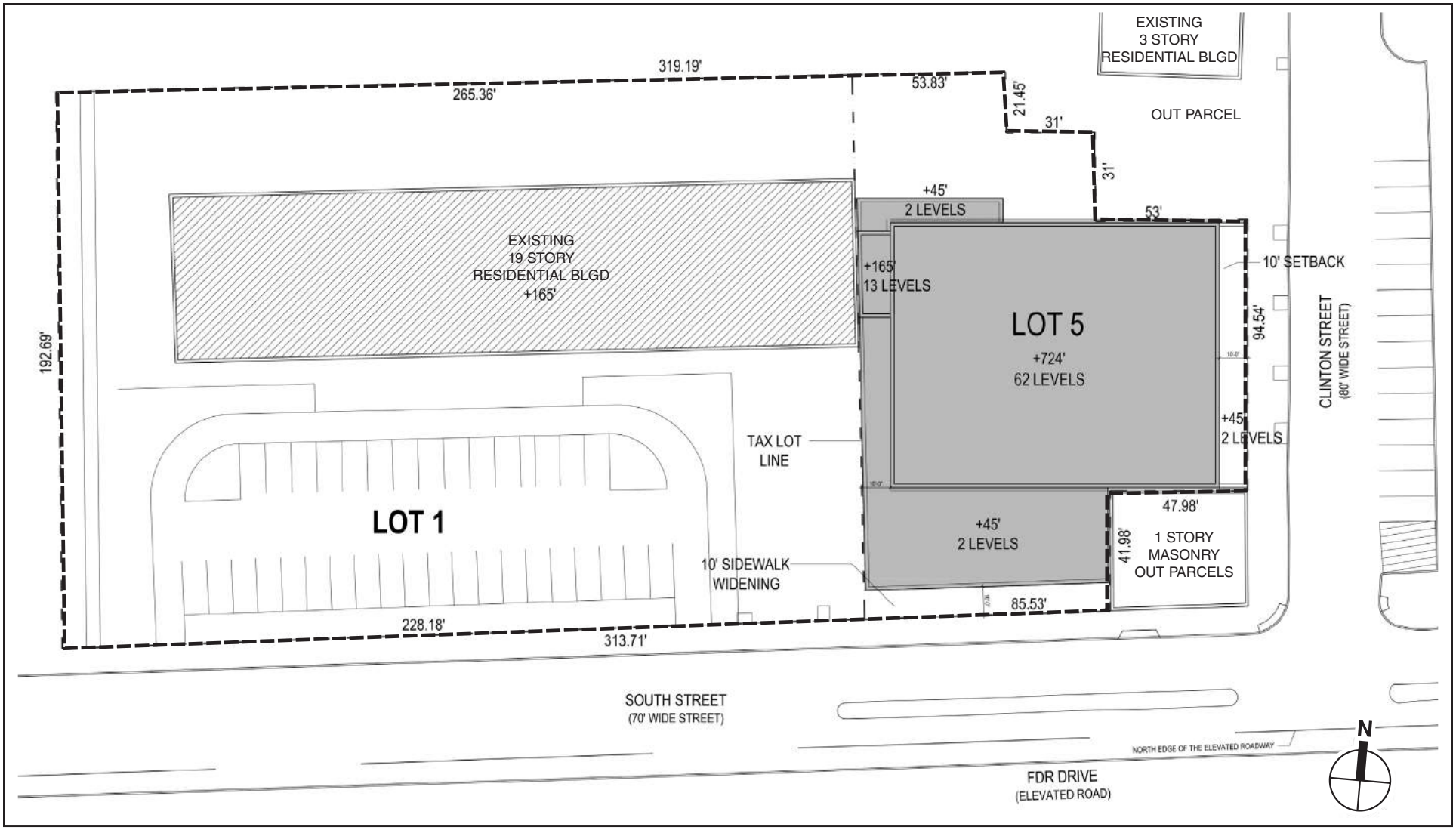
C. PURPOSE AND NEED OF THE PROPOSED ACTIONS

As described above, the Two Bridges LSRD regulates the maximum developable floor area, lot coverage, and other features of development permitted on the LSRD sites. A summary of the previously granted certifications, authorizations and special permits for sites within the boundaries of the LSRD is attached as **Appendix A**. To facilitate the proposed projects, minor modifications to the Two Bridges LSRD Special Permit are being requested from the CPC, as described below. The new mixed-use developments on each of the three project sites would be developed as-of-right under zoning as they would comply with the underlying C6-4 zoning district regulations applicable to the sites under the Zoning Resolution. No new special permits, authorizations, or certifications, and no use or bulk waivers would be required to facilitate the proposed projects. However, as the project sites are located within the Two Bridges LSRD, minor modifications are required to modify the site plan and zoning calculations of the Two Bridges LSRD to reflect the proposals.

SITE 4 (4A/4B)

The proposed minor modification of the Two Bridges LSRD would facilitate the further development of Site 4 (4A/4B). The proposed minor modification is needed to facilitate the

[3] The Two Bridges LSRD table will limit the new residential development on Site 6A to 765 dwelling units.

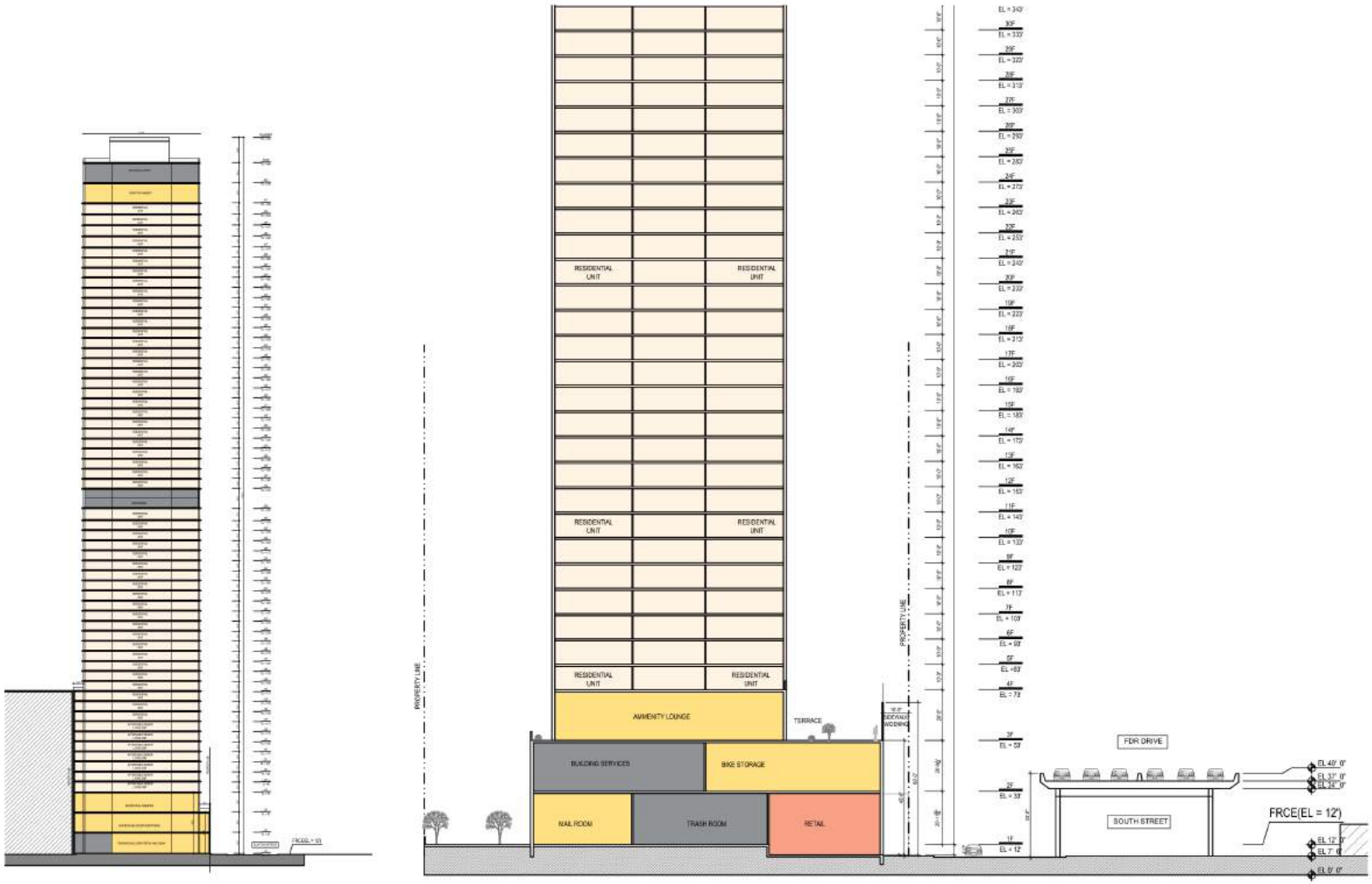


Source: *Perkins Eastman*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 6A — Proposed Site Plan

Figure 11



Source: *Perkins Eastman*

NOTE: *FOR ILLUSTRATIVE PURPOSES ONLY*

Site 6A — Illustrative Section of Proposed Development (North–South)

further development of Site 4 (4A/4B) with new affordable and market-rate housing; up to 660 new units in total, with 25 percent designated as affordable (up to 165 units). (In addition, 10 units would be relocated from 80 Rutgers Slip to the new building and would be allocated for senior housing.) The proposed actions would allow for the Site 4 (4A/4B) development to provide substantial capital to two non-profit organizations in support of their on-going efforts to provide, support, and maintain affordable housing for New Yorkers. The Site 4 (4A/4B) development also would enhance the streetscape and pedestrian environment by improving the open space areas located on Lots 15, 70, and 76, and would strengthen local retail opportunities by increasing the ground floor retail at this site. The proposed action would improve the resiliency of the site, with physical strategies being implemented around Lot 70 of Site 4 (4A/4B) to assist in protecting the existing building at 80 Rutgers Slip and the new building on Site 4 (4A/4B).

SITE 5

The proposed minor modification of the Two Bridges LSRD would facilitate the further development of Site 5 by replacing a surface parking lot with new affordable and market-rate housing, community facility space, and retail. The new Site 5 development would provide up to 1,350 new units, 25 percent of which would be designated as affordable (up to 338 units). In addition, the proposed Site 5 project would help address the continuing need for independent living facilities for seniors in New York City, by creating at least 100 new units of low income senior housing as part of the affordable housing to be provided on that site. With the proposed minor modification, the proposed development also would significantly improve the open space on Site 5, by providing new landscaping, seating, and play areas in the open space between 265 and 275 Cherry Street and along Rutgers Slip. The open space improvements along Rutgers Slip would enhance pedestrian access from the upland neighborhood to the East River waterfront, and local retail opportunities would be enhanced by the creation of additional ground-floor retail at 265 and 275 Cherry Street. The proposed action also would improve the site's resiliency by elevating the first floor of the new building above the flood plain elevation, and employing physical strategies around the site to assist in protecting the 265 and 275 Cherry Street buildings.

SITE 6A

The proposed minor modification of the Two Bridges LSRD would facilitate the further development of Site 6A with new affordable and market-rate housing. The new Site 6A development would provide up to 765 new units in total, with 25 percent designated as affordable (up to 191 units). In addition, the proposed Site 6A project would help address the continuing need for independent living facilities for seniors in New York City, by creating approximately 100 new units of low income senior housing as part of the affordable housing to be provided on that site. With the proposed minor modification, new development would replace a vacant lot and introduce ground floor retail that would enhance the streetscape and pedestrian environment along Clinton and South Streets and strengthen local retail opportunities. The proposed action also would improve the resiliency of the site and would create new open space on site.

THE PROJECT SITES

Together, Sites 4(4A/4B), 5, and 6A would result in three new buildings containing a total of approximately 2,503,365 gsf of new Use Group 2 residential space, approximately 10,888 gsf of Use Group 6 retail space, approximately 17,028 gsf community facility space, and

approximately 22,779 gsf of private open space. Together, the three proposed buildings would contain a total of up to 2,775 new dwelling units, of which 25 percent or up to 694 would be designated as affordable within Manhattan Community District 3. This affordable housing would advance a City-wide initiative to build and preserve 200,000 affordable units over 10 years in order to support New Yorkers with a range of incomes, from the very lowest to those in the middle class. The proposed actions also would result in improvements to the resiliency of each site and enhance the surrounding streetscape and pedestrian experience through the creation of new landscaping and private open space. In addition, new ground floor retail at the project sites would add to the retail mix already located in the Two Bridges neighborhood.

The proposed actions also would be consistent with the overall development objectives of the Two Bridges LSRD; providing well designed low, moderate, and middle income housing; providing convenient recreational, commercial, and community facility uses; achieving high quality urban design, architecture, street, and open space elements; and strengthening the City's tax base by encouraging development and employment opportunities in the area.

D. ANALYSIS FRAMEWORK

The 2014 *CEQR Technical Manual* will serve as a general guide on the methodologies and impact criteria for evaluating the proposed projects' potential effects on the various environmental areas of analysis. In disclosing impacts, the EIS will consider the proposed projects' potential adverse impacts on its environmental setting. A future build year of 2021 will be examined to assess the potential impacts of the proposed actions. Consequently, the environmental setting is not the current environment, but the future environment. Therefore, the technical analyses and consideration of alternatives include descriptions of existing conditions, conditions in the future without the proposed projects (the No Action scenario), and conditions in the future with the proposed projects (the With Action scenario). The incremental difference between the No Action and With Action conditions is analyzed to determine the potential environmental effects of the proposed projects. In order to understand how the cumulative impacts of the proposed projects might change if one or more of the projects is delayed indefinitely or ultimately not pursued, the EIS will also provide a qualitative analysis of certain permutations in a separate chapter. The analysis will be limited to evaluating specific locations or facilities for which impacts and mitigation needs have been identified under the cumulative impact analysis of all three projects. The assessments for the relevant technical areas will be targeted to focus on those impacts.

NO ACTION SCENARIO

For the No Action scenario, it is assumed that the project sites would continue in their existing conditions and that the existing retail in the Lot 76 building on Site 4 (4A/4B) would be re-tenanted. **Table 2** summarizes the No Action conditions for the three project sites.

Table 2
No Action Scenario

Use (GSF)	Site 4 (4A/4B)[1]	Site 5	Site 6A	Total New
Use Group 2 (Residential)	*Existing*: 313,510 gsf *New*: 0	*Existing*: 633,523 gsf *New*: 0	*Existing*: 262,877 gsf *New*: 0	0
Residential Units	*Existing*: 307 DUs *New*: 0	*Existing*: 490 DUs *New*: 0	*Existing*: 256 DUs *New*: 0	0
Affordable Unit Count	*Existing*: 307 DUs *New*: 0	*Existing*: 490 DUs *New*: 0	*Existing*: 128 *New*: 0	0
Use Group 6 (Retail)	*Existing*: 11,575 (retenanted) *New*: 0	*Existing*: 2,085 gsf *New*: 0	*Existing*: 0 *New*: 0	0
Community Facility	*Existing*: 27,552 gsf *New*: 0	*Existing*: 0 *New*: 0	*Existing*: 0 *New*: 0	0
Accessory Parking	*Existing*: 15 *New*: 0	*Existing*: 103 *at grade* *New*: 0	*Existing*: 35 *at grade* *New*: 0	0
Private Open Space	*Existing*: 15,868 sf *New*: 0	*Existing*: 64,152 sf *New*: 0	*Existing*: 0 *New*: 0	0
Vacant	*Existing*: 0 *New*: 0	*Existing*: 0 *New*: 0	*Existing*: 20,177 sf *New*: 0	0

Notes:

1. 80 Rutgers Slip/Lot 70: 85,615 gsf [109 units] residential, 3,928 sf open space, and 4 surface parking spaces; 82 Rutgers Slip/Lot 15: 227,895 gsf residential [198 units], 27,552 gsf community facility, 11 accessory enclosed parking spaces, and 11,660 sf open space; 235 Cherry Street/Lot 76: 11,575 gsf retail and 280 sf open space.

Table 2A
Site 4 (Site 4A/4B)

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If yes, specify the following				
Describe type of residential structures	**Lot 15: 1 21-story building Lot 70: 1 10-story building Lot 76: N/A**	**Lot 15: 1 21-story building *(remaining)* Lot 70: 1 10-story building *(remaining)* Lot 76: N/A**	**Lot 15: 1 21-story building *(remaining)* Lot 70: 1 10-story building *(remaining)* Lots 70 & 76 combined: 1 79-story building *(new)* [4]**	**+79 floors**
No. of dwelling units	**Lot 15: 198 DUs Lot 70: 109 DUs Lot 76: N/A**	**Lot 15: 198 DUs *(remaining)* Lot 70: 109 DUs *(remaining)* Lot 76: N/A**	**Lot 15: 198 DUs *(remaining)* Lot 70: 99 DUs *(remaining)* Lots 70 & 76 combined: + approx. 670 DUs *(new*[5]*)***	**+approx. 660 DUs**
No. of low- to moderate-income units	**Lot 15: 198 Lot 70: 109 Lot 76: N/A**	**Lot 15: 198 *(remaining)* Lot 70: 109 *(remaining)* Lot 76: N/A**	**Lot 15: 198 *(remaining)* Lot 70: 99 *(remaining)* Lots 70 & 76 combined: + approx. 175 DUs *(new, including 10 relocated DUs)***	**+approx. 165 DUs**
Gross Floor Area (sq. ft.)	**Lot 15: 227,895 gsf Lot 70: 85,615 gsf Lot 76: N/A**	**Lot 15: 227,895 gsf *(remaining)* Lot 70: 85,615 gsf *(remaining)* Lot 76: N/A**	**Lot 15: 227,895 gsf *(remaining)* Lot 70: 80,799 gsf *(remaining)* Lots 70 & 76 combined: 617,464 gsf *(new)***	**+615,217 gsf**
Commercial	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If yes, specify the following:				
Describe type (retail, office, other)	**Lot 15: N/A Lot 70: N/A Lot 76: 1 1-story partially vacant retail building**	**Lot 15: N/A Lot 70: N/A Lot 76: Re-tenant 1-story building with retail *(remaining)***	**Lot 15: N/A Lot 70: Retail Lots 70 & 76 combined: Re-tenant 1-story building with retail *(remaining)***	
Gross floor area (sq. ft.)	**Lot 15: N/A Lot 70: N/A Lot 76: 11,575 gsf**	**Lot 15: N/A Lot 70: N/A Lot 76: 11,575 gsf *(remaining)***	**Lot 15: N/A Lot 70: 3,124 gsf *(new)* Lots 70 & 76 combined: 11,575 gsf *(remaining)***	**+3,124**
Manufacturing/Industrial	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■	
If yes, specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify				
Community Facility	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If yes, specify the following				
Type	**Lot 15: Medical offices, daycare center**	**No change**	**No change**	**No change**
Gross floor area (sq. ft.)	**Lot 15: 27,552 gsf**	**No change**	**No change**	**No change**
Vacant Land	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■	
If yes, describe				
Other Land Uses	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If yes, describe	**Lot 15: approx. 11,660 sf open space Lot 70: approx.. 3,928 sf open space Lot 76: approx.. 280 sf open space**	**No change**	**Lots 15/70: Improvements to existing open space Lot 76: No change**	**No change**
Parking				
Garages	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If yes, specify the following:				
No. of public spaces				
No. of accessory spaces	**Lot 15: 11**	**No change**	**No change**	**No change**
Lots	Yes ■ No ☐	Yes ■ No ☐	Yes ☐ No ■	
If yes, specify the following:				
No. of public spaces	**0**	**No change**	**No change**	**No change**
No. of accessory spaces	**Lot 70: 4 Lot 76: 0**	**No change**	**Lots 70/76: No parking spaces are required and none would be provided.**	**(4) accessory spaces**

[4] Portion of 10-story building *(remaining)* would be incorporated into the proposed building.
[5] 670 DUs includes the 10 units to be relocated from the existing Lot 70 building.

Table 2A (cont'd)
Site 4 (Site 4A/4B)

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Population				
Residents	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If "yes", specify number	**Approx. 660**	**No change**	**Approx. 2,079**	**1,419**
Briefly explain how the number of residents was calculated	**Average household size of 2.15 from Manhattan Community District 3 Profile (Sources: U.S. Census Bureau, 2000 and 2010 Censuses SF1 Population Division - NYC Department of City Planning [Dec 2011]). Average household size of 1.5 assumed for senior units under With Action Condition.**			
Businesses	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If "yes", specify the following:				
No. and type	**TBD/Retail, community facility**	**No change**	**TBD/Retail, community facility**	
No. and type of workers by business	**Approx. 35 retail, 28 community facility**	**No change**	**Approx. 45 retail, 28 community facility**	**10 retail**
No. and type of non-residents who are not workers	**TBD**	**No change**	**TBD**	**TBD**
Briefly explain how the number of businesses was calculated	**Retail including dining: 333 sf/employee. Community facility: 1,000 sf/employee.**			
Other (students, visitors, concert-goers, etc.)	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■	
If any, specify number				
Briefly explain how the number was calculated				
Zoning				
Zoning classification	**C6-4**	**No change**	**No change**	**No change**
Maximum amount of floor area that can be developed	**69,210 sf x 10.0 FAR = 692,100 sf 12.0 FAR = 830,520 sf**	**No change**	**No change**	**No change**
Predominant land use and zoning classifications within land use study areas or a 400-foot radius of proposed project	**Residential, commercial, transportation/utility, open space, C6-4, M1-4, R7-2**	**No change**	**No change**	**No change**

Table 2B
Site 5

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, specify the following				
Describe type of residential structures	**Lot 1: 2 26-story buildings**	**Lot 1: 2 26-story buildings *(remaining)***	**Lot 1: 2 26-story buildings *(remaining)* Lots 1/2: 1 62-story tower, 1 69-story tower, w shared base[6] *(new)***	**Lots 1/2: +69 floors**
No. of dwelling units	**Lot 1: 490 DUs**	**Lot 1: 490 DUs *(remaining)***	**Lot 1: 490 DUs *(remaining)* Lots 1/2: 1,350 DUs *(new)***	**Lots 1/2: + apprx. 1,350 DUs**
No. of low- to moderate-income units	**Lot 1: 490 DUs**	**Lot 1: 490 DUs *(remaining)***	**Lot 1: 490 DUs *(remaining)* Lots 1/2: Approx. 338 DUs *(new)***	**Lots 1/2: + approx. 338 DUs**
Gross Floor Area (sq. ft.)	**Lot 1: 633,523 gsf[7]**	**Lot 1: 633,523 gsf *(remaining)***	**Lot 1: 633,523 *(remaining)* Lots 1/2: 1,227,932 gsf *(new)***	**Lots 1/2: +approx.1,227,932 gsf**
Commercial	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, specify the following:				
Describe type (retail, office, other)	**Lot 1: Retail in 265 Cherry Street**	**Lot 1: No change**	**Lot 1: Retail**	**Retail**
Gross floor area (sq. ft.)	**Lot 1: 2,085 gsf[3]**	**Lot 1: No change**	**Lot 1: 2,085 gsf *(remaining)* 5,258 gsf *(new)***	**Lot 1: +5,258 gsf**
Manufacturing/Industrial	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If yes, specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify				
Community Facility	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, specify the following				
Type	**Lot 1: 1 non-profit community development corporation in 275 Cherry Street**	**Lot 1: No change**	**Lot 1: No change Lots 1/2: General community facility use**	
Gross floor area (sq. ft.)	**0**	**0**	**Lot 1: No change Lots 1/2: 17,028 gsf**	**Lots 1/2: +17,028 gsf**
Vacant Land	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If yes, describe				
Other Land Uses	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, describe	**Lots 1/2: Approx. 64,152 sf private playgrounds and seating areas**	**Lots 1/2: No change**	**Lots 1/2: 64,152 sf *(remaining)* 19,579 sf private open space *(new)***	**Lots 1/2: +19,579 sf**

[6] Anticipated number of floors, to a maximum height of 798'.
[7] Existing residential floor area is based on a calculation by Handel Architects dated February 22, 2016 and represents an update from the figures presented in the *Two Bridges (HealthCare Chaplaincy) EAS.*

Table 2B (cont'd)
Site 5

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Parking				
Garages	Yes ☐ No ■	Yes ☐ No ■	Yes ■ No ☐	
If yes, specify the following:				
No. of public spaces	**0**	**No change**	**No change**	**0**
No. of accessory spaces	**0**	**0**	**Lots 1/2: 103**	**Lots 1/2: +103**
Lots	Yes ■ No ☐	Yes ■ No ☐	Yes ☐ No ■	
If yes, specify the following:				
No. of public spaces	**0**	**No change**	**No change**	**0**
No. of accessory spaces	**Lots 1/2: 103**	**No change**	**0**	**Lots 1/2: (103)**
Population				
Residents	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If "yes", specify number	**Approx. 1,054**	**No change**	**Approx. 3,891**	**2,838**
Briefly explain how the number of residents was calculated	**Average household size of 2.15 from Manhattan Community District 3 Profile (Sources: U.S. Census Bureau, 2000 and 2010 Censuses SF1 Population Division - NYC Department of City Planning [Dec 2011]). Average household size of 1.5 assumed for senior units under With Action Condition.**			
Businesses	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐	
If "yes", specify the following:				
No. and type	**TBD/retail**	**No change**	**TBD/retail, community facility**	**TBD**
No. and type of workers by business	**Approx. 6**	**No change**	**Approx. 22 retail/Approx. 17 community facility**	**16 retail, 17 community facility**
No. and type of non-residents who are not workers	**TBD**	**No change**	**TBD**	**TBD**
Briefly explain how the number of businesses was calculated	**Retail including dining: 333 sf/employee. Community facility: 1,000 sf/employee.**			
Other (students, visitors, concert-goers, etc.)	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■	
If any, specify number				
Briefly explain how the number was calculated				
Zoning				
Zoning classification	**C6-4**	**No change**	**No change**	**No change**
Maximum amount of floor area that can be developed	**145,031 sf x 10.0 FAR = 1,450,310 sf 12.0 FAR = 1,740,372 sf**	**No change**	**No change**	**No change**
Predominant land use and zoning classifications within land use study areas or a 400-foot radius of proposed project	**Residential, commercial, transportation/utility, open space, C6-4, M1-4, R7-2**	**No change**	**No change**	**No change**

Table 2C
Site 6A

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, specify the following				
Describe type of residential structures	**Lot 1: 1 19-story building Lot 5: N/A**	**No change**	**Lot 1: No change Lot 5: 1 62-story building**	**Lot 5: 1 62-story building**
No. of dwelling units	**Lot 1: 256 Lot 5: N/A**	**No change**	**Lot 1: No change Lot 5: 765**	**Lot 5: +765**
No. of low- to moderate-income units	**Lot 1: 128 Lot 5: N/A**	**No change**	**Lot 1: No change Lot 5: 191**	**Lot 5: +191**
Gross Floor Area (sq. ft.)	**Lot 1: 262,877 gsf**	**No change**	**Lot 1: No change Lot 5: 655,463 gsf**	**Lot 5: +655,463 gsf**
Commercial	Yes □ No ■	Yes □ No ■	Yes ■ No □	
If yes, specify the following:				
Describe type (retail, office, other)			**Lot 5: Retail**	**Retail**
Gross floor area (sq. ft.)			**Lot 5: 2,506 gsf**	**Lot 5: +2,506 gsf**
Manufacturing/Industrial	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If yes, specify the following:				
Type of use				
Gross floor area (sq. ft.)				
Open storage area (sq. ft.)				
If any unenclosed activities, specify				
Community Facility	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If yes, specify the following				
Type				
Gross floor area (sq. ft.)				
Vacant Land	Yes ■ No □	Yes ■ No □	Yes □ No ■	
If yes, describe	**Lot 5: Approximately 20,177-sf paved undeveloped site**	**Lot 5: No change**		
Other Land Uses	Yes □ No ■	Yes □ No ■	Yes ■ No □	
If yes, describe			**Lot 5: 3,200 sf private open space *(new)***	**Lot 5: +3,200 sf**
Parking				
Garages	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If yes, specify the following:				
No. of public spaces				
No. of accessory spaces				
Lots	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If yes, specify the following:				
No. of public spaces	**Lot 1: 0**	**Lot 1: No change**	**Lot 1: No change**	**Lot 1: No change**
No. of accessory spaces	**Lot 1: 35**	**Lot 1: No change**	**Lot 1: No change**	**Lot 1: No change**
Population				
Residents	Yes ■ No □	Yes ■ No □	Yes ■ No □	
If "yes", specify number	**Approx. 542**	**No change**	**Approx. 2,122**	**1,580**
Briefly explain how the number of residents was calculated	**Average household size of 2.15 from Manhattan Community District 3 Profile (Sources: U.S. Census Bureau, 2000 and 2010 Censuses SF1 Population Division - NYC Department of City Planning [Dec 2011]). Average household size of 1.5 assumed for senior units under With Action Condition.**			
Businesses	Yes □ No ■	Yes □ No ■	Yes ■ No □	
If "yes", specify the following:				
No. and type			**TBD/retail**	
No. and type of workers by business	**0**	**0**	**Approx. 8**	**8**
No. and type of non-residents who are not workers	**TBD**	**TBD**	**TBD**	**TBD**
Briefly explain how the number of businesses was calculated	**Retail including dining: 333 sf/employee.**			
Other (students, visitors, concert-goers, etc.)	Yes □ No ■	Yes □ No ■	Yes □ No ■	
If any, specify number				
Briefly explain how the number was calculated				
Zoning				
Zoning classification	**C6-4**			
Maximum amount of floor area that can be developed	**The maximum amount of floor area that can be developed on the site today as per the LSRD is 262,877 sf, which is the zfa of the existing building.**	**No change**	**856,284 sf (71,357 sf (combined area of Lots 1 and 5 [71,357 sf] x 12.0 FAR) minus 262,587 sf (existing building on Lot 1) = 593,697 sf**	**No change**
Predominant land use and zoning classifications within land use study areas or a 400-foot radius of proposed project	**Residential, commercial, transportation/utility, open space, C6-4, M1-4, R7-2**	**No change**	**No change**	**No change**

Table 2D
Incremental Increases for Each Project Site

	SITE 4 (4A/4B)—INCREMENT	SITE 5—INCREMENT	SITE 6A—INCREMENT
Land Use			
Residential	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐
If yes, specify the following			
Describe type of residential structures	**+79 floors**	**Lots 1/2: +69 floors**	**Lot 5: 1 62-story building**
No. of dwelling units	**+up to 660 DUs**	**Lots 1/2: +up to 1,350 DUs**	**Lot 5: +up to 765 DUs**
No. of low- to moderate-income units	**+up to 165 DUs**	**Lots 1/2: +up to 338 DUs**	**Lot 5: + up to 191 DUs**
Gross Floor Area (sq. ft.)	**+615,217 gsf**	**Lots 1/2: +1,227,932 gsf**	**Lot 1: No change** **Lot 5: +655,463 gsf**
Commercial	Yes ■ No ☐	Yes ☐ No ■	Yes ■ No ☐
If yes, specify the following:			
Describe type (retail, office, other)	**N/A**	**Retail**	**Retail**
Gross floor area (sq. ft.)	**+3,124 gsf**	**Lot 1: +5,258 gsf**	**Lot 5: +2,506 gsf**
Manufacturing/Industrial	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■
If yes, specify the following:			
Type of use			
Gross floor area (sq. ft.)			
Open storage area (sq. ft.)			
If any unenclosed activities, specify			
Community Facility	Yes ■ No ☐	Yes ■ No ☐	Yes ☐ No ■
If yes, specify the following			
Type	**No change**	**Lot 1: No change** **Lots 1/2: General community facility use**	**N/A**
Gross floor area (sq. ft.)	**No change**	**Lots 1/2: +17,028 gsf**	**N/A**
Vacant Land	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■
If yes, describe			
Other Land Uses	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐
If yes, describe	**Lot 76: No change**	**Lots 1/2: 19,579 gsf private open space *(new)***	**Lot 5: 3,200 sf private open space *(new)***
Parking			
Garages	Yes ■ No ☐	Yes ■ No ☐	Yes ☐ No ■
If yes, specify the following:			
No. of public spaces	**N/A**	**0 (No change)**	**N/A**
No. of accessory spaces	**No change**	**Lot 2: +103**	**N/A**
Lots	Yes ■ No ☐	Yes ☐ No ■	Yes ■ No ☐
If yes, specify the following:			
No. of public spaces	**No change**	**0 (No change)**	**Lot 1: No change**
No. of accessory spaces	**(4) accessory spaces**	**Lot 2: (103)**	**Lot 1: No change**
Population			
Residents	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐
If "yes", specify number			
Briefly explain how the number of residents was calculated	**Average household size of 2.15 from Manhattan Community District 3 Profile (Sources: U.S. Census Bureau, 2000 and 2010 Censuses SF1 Population Division - NYC Department of City Planning [Dec 2011]). Average household size of 1.5 assumed for senior units under With Action Condition.**		
Businesses	Yes ■ No ☐	Yes ■ No ☐	Yes ■ No ☐
If "yes", specify the following:			
No. and type	**TBD/retail, community facility**	**No change**	**TBD/retail, community facility**
No. and type of workers by business	**Approx. 42 retail, 28 community facility**	**No change**	**Approx. 74 retail, 45 community facility**
No. and type of non-residents who are not workers	**TBD**	**TBD**	**TBD**
Briefly explain how the number of businesses was calculated	**Retail including dining: 333 sf/employee. Community facility: 1,000 sf/employee.**		
Other (students, visitors, concert-goers, etc.)	Yes ☐ No ■	Yes ☐ No ■	Yes ☐ No ■
If any, specify number			
Briefly explain how the number was calculated			
Zoning			
Zoning classification	**C6-4**		
Maximum amount of floor area that can be developed	**No change**	**No change**	**No change**
Predominant land use and zoning classifications within land use study areas or a 400-foot radius of proposed project	**No change**	**No change**	**No change**

WITH ACTION SCENARIO

In the With Action scenario, the proposed projects described in Section I above would be constructed on the project sites.

It is assumed that, in addition to modifying the amount of floor area, number of dwelling units, lot coverage, and open space available to the project sites under the LSRD, the minor modifications to the LSRD would also establish building envelope and site plan controls for each project. Because the LSRD site plans will provide controls with respect to the maximum building envelopes and programs, the analysis will assume the details of the proposed programs and designs as the reasonable worst-case development scenario.

E. CITY ENVIRONMENTAL QUALITY REVIEW

CEQR OVERVIEW

New York City has formulated an environmental review process, CEQR, pursuant to the State Environmental Quality Review Act (SEQRA) and its implementing regulations (Part 617 of 6 New York Codes, Rules and Regulations). The City's CEQR rules are found in Executive Order 91 of 1977 and subsequent rules and procedures adopted in 1991 (62 Rules of the City of New York, Chapter 5). CEQR's mandate is to assure that governmental agencies undertaking actions within their discretion take a "hard look" at the environmental consequences of each of those actions so that all potential significant environmental impacts of each action are fully disclosed, alternatives that reduce or eliminate such impacts are considered, and appropriate, practicable measures to reduce or eliminate such impacts are adopted.

The CEQR process begins with selection of a "lead agency" for the review. The lead agency is generally the governmental agency which is most responsible for the decisions to be made on a proposed action and which is also capable of conducting the environmental review. For the proposed Two Bridges LSRD projects, the Department of City Planning (DCP), acting on behalf of CPC, is the CEQR lead agency.

DCP, after reviewing the Environmental Assessment Statement (EAS), has determined that the proposed projects have the potential for significant adverse environmental impacts and that an EIS must be prepared. A public scoping of the content and technical analysis of the EIS is the first step in its preparation, as described below. Following completion of scoping, the lead agency oversees preparation of a draft EIS (DEIS) for public review.

DCP and CPC will hold a public hearing during the Commission's period for consideration of the application. That hearing record is held open for 10 days following the open public session, at which time the public review of the DEIS ends. The lead agency then oversees preparation of a final EIS (FEIS), which incorporates all relevant comments made during public review of the DEIS. The FEIS is the document that forms the basis of CEQR Findings, which the lead agency and each involved agency (if applicable) must make before taking any action within its discretion on the proposed actions.

COMMUNITY OUTREACH MEETINGS

Prior to the public scoping meeting and DEIS hearing, three community outreach meetings were held regarding the environmental review process. A fourth meeting will be held between the scoping meeting and the certification of the DEIS. Though these community outreach meetings

are not required under CEQR, the three development teams have committed to providing additional opportunities during the environmental review process to gain insight and input from the community and to establish strategies for working with the community through the planning and design stages of the three proposed projects.

SCOPING

The CEQR scoping process is intended to focus the EIS on those issues that are most pertinent to the proposed actions. The process at the same time allows other agencies and the public a voice in framing the scope of the EIS. During the period for scoping, those interested in reviewing the draft EIS scope may do so and give their comments in writing to the lead agency or at the public scoping meeting. The period for comments on the Draft Scope of Work will remain open for 10 days following the meeting, at which point the scope review process will be closed. The lead agency will then oversee preparation of a Final Scope of Work, which incorporates all relevant comments made on the scope and revises the extent or methodologies of the studies, as appropriate, in response to comments made during scoping. The DEIS will be prepared in accordance with the Final Scope of Work.

F. PROPOSED SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The scope of the EIS will conform to all applicable laws and regulations and will follow the guidance of the *CEQR Technical Manual*.

The EIS will contain:

- A description of the proposed projects and the environmental setting;
- A statement of the environmental impacts of the proposed actions, including short- and long-term effects, and typical associated environmental effects;
- An identification of any adverse environmental effects that cannot be avoided if the proposed actions are implemented;
- A discussion of reasonable alternatives to the proposed actions;
- An identification of any irreversible and irretrievable commitments of resources that would be involved if the proposed project is built; and
- A description of mitigation measures proposed to minimize or fully mitigate any significant adverse environmental impacts.

The analyses for the proposed actions will be performed for the year that the proposed projects will be substantially operational, which is 2021. The No Action future baseline condition to be analyzed in all technical chapters will assume that absent the proposed actions, the project sites would continue in their existing conditions and that the existing retail in the Lot 76 building on Site 4 (4A/4B) would be re-tenanted.

In order to understand how the cumulative impacts of the proposed projects might change if one or more of the projects is delayed indefinitely or ultimately not pursued, the EIS will also provide an analysis of certain permutations in a separate chapter. The analysis will be limited to evaluating specific locations or facilities for which impacts and mitigation needs have been identified under the cumulative impact analysis of all three projects. The assessments for the relevant technical areas will be targeted to focus on those impacts.

Below is a description of the environmental categories in the *CEQR Technical Manual* that will be analyzed in the EIS and a description of the tasks to be undertaken. For all environmental categories discussed below, the EIS tasks will include consideration of relevant information obtained in the three community outreach meetings conducted by the project teams prior to scoping, as described above.

PROJECT DESCRIPTION

This chapter introduces the reader to the proposed projects and sets the context in which to assess impacts. The chapter gives the public and decision-makers a baseline to compare the With Action scenario, the No Action scenario, and any alternative options, as appropriate.

The chapter will contain a brief history of the uses on the project sites; a statement of the purpose and need for the proposed actions; a detailed description of the proposed projects; and a discussion of the procedures to be followed and the role of the EIS in the process. The chapter will also describe the analytic framework for the EIS and provide screening analyses for technical areas that do not require a detailed analysis.

The project description will include a discussion of key project elements, such as site plans and elevations, access and circulation, and other project features. The section on required approvals will describe all public actions required to develop the projects. The role, if any, of any other public agency in the approval process will also be described. The role of the EIS as a full disclosure document to aid in decision-making will be identified and its relationship to any other approval procedures will be described. The nature of the cumulative impact analysis undertaken under the EIS will also be described.

LAND USE, ZONING, AND PUBLIC POLICY

The proposed projects are understood to require minor modifications of the Two Bridges LRSD. Therefore, the EIS will include an assessment of the proposed actions' consistency with land use, zoning, and public policy, in accordance with the *CEQR Technical Manual*.

A land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project. The analysis also considers the project's compliance with and effect on the area's zoning and other applicable public policies. That assessment, which provides a baseline for other analyses, will consist of the following tasks:

- Provide a brief development history of the project sites and study area. The study area will include the area within approximately ¼-mile of the boundaries of the LSRD.
- Based on existing studies, information included in existing geographic information systems (GIS) databases for the area and field surveys, identify, describe, and graphically present predominant land use patterns and site utilization on the project sites and in the study area. Recent land use trends and major factors influencing land use trends will be described.
- Describe and map existing zoning and any recent zoning actions on the project sites and in the ¼-mile study area.
- Summarize other public policies that may apply to the project sites and study area, including any formal neighborhood or community plans and the City's Comprehensive Waterfront Plan.
- Prepare a list of other projects expected to be built in the study area that would be completed before or concurrent with the proposed projects (No Action projects). Describe the effects of

these projects on land use patterns and development trends. Also, describe any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study area, including plans for public improvements.

- Describe the proposed actions and provide an assessment of the impacts of the proposed actions on land use and land use trends, zoning, and public policy. Consider the effects related to issues of compatibility with surrounding land use, consistency with zoning and other public policy initiatives, and the effect of the projects on development trends and conditions in the area.
- Since the project sites are located in the Coastal Zone, an assessment of the projects' consistency with the Waterfront Revitalization Program (WRP) also will be prepared. This includes the preparation of a WRP Consistency Assessment Form (CAF). The WRP CAF will address in part the proposals flood resiliency, both to current flood hazards and to future flood hazards, with sea level rise and climate change.

SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Although socioeconomic changes may not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services, or economic investment in a way that changes the socioeconomic character of the area. This chapter will assess the proposed actions' potential effects on the socioeconomic character of the surrounding area.

According to the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement; and (5) adverse effects on a specific industry.

The proposed projects would not result in any direct residential or business displacement. For Site 4(4A/4B), in preparation for the proposed project, the 10 units at 80 Rutgers Slip that would be relocated to the new building would be vacated. This would occur (i) as existing residents leave the 10 units, or (ii) by moving residents of these units to other units that become available in the building or in a nearby building. No residents would be permanently displaced from the building. With respect to indirect displacement and adverse effects on a specific industry, each of the proposed projects would exceed a CEQR threshold warranting assessment (development of 200 or more dwelling units). The methodology for each assessment is described below.

INDIRECT RESIDENTIAL DISPLACEMENT

Indirect residential displacement is the involuntary displacement of residents that results from a change in socioeconomic conditions created by a proposed action. Indirect residential displacement can occur if a project either introduces a trend or accelerates a trend of changing socioeconomic conditions that leads to increased residential rents, which in turn may displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. To assess this potential impact, the analysis will address a series of threshold questions in terms of whether the proposed projects would substantially alter the demographic character of an area through population change or the introduction of more costly housing.

The indirect residential displacement analysis will use the most recent available U.S. Census data, New York City Department of Finance's Real Property Assessment Data (RPAD), as well as current real estate market data to present demographic and residential market trends and conditions for the study area. The presentation of study area characteristics will include population estimates, housing tenure and vacancy status, current market rate rents, and median household income. The preliminary assessment will carry out the following step-by-step evaluation:

- **Step 1:** Determine if the proposed actions would add substantial new population with different income as compared with the income of the study area population. If the expected average incomes of the new population would be similar to the average incomes of the study area populations, no further analysis is necessary. If the expected average incomes of the new population would exceed the average incomes of the study area populations, then Step 2 of the analysis will be conducted.
- **Step 2:** Determine if the proposed actions' population is large enough to affect real estate market conditions in the study area. If the population increase may potentially affect real estate market conditions, then Step 3 will be conducted.
- **Step 3:** Determine whether the study area has already experienced a readily observable trend toward increasing rents and the likely effect of the proposed actions on such trends.
  - If the vast majority of the study area has already experienced a readily observable trend toward increasing rents and new market development, further analysis is not necessary. However, if such trends could be considered inconsistent and not sustained, a detailed analysis may be warranted.
  - If no such trend exists either within or near the study area, the actions could be expected to have a stabilizing effect on the housing market within the study area by allowing limited new housing opportunities and investment. In this circumstance no further analysis is necessary.
  - If those trends do exist near to or within smaller portions of the study area, the action could have the potential to accelerate an existing trend. In this circumstance, a detailed analysis will be conducted.

A detailed analysis, if warranted, would utilize more in-depth demographic analysis and field surveys to characterize existing conditions of residents and housing, identify populations at risk of displacement, assess current and future socioeconomic trends that may affect these populations, and examine the effects of the proposed actions on prevailing socioeconomic trends and, thus, impacts on the identified populations at risk. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

INDIRECT BUSINESS DISPLACEMENT

The indirect business displacement analysis determines whether the proposed actions may introduce trends that make it difficult for those businesses that provide products and services essential to the local economy, or those subject to regulations or publicly adopted plans to preserve, enhance, or otherwise product them, to remain in the area. The purpose of this analysis is to determine whether a proposed action has potential to introduce such a trend. The preliminary assessment will entail the following tasks:

- Identify and characterize conditions and trends in employment and businesses within the study area. This analysis will be based on field surveys and employment data from the New York State Department of Labor and/or Census.
- Determine whether the proposed actions would introduce enough of a new economic activity to alter existing economic patterns.
- Determine whether the proposed actions would add to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing economic patterns.
- Determine whether the proposed actions would indirectly displace residents, workers, or visitors who form the customer base of existing businesses in the area.

If the preliminary assessment determines that the proposed actions could introduce trends that make it difficult for businesses that are essential to the local economy to remain in the area, a detailed analysis will be conducted. Following *CEQR Technical Manual* guidelines, the detailed analysis would determine whether the proposed actions would increase property values and thus increase rents for a potentially vulnerable category of business and whether relocation opportunities exist for those businesses. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

Based on the findings of the indirect business displacement assessment described above, a preliminary assessment of potential effects on specific industries will examine the following:

- Whether the proposed actions would significantly affect business conditions in any industry or category of businesses within or outside the study area; and
- Whether the proposed actions would indirectly substantially reduce employment or impair the economic viability in a specific industry or category of businesses.

The industries or categories of businesses that will be considered in this assessment are those specified in the North American Industry Classification System (NAICS) as promulgated by the U.S. Census Bureau.

COMMUNITY FACILITIES AND SERVICES

As defined for CEQR analysis, community facilities are public or publicly funded schools, libraries, child care centers, health care facilities and fire and police protection. A project can affect community facility services directly, when it physically displaces or alters a community facility; or indirectly, when it causes a change in population that may affect the services delivered by a community facility. This chapter of the EIS will evaluate the effects on community services due to the proposed actions.

The proposed actions would not have a direct effect on community facilities, as there would not be a physical displacement or alteration of any community facilities. According to the *CEQR Technical Manual*, preliminary thresholds indicating the need for detailed analyses of indirect effects on community facilities are as follows:

- Public Schools: The *CEQR Technical Manual* preliminary threshold indicating the need for detailed analysis of public schools is the generation of more than 50 new elementary/middle school or 150 high school students. For Manhattan, an increase of more than 310 units

exceeds the threshold for elementary/middle school and more than 2,492 units for high school.

- Libraries: The *CEQR Technical Manual* preliminary threshold indicating the need for detailed analysis of libraries is a greater than 5 percent increase in the ratio of residential units to libraries in the borough. For Manhattan, this is equivalent to residential population increase of 901 residential units.
- Health Care Facilities: The ability of health care facilities to provide services for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of health care facilities is included only if a proposed project would directly affect the physical operations of, or access to and from, a hospital or public health clinic, or if a proposed action would create a sizeable new neighborhood where none existed before.
- Child Care Facilities (publicly funded): The *CEQR Technical Manual* preliminary threshold indicating the need for detailed analysis is the generation of more than 20 eligible children based on the number of new low/moderate-income residential units by borough. For Manhattan, an increase of 170 low/moderate-income residential units exceeds this threshold.
- Fire Protection: The ability of the fire department to provide fire protection services for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of fire protection services is included only if a proposed action would directly affect the physical operations of, or access to and from, a fire station house, or if a proposed action would create a sizeable new neighborhood where none existed before.
- Police Protection: The ability of the police department to provide public safety for a new project usually does not warrant a detailed assessment under CEQR. Generally, a detailed assessment of police protective services is included only if a proposed action would directly affect the physical operations of, or access to and from, a precinct house, or if a proposed action would create a sizeable new neighborhood where none existed before.

Based on these thresholds, the proposed actions are not expected to trigger detailed analyses of outpatient health care facilities or police and fire protection serving the project area. However, the proposed actions will require analyses for public elementary, middle, and high schools, publicly funded day care, and libraries. This chapter will therefore include analyses of public schools, publicly funded day care, and libraries, following the guidance of the *CEQR Technical Manual*. These analyses would include the tasks described below.

PUBLIC SCHOOLS

The analysis of public elementary, middle, and high schools will include the following tasks:

- Identify schools serving the project area and discuss the most current information on enrollment, capacity, and utilization from the Department of Education. The primary study area for the analysis of elementary and intermediate schools should be the school districts' "sub-district" in which the project is located. The proposed actions also trigger an analysis of high schools, which are assessed on a borough-wide basis.
- Based on the data provided from the Department of Education, the School Construction Authority, and DCP, future conditions in the area without the proposed actions will be determined.
- Based on methodology presented in the *CEQR Technical Manual*, the potential impact of students generated by the proposed actions on public elementary, middle, and high schools will be assessed.

PUBLICLY FUNDED CHILD CARE

The analysis of child care will include the following tasks:

- Identify existing publicly funded group child care and Head Start facilities within approximately 1.5 miles of the project sites.
- Describe each facility in terms of its location, number of slots (capacity), and existing enrollment. Care will be taken to avoid double-counting slots that receive both ACS and Head Start funding. Information will be based on publicly available information and/or consultation with the Administration for Children's Services' Division of Early Care and Education (ECE).
- Any expected increases in the population of children under 6 within the eligibility income limitations (i.e., children in families that have incomes at or below 200 percent Federal Poverty Level), based on CEQR methodology, will be discussed as potential additional demand, and the potential effect of any population increases on demand for publicly funded group child care and Head Start services in the study area will be assessed. The potential effects of the additional eligible children resulting from the proposed actions will be assessed by comparing the estimated net demand (number of child care-eligible children generated by the proposed projects) over capacity (number of available child care "slots" in the study area) to the net demand over capacity estimated in the No Action condition.

LIBRARIES

The analysis of libraries will include the following tasks:

- Describe and map the local libraries and catchment areas in the vicinity of the project sites.
- Identify the existing user population, branch holdings and circulation. Based on this information, estimate the holdings per resident.
- Determine conditions in the future without the proposed actions based on planned developments and known changes to the library system.
- Based on the population to be added by the proposed actions, estimate the holdings per resident and compare conditions in the future with the proposed actions to conditions in the future without the proposed actions.

OPEN SPACE

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct effect on an area open space (e.g., displacement of an existing open space resource) or an indirect effect through increased population size. For the proposed projects—which are located in a portion of Manhattan Community District (CD) 3 that is considered neither underserved nor well-served by open space—an assessment would be required if the proposed projects' population is greater than 200 residents or 500 employees.

Compared to conditions in the future No Action condition, the proposed actions are not expected to result in an incremental increase of 500 or more employees; therefore, an assessment of the potential for indirect effects on open space due to an increased worker population is not warranted. However, the increase in the residential population resulting from the proposed actions will exceed the 200-resident CEQR threshold requiring a residential open space analysis. The methodology set forth in the *CEQR Technical Manual* consists of establishing a study area for analysis, calculating the total population in the study area, and creating an inventory of

publicly accessible open spaces within a 1/2-mile of the project sites; this inventory will include examining these spaces for their facilities (active vs. passive use), condition, and use (crowded or not). The chapter will project conditions in the No Action scenario, and assess impacts of the proposed actions based on quantified ratios and qualitative factors.[8] The new and enhanced private open spaces to be created on the project sites will be described and considered in the analysis qualitatively. The analysis will begin with a preliminary assessment to determine the need for further analysis. If warranted, a detailed assessment will be prepared, following the guidelines of the *CEQR Technical Manual*.

SHADOWS

The *CEQR Technical Manual* requires a shadows assessment for proposed actions that would result in new structures greater than 50 feet in incremental height, or of any height if the project site is adjacent to, or across the street from, a sunlight-sensitive resource. Sunlight-sensitive resources include publicly accessible open spaces, sunlight-sensitive features of historic resources, and natural features.

The proposed projects will result in new structures more than 50 feet taller than what would exist on the sites in the No Action condition, and therefore a shadows assessment will be conducted to determine whether new shadows could be cast on any nearby sunlight sensitive resources. Tasks will include:

- Develop a base map illustrating the project sites in relationship to publicly accessible open spaces, historic resources with sunlight-dependent features, and natural features in the area.
- Determine the longest possible shadows that could result from the proposed actions to determine whether it could reach any sunlight-sensitive resources at any time of year.
- Develop a three-dimensional computer model of the elements of the base map developed in the preliminary assessment, the proposed buildings, and the No Action condition.
- Using three-dimensional computer modeling software, determine the extent and duration of new shadows that would be cast on sunlight-sensitive resources as a result of the proposed actions on four representative days of the year.
- Document the analysis with graphics comparing shadows resulting from the No Action scenario with shadows in the With Action scenario, with incremental shadow highlighted in a contrasting color. Include a summary table listing the entry and exit times and total duration of incremental shadow on each applicable representative day for each affected resource.
- Assess the significance of any shadow impacts on sunlight-sensitive resources. If any significant adverse shadow impacts are identified, identify and assess potential mitigation strategies.

[8] The *CEQR Technical Manual* guidelines suggest that a quantitative open space impact may result when a project would reduce the study area's open space ratio by more than 5 percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. In areas that are extremely lacking in open space, a reduction as small as 1 percent may be considered significant, depending on the area of the City.

HISTORIC AND CULTURAL RESOURCES

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. Historic resources include designated New York City Landmarks (NYCLs) and Historic Districts (NYCHDs); properties calendared for consideration as NYCLs by the Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation; properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing, or properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; and National Historic Landmarks (NHLs).

According to the *CEQR Technical Manual*, a historic and cultural resources assessment is required if a project would have the potential to affect either archaeological or architectural resources. It is expected that the projects all would require subsurface disturbance on their respective sites and thus it will be necessary to analyze the potential impacts of the proposed actions on archaeological resources. Therefore, consistent with the *CEQR Technical Manual*, the historic and cultural resources analysis will include the following tasks:

- Consult with LPC regarding the potential archaeological sensitivity of the project sites. In a comment letter dated March 2, 2017, LPC determined that, based on its review of archaeological sensitivity models and historic maps, there is potential for the recovery of remains from Colonial and 19th Century occupation on the project sites. Accordingly, LPC recommended that an archaeological documentary study be performed for the project sites to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary. A Phase 1A Archaeological Study will be prepared as requested by LPC and summarized in the EIS.
- Map and briefly describe any known architectural resources within a 400-foot study area surrounding the project sites.
- Conduct a field survey by an architectural historian of the study area, to identify any potential architectural resources that could be affected by the proposed actions. Potential architectural resources comprise properties that appear to meet the eligibility criteria for NYCL designation and/or S/NR listing. The field survey will be supplemented, as necessary, with research at relevant repositories, online sources, and current sources prepared by LPC and OPRHP. Determinations of eligibility from LPC will be requested for any potential architectural resources. Map and briefly describe any identified potential architectural resources.
- Evaluate the potential for the proposed actions to result in direct, physical effects on any identified architectural and archaeological resources. Assess the potential for the proposed actions to result in any visual and contextual impacts on architectural resources. Potential effects will be evaluated through a comparison of the No Action condition and the With Action condition.
- If applicable, develop measures to avoid, minimize, or mitigate any adverse impacts on historic and cultural resources, in consultation with LPC.

URBAN DESIGN AND VISUAL RESOURCES

According to the methodologies of the *CEQR Technical Manual*, if a project requires actions that would result in physical changes to a project site beyond those allowable by existing zoning and which could be observed by a pedestrian from street level, a preliminary assessment of

urban design and visual resources should be prepared. As described in the *CEQR Technical Manual*, examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline.

For the EIS, a preliminary assessment of urban design and visual resources will first be prepared. The preliminary assessment will determine whether the proposed actions, in comparison to the No Action condition, would create a change to the pedestrian experience that is significant enough to require greater explanation and further study. The study area for the preliminary assessment of urban design and visual resources will be consistent with that of the study area for the analysis of land use, zoning and public policy. The analysis will also account for longer views to the project sites, including views from the Brooklyn waterfront. The preliminary assessment will include a concise narrative of the existing area, the No Action condition, and the future with the proposed actions. The analysis will draw on information from field visits to the study area and will present photographs, zoning and floor area calculations, building heights, project drawings and site plans, and view corridor assessments. The analysis also will describe potential wind conditions related to the proposed site plans and building massings.

A detailed analysis will be prepared if warranted based on the preliminary assessment. As described in the *CEQR Technical Manual*, examples of projects that may require a detailed analysis are those that would make substantial alterations to the streetscape of a neighborhood by noticeably changing the scale of buildings, potentially obstruct view corridors, or compete with icons in the skyline. The detailed analysis would describe the urban design and visual resources of the project area and the surrounding area. The analysis would describe the potential changes that could occur to urban design and visual resources in the future with the proposed actions, in comparison to the No Action condition, focusing on the changes that could potentially adversely affect a pedestrian's experience of the area. If necessary, mitigation measures to avoid or reduce potential significant adverse impacts will be identified.

NATURAL RESOURCES

Under the *CEQR Technical Manual*, a natural resource is defined as the City's biodiversity (plants, wildlife and other organisms); any aquatic or terrestrial areas capable of providing suitable habitat to sustain the life processes of plants, wildlife, and other organisms; and any areas capable of functioning in support of the ecological systems that maintain the City's environmental stability. Such resources include ground water, soils and geologic features; numerous types of natural and human-created aquatic and terrestrial habitats (including wetlands, dunes, beaches, grasslands, woodlands, landscaped areas, gardens, parks, and built structures); as well as any areas used by wildlife.

The three project sites comprise developed areas with buildings, surface parking, and open space; as such, vegetation is limited primarily to street trees, and there is minimal habitat to support native wildlife. The three project sites are within the 100-year floodplain and 500-year floodplain as indicated on the Federal Emergency Management Agency (FEMA) Revised Preliminary Flood Insurance Rate Maps (PFIRMs).

The natural resources assessment will characterize the existing natural resources within or in the vicinity of the three project sites, including floodplains, terrestrial natural resources (vegetation and wildlife), groundwater resources, and threatened, endangered, and special concern species. The assessment of the potential for the proposed actions to affect natural resources will consider short-term construction effects, long-term effects such as the potential for bird strikes with the

proposed buildings and beneficial impacts to wildlife from any landscaping and establishment of street trees that would be implemented as part of the proposed actions. A discussion of any related permits that may be required will be provided.

The natural resources analysis will include the following tasks:

- On the basis of existing information site reconnaissance, characterize the existing natural resources (floodplains, terrestrial plants, wildlife, groundwater resources, and threatened, endangered, and special concern species), within and adjacent to the three project sites.
- Assess potential effects to natural resources in the future without the proposed actions, accounting for any changes in the study area that may alter terrestrial natural resources in the vicinity of the three project sites.
- Assess potential impacts to natural resources from the proposed actions. Potential impacts to terrestrial resources will be assessed by considering removal of the existing structures and construction of new structures, visual and noise disturbances to wildlife in the vicinity of the three project sites, the potential for bird strikes with the proposed structures, and benefits of landscaping and planting of street trees that would occur as part of the proposed actions. The need for any state or federal approvals will be identified.

The future No Action condition for the natural resources within the three project sites and study area for the propose actions will be described in the EIS as the baseline condition. The potential effects of the proposed actions on natural resources, in comparison to the No Action condition, will be assessed. The short-term and long-term impacts of the proposed actions on the environment will be discussed, as well as concepts for the potential mitigation of identified significant impacts to natural resources.

HAZARDOUS MATERIALS

This chapter of the EIS will include a summary of current Phase I Environmental Site Assessments and any other available hazardous materials studies for Site 4(4A/4B) and Site 6A, as well as general requirements for environmental management during construction including soil management and environmental health and safety. A Phase I ESA uses historical maps, regulatory databases and a site inspection to determine potential sources of contamination. The chapter will summarize the significant conclusions of the Phase I ESAs and any other available studies and will include any requirements for subsurface (Phase II) testing or other activities, such as preparation and implementation of a Remedial Action Plan and Health and Safety Plan, needed either prior to or during construction of the proposed projects to avoid the potential for significant adverse impacts.

Site 5 carries an environmental (E) designation for hazardous materials. Hazardous materials (E) designations fall under the auspices of the NYC Office of Environmental Remediation (OER). Thus, for that site, the hazardous materials section of the EIS will summarize OER's requirements, which the Site 5 project will satisfy in order to avoid hazardous materials impacts.

WATER AND SEWER INFRASTRUCTURE

According to the *CEQR Technical Manual*, a water and sewer infrastructure assessment analyzes whether a proposed project may adversely affect New York City's water distribution or sewer system and, if so, assess the effects of such projects to determine whether their impact is significant, and present potential mitigation strategies and alternatives. Because the proposed actions would introduce an incremental increase above the No Action scenario of more than

1,000 residential units and the project sites are located in a combined sewer area within Manhattan, an analysis of water and sewer infrastructure is warranted. This analysis will consist of the following:

- The existing stormwater drainage system and surfaces (pervious or impervious) on the project sites will be described, and the amount of wastewater and stormwater generated on the sites will be estimated using rates provided in the *CEQR Technical Manual* and DEP's volume calculation worksheet. Drainage areas with direct discharges and overland flow will be presented.
- The existing sewer system serving the project sites will be described based on records obtained from DEP (e.g., sewer network maps, drainage plans). The existing flows to the Newtown Creek Wastewater Treatment Plan (WWTP), which serves the project sites, will be obtained for the latest 12-month period, and the average dry weather monthly flow will be presented.
- Any changes to the sites' stormwater drainage system and surface area expected in the future without the proposed actions will be described. In addition, any changes to the sewer system expected to occur in the future without the proposed actions will be described, based on information provided by DEP.
- The analysis of potential impacts will consider future stormwater generation from the proposed projects. The assessment will discuss any planned sustainability elements that are intended to reduce storm water runoff. Any changes to the sites' proposed surface areas (pervious or impervious) will be described, and runoff coefficients and runoff for each surface type/area will be presented. Volume and peak discharge rates of stormwater from the sites will be determined based on the DEP volume calculation matrix.
- Sanitary sewage generation for the proposed projects will be estimated. The effects of the incremental demand on the system will be assessed to determine the impact on operations of the Newtown Creek WWTP.
- Based on the analyses of future stormwater and wastewater generation, the change in flows and volumes to the sewer system and waterbodies due to the proposed projects will be determined.

SOLID WASTE

A solid waste assessment determines whether an action has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City's Solid Waste Management Plan or with State policy related to the City's integrated solid waste management system. The proposed projects would induce new development that would require sanitation services. If a project's generation of solid waste in the With-Action condition would not exceed 50 tons per week, it may be assumed that there would be sufficient public or private carting and transfer station capacity in the metropolitan area to absorb the increment, and further analysis generally would not be required. As the proposed projects are expected to result in a net increase of more than 50 tons per week, compared to the No Action condition, an assessment of solid waste and sanitation services is warranted. This chapter will provide an estimate of the additional solid waste expected to be generated by the proposed projects and assesses its effects on the City's solid waste and sanitation services. This assessment will:

- Describe existing and future New York City solid waste disposal practices;

- Estimate solid waste generation by the proposed projects for existing, No Action, and With Action conditions; and
- Assess the impacts of the proposed projects' solid waste generation on the City's collection needs and disposal capacity. The proposed projects' consistency with the City's Solid Waste Management Plan will also be assessed.

ENERGY

The *CEQR Technical Manual* recommends a detailed analysis of energy impacts for projects that could significantly affect the transmission or generation of energy or that cause substantial new consumption of energy. Because the proposed projects would not result in any of these conditions, a detailed assessment of energy impacts is not necessary. Nevertheless, the *CEQR Technical Manual* recommends that a project's energy consumption be calculated and disclosed; therefore, the EIS will disclose the projected amount of energy that would be consumed by the proposed projects.

TRANSPORTATION

In accordance with guidance prescribed in the *CEQR Technical Manual*, the evaluation of potential transportation-related impacts associated with a proposed development begins with screening assessments, which encompass the preparation of travel demand estimates and/or trip assignments, to determine if detailed analyses would be warranted to address the potential impacts project-generated trips may have on the transportation system. For the proposed actions, these screening assessments are expected to show that detailed analyses of traffic, transit, pedestrians, vehicle/pedestrian safety, and parking for weekday peak periods would be required. The transportation scope of work is outlined below.

TRAVEL DEMAND PROJECTIONS AND SCREENING ASSESSMENTS

The transportation analysis for the EIS will assess potential impacts associated with trip increments that could occur as a result of the proposed actions. Travel demand estimates and trip assignments will be prepared for the proposed actions. The screening assessments entail evaluating the results of these trip estimates to identify the appropriate study areas for detailed analyses and summarize the findings in a Travel Demand Factors (TDF) memorandum for review and concurrence by the lead agency, the New York City Department of Transportation (DOT), and/or New York City Transit (NYCT). For technical areas determined to require further detailed analyses (i.e., traffic, parking, transit, and/or pedestrians), those analyses will be prepared in accordance with *CEQR Technical Manual* procedures.

TRAFFIC

Given the scale of the proposed projects as well as the proposed mix of uses, a detailed analysis of traffic operations will be required for the weekday AM, midday, and PM peak periods at approximately 30 intersections.

Data Collection and Baseline Traffic Volumes

Data collection efforts will be undertaken pursuant to *CEQR Technical Manual* guidelines. The traffic data collection program will include continuous (9-day) automatic traffic recorder (ATR) counts, intersection turning movement and vehicle classification counts, conflicting bike/pedestrian volumes, and an inventory of existing roadway geometry (including street

widths, travel directions, lane markings, curbside regulations, bus stop locations, etc.) and traffic control. Field observations will be collected that document any traffic queuing, construction activities, or other unusual conditions that would affect normal traffic flows. This program will also document existing driveway activities on the project sites and consider data needs for the mobile source air quality analysis described in the next section. Official signal timing data will be obtained from DOT for incorporation into the capacity analysis described below. Using the collected traffic data, balanced traffic volume networks will be developed for the weekday AM, midday, and PM peak hours.

Existing Conditions Capacity Analysis

The traffic analysis will be performed in accordance with 2000 *Highway Capacity Manual* (HCM) procedures, using software approved by the lead agency and DOT. Analysis results for the weekday AM, midday, and PM peak hours will be tabulated to show intersection, approach, and lane group volume-to-capacity (v/c) ratio, average vehicle delay, and level-of-service (LOS). Congested vehicle movements will be described.

No Action Condition Analysis

The future No Action traffic volumes will incorporate *CEQR Technical Manual* recommended background growth plus trips expected to be generated by nearby development projects. Physical and operational changes that are expected to be implemented independent of the proposed projects, if any, will also be incorporated into the future traffic analysis network. The same intersections selected for analysis under existing conditions will be assessed to identify changes in v/c ratio, average vehicle delay, and LOS. Notable deteriorations in service levels will be described.

With Action Condition Analysis

Incremental vehicle trips associated with the proposed actions will be overlaid onto the No-Action peak hour traffic networks, accounting for also changes in site access and circulation, for analysis of potential impacts. Vehicle movements found to incur delays exceeding the CEQR impact thresholds will be described. For these locations, traffic engineering improvement measures will be explored to mitigate the identified significant adverse traffic impacts to the extent practicable.

TRANSIT

Due to comparatively higher transit ridership on weekday commuter hours than other weekday and weekend time periods, the analysis of potential transit impacts typically considers only the weekday AM and PM peak periods. For the proposed actions, a detailed analysis of control areas and pedestrian circulation elements is expected to be required for the East Broadway Station (F line). In addition, line-haul analyses will be conducted, as warranted, for this subway line and the nearby bus routes (i.e., M22 and M15). If significant adverse impacts are identified, improvement measures will be recommended to mitigate the impacts to the extent practicable. If mitigation measures are needed for station improvements, they will be developed in consultation with NYCT.

PEDESTRIANS

Detailed pedestrian analyses will be conducted for the weekday AM, midday, and PM peak periods. These analyses will consider sidewalk, corner reservoir, and crosswalk facilities

surrounding the project sites and along key routes to nearby transit resources, as determined by the TDF memo and consultation with DOT. Where significant adverse impacts are identified, improvement measures will be recommended to mitigate the impacts to the extent practicable.

VEHICLE/PEDESTRIAN SAFETY

An assessment of vehicular and pedestrian safety issues will be included with the pedestrian analysis. The most recent three years of crash data will be obtained from the New York State Department of Transportation (NYSDOT) for the study area intersections. These data will be analyzed to determine if any of the studied locations may be classified (using CEQR criteria) as high vehicle crash or high pedestrian/bike accident locations and whether trips and changes resulting from the proposed projects would adversely affect vehicular and pedestrian safety at these locations. If any high accident locations are identified, feasible improvement measures will be explored to alleviate potential safety issues.

PARKING

A parking survey will be performed to collect information on the off-street parking supply and utilization within ½-mile of the project sites. For the proposed actions, a parking demand projection will be prepared to determine how the future demand could be accommodated on-site or at surrounding parking resources and to identify potential parking shortfall, if any.

AIR QUALITY

The vehicle trips generated by the proposed actions would potentially exceed the *CEQR Technical Manual's* carbon monoxide (CO) screening threshold of 170 vehicles in a peak hour at any intersection and/or the particulate matter (PM) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, a screening analysis for mobile sources will be performed. If screening thresholds are exceeded, a detailed mobile source analysis would be required. Additionally, the parking facility on Site 5 will also be analyzed to determine its effect on air quality. The proposed project would also introduce sensitive uses within 200 feet of the elevated section of the FDR Drive; therefore, the effects of this existing roadway on the proposed uses need to be analyzed, as recommended in the *CEQR Technical Manual*.

Potential impacts on surrounding uses from the heating and hot water systems that would serve the proposed buildings will be assessed, as will potential impacts on the proposed buildings from existing buildings in the surrounding area. The effect of heating and hot water systems associated with large or major emission sources in existing buildings on the project sites will be analyzed, if required. Since the project sites are within 400 feet of an area zoned for manufacturing, an assessment of uses surrounding the project sites will be conducted to determine the potential for impacts from industrial emissions sources, in accordance with *CEQR Technical Manual* methodologies.

MOBILE SOURCE ANALYSIS

- A screening analysis for CO and PM for the worst case scenario location(s) will be prepared based on the traffic analysis and the above-mentioned CEQR criteria. If screening levels are exceeded, a dispersion analysis would be required, at one or more intersection locations.

- Select emission calculation methodology. Compute vehicular cruise and idle emission factors for the proposed parking facility, using the MOVES 2014a model and applicable assumptions based on guidance by EPA, DEC, and DEP.
- Select appropriate CO and PM background levels for the study area.
- Perform an analysis of CO and PM for the proposed parking facility on Site 5. The analysis will use the procedures outlined in the *CEQR Technical Manual* for assessing potential impacts from proposed parking facilities. Cumulative impacts from on-street sources and emissions from the parking facility will be calculated, where appropriate.
- Evaluate potential impacts by comparing predicted future CO and PM levels with standards, and *de minimis* criteria. If significant adverse impacts are predicted, recommend design measure to minimize impacts.

STATIONARY SOURCE ANALYSIS

- A detailed stationary source analysis will be performed using the EPA AERMOD dispersion model to estimate the potential impacts from the heating and hot water systems for the proposed projects, as well as the potential for impacts on the proposed buildings from existing buildings in the surrounding area. Five years of recent meteorological data, consisting of surface data from the LaGuardia Airport National Weather Service Station, and concurrent upper data from Brookhaven, New York, will be used for the simulation modeling. Concentrations of the air contaminants of concern will be determined at sensitive receptor locations on the proposed project, as well as at off-site locations from the cumulative effects of the emission sources associated with the proposed project. Predicted values will be compared with the corresponding guidance thresholds and national ambient air quality standards.
- Since the project sites are located within 400 feet a manufacturing district, an assessment of uses surrounding the development site will be conducted to determine the potential for impacts from industrial emissions, in accordance with *CEQR Technical Manual* methodologies. A field survey will be performed to determine if there are any processing or manufacturing facilities within 400 feet of the development site. If permit information on any emissions from processing or manufacturing facilities within 400 feet of the development site are identified, an industrial source screening analysis as detailed in the *CEQR Technical Manual*, will be performed.

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

In accordance with the *CEQR Technical Manual*, greenhouse gas (GHG) emissions generated by the proposed projects will be cumulatively quantified, and an assessment of consistency with the City's established GHG reduction goal will be prepared. Emissions will be estimated for the analysis year and reported as carbon dioxide equivalent (CO_2e) metric tons per year for each project and cumulatively. GHG emissions other than carbon dioxide (CO_2) will be included if they would account for a substantial portion of overall emissions, adjusted to account for the global warming potential.

Relevant measures to reduce energy consumption and GHG emissions that could be incorporated into each of the proposed projects will be discussed, and the potential for those measures to reduce GHG emissions will be assessed to the extent practicable.

Since the project sites are located in a flood hazard zone, the potential impacts of climate change on the proposed projects will be evaluated. The discussion will focus on sea level rise and changes in storm frequency projected to result from global climate change and the potential future impact of those changes on project infrastructure and uses.

The analysis will consist of the following subtasks:

- The potential effects of climate change on the project sites will be evaluated based on the best available information. The evaluation will focus on potential future sea and storm levels and the interaction with project infrastructure and uses. The discussion will focus on early integration of climate change considerations into the three project designs to allow for uncertainties regarding future environmental conditions resulting from climate change.
- Direct Emissions—GHG emissions from on-site boilers used for heat and hot water and natural gas used for cooking, if any, will be quantified. Emissions will be based on available project-specific information regarding the project's expected fuel use or carbon intensity factors specified in the *CEQR Technical Manual* where data is not available.
- Indirect Emissions—GHG emissions from purchased electricity off-site and consumed on-site during the projects' operation will be estimated.
- Indirect Mobile Source Emissions—GHG emissions from vehicle trips to and from the project sites will be quantified using trip distances and vehicle emission factors provided in the *CEQR Technical Manual*.
- Emissions from project construction and emissions associated with the extraction or production of construction materials will be qualitatively discussed. Opportunities for reducing GHG emissions associated with construction will be considered.
- Design features and operational measures to reduce the proposed project's energy use and GHG emissions will be discussed and quantified to the extent that information is available.
- Consistency with the City's GHG reduction goal will be assessed. While the City's overall goal is to reduce GHG emissions by 30 percent below 2005 level by 2025, individual project consistency is evaluated based on building energy efficiency, proximity to transit, on-site renewable power and distributed generation, efforts to reduce on-road vehicle trips and/or to reduce the carbon fuel intensity or improve vehicle efficiency for project-generated vehicle trips, and other efforts to reduce the project's carbon footprint.

NOISE

The noise analysis will examine impacts of existing noise sources (e.g., vehicular traffic from adjacent roadways) on the proposed residential and open space uses and the potential impacts of project-generated noise on noise-sensitive land uses nearby. This will include noise monitoring to determine existing ambient noise levels as well as projections of future noise levels based on expected changes in changes in vehicular traffic on adjacent roadways. The subtasks are as follows:

- Select appropriate noise descriptors. Appropriate noise descriptors to describe the existing noise environment will be selected. The L_{eq} and L_{10} levels will be the primary noise descriptors used for the noise analysis. Other noise descriptors including the L_1, L_{10}, L_{50}, L_{90}, L_{min}, and L_{max} levels will be examined when appropriate.
- Perform a screening analysis to determine whether there are any locations where there is the potential for the proposed actions to result in significant noise impacts (e.g., doubling of

noise PCEs) due to project-generated traffic. If the results of the traffic study indicate that a doubling of traffic would occur, a mobile source noise analysis would be performed.

- Select receptor locations for noise exposure analysis purposes. Receptor sites analyzed will include locations where high existing ambient noise levels could adversely affect new residential and other sensitive uses associated with the project.
- Determine existing noise levels. At each of the receptor sites identified above, 20-minute measurements would be performed during typical weekday AM, midday, and PM peak periods. L_1, L_{10}, L_{50}, L_{90}, L_{min}, and L_{max} values will be recorded.
- Data analysis and reduction. The results of the noise measurement program will be analyzed and tabulated
- Determine future noise levels without the proposed actions. Based upon the results of noise level measurements, the results of traffic analysis, and the use of mathematical models, noise levels at each noise receptor location shall be determined.
- Determine future noise levels with the proposed actions. Based upon the results of noise level measurements, the results of traffic analysis, and the use of mathematical models, noise levels at each noise receptor location shall be determined.
- Determine amount of building attenuation required. The level of building attenuation necessary to satisfy CEQR requirements is a function of the exterior noise levels, and will be determined. Projected future noise levels will be compared to appropriate standards and guideline levels. As necessary, general noise attenuation measures needed for project buildings to achieve compliance with standards and guideline levels will be recommended.
- Open Space Noise Analysis. Predicted noise levels at open space areas associated with the proposed projects will be compared to *CEQR Technical Manual* noise exposure guidelines for open space.
- (E) designation requirements. An (E) designation for noise is mapped on Site 5. The Noise chapter of the EIS will summarize the requirements of this (E) designation.
- A detailed analysis of the proposed development's mechanical equipment will not be required, because any stationary noise sources associated with the proposed project (i.e., HVAC/R equipment) would be designed to meet applicable noise regulations, which are more stringent than CEQR noise impact criteria.

PUBLIC HEALTH

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify measures to mitigate such effects.

According to the guidelines of the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated significant adverse impacts are identified in any one of these technical areas and DCP determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

NEIGHBORHOOD CHARACTER

Neighborhood character is established by a number of factors, such as land use, zoning, and public policy; socioeconomic conditions; open space; urban design and visual resources; shadows; transportation; and noise. According to the guidelines of the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in one of the technical areas presented above, or when a project may have moderate effects on several of the elements that define a neighborhood's character.

Methodologies outlined in the *CEQR Technical Manual* will be used to provide an assessment of neighborhood character. Work items for this task are as follows:

- Based on other EIS sections, describe the predominant factors that contribute to defining the character of the neighborhood surrounding the project site.
- Based on planned development projects, public policy initiatives, and planned public improvements, summarize changes that can be expected in the character of the area in the future without the proposed actions.
- Assess and summarize the proposed actions' effects on neighborhood character using the analysis of impacts as presented in other pertinent EIS sections (particularly socioeconomic conditions, open space, urban design and visual resources, shadows, traffic, and noise).

CONSTRUCTION

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as people passing through the area. The construction assessment will focus on areas where construction activities may pose specific environmental problems. According to the *CEQR Technical Manual*, a large-scale development project with an overall construction period lasting longer than two years and that is near to sensitive receptors (i.e., residences, open spaces, etc.) should undergo a construction impact assessment. The construction impact assessment will evaluate the duration and severity of the disruption or inconvenience to nearby sensitive receptors and will be based on a conceptual construction schedule for the proposed projects with anticipated construction duration for each of the proposed projects. The construction assessment will focus on the cumulative construction effects of the proposed projects. This assessment will describe the likely construction schedule and logistics for each project, discuss anticipated on-site activities, and provide estimates of construction workers and truck deliveries.

Technical areas to be assessed include the following:

- Transportation Systems. This assessment will consider losses in lanes, sidewalks, off-street parking on the project sites, and effects on other transportation services (i.e., transit and pedestrian circulation) during the construction periods, and identify the increase in vehicle trips from construction workers and equipment. Issues concerning construction worker parking and truck delivery staging will also be addressed. Based on the trip projections of activities associated with peak construction for the proposed projects, an assessment of potential transportation impacts during construction and how they are compared to the trip projections under the operational condition will be provided. If this effort identifies the need for a separate detailed analysis due to an exceedance of the *CEQR Technical Manual*

quantified transportation analyses thresholds (50 or more vehicle-trips and/or 200 or more transit/pedestrian trips during a given peak hour), such analysis will be prepared.

- Air Quality. Due to the anticipated duration of construction duration, construction of multiple buildings, and proximity to sensitive receptor locations such as residences and nearby open spaces, the proposed projects would have the potential for construction effects related to air quality. A detailed dispersion analysis of construction sources will be performed to determine the potential for air quality impacts on sensitive receptor locations. Air pollutant sources would include combustion exhaust associated with non-road construction engines (e.g., cranes, excavators) and trucks operating on-site, construction-generated traffic on local roadways, as well as onsite activities that generate fugitive dust (e.g., excavation, demolition). The pollutants of concern include carbon monoxide (CO), particulate matter (PM), and nitrogen dioxide (NO_2). The potential for significant impacts will be determined by a comparison of model predicted total concentrations to the National Ambient Air Quality Standards (NAAQS), or by comparison of the predicted increase in concentrations to applicable interim guidance thresholds. The air quality analysis will also include a discussion of the strategies and best management practices to reduce project related air pollutant emissions associated with construction activities.
- Noise and Vibration. A quantitative construction noise analysis will be prepared to examine potential noise impacts due to construction-related stationary and mobile sources. In the detailed construction noise analysis, existing noise levels will be determined by noise measurements performed at at-grade receptor locations. During the most representative worst-case time periods, noise levels due to construction of the proposed project will be predicted for each sensitive receptor. The noise analysis will also include a discussion of strategies to reduce noise associated with construction activities. Based on the results of the construction noise analysis, if necessary, the feasibility, practicability, and effectiveness of implementing measures to mitigate significant construction noise impacts will be examined.

  Construction activities have the potential to result in vibration levels that may result in structural or architectural damage, and/or annoyance or interference with vibration-sensitive activities. Therefore, a construction vibration assessment will be performed. This assessment will determine critical distances at which various pieces of equipment may cause damage or annoyance to nearby buildings based on the type of equipment, the building construction, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a building than its critical distance, measures to reduce the potential effects of vibrations will be proposed.
- Other Technical Areas. As appropriate, discuss other areas of environmental assessment for potential construction-related impacts, including but not limited to historic and cultural resources, hazardous materials, open space, socioeconomic conditions, community facilities, and land use and neighborhood character.

ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the proposed project. The alternatives are usually defined when the full extent of a proposed project's impacts is identified, but at this time, it is anticipated that they will include the following:

- A No Action Alternative, which describes the conditions that would exist in the future if the proposed actions were not implemented;
- A No Unmitigated Significant Adverse Impacts Alternative, if unavoidable adverse impacts are identified in the EIS, which describes the changes in the proposed program and design which would be necessary in order to eliminate the identified unavoidable adverse impacts; and
- A discussion of other possible alternatives that may be developed in consultation with the lead agency during the EIS preparation process, such as alternatives that may reduce but not eliminate identified unavoidable adverse impacts, or that may be posed by the public during the scoping of the EIS.

For technical areas where impacts have been identified, the alternatives analysis will determine whether these impacts would still occur under each alternative. The analysis of each alternative will be qualitative, except where impacts from the proposed projects have been identified.

ANALYSIS OF PROJECT PERMUTATIONS

In order to understand how the cumulative impacts of the proposed projects might change if one or more of the projects is delayed indefinitely or ultimately not pursued, the EIS will also provide an analysis of such permutations in a separate chapter. The analysis will be limited to evaluating specific locations or facilities for which impacts and mitigation needs have been identified under the cumulative impact analysis of all three projects. The assessments for the relevant technical areas will be targeted to focus on those impacts.

MITIGATION

Where significant adverse impacts have been identified in the EIS, this chapter will describe the measures to mitigate those impacts. These measures will be developed and coordinated with the responsible city and state agencies, as necessary, and also will be the subject of discussion during the community outreach meetings described above. Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts.

SUMMARY CHAPTERS

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the regulations and the *CEQR Technical Manual*. They are as follows:

EXECUTIVE SUMMARY

Once the EIS technical sections have been prepared, a concise executive summary will be drafted. The executive summary will use relevant material from the body of the EIS to describe the proposed actions, environmental impacts, measures to mitigate those impacts, and alternatives to the proposed actions.

UNAVOIDABLE ADVERSE IMPACTS

Those impacts, if any, which could not be avoided and could not be practicably mitigated, will be described in this chapter.

GROWTH-INDUCING ASPECTS OF THE PROPOSED PROJECTS

This chapter will focus on whether the proposed projects would have the potential to induce new development within the surrounding area.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

This chapter focuses on those resources, such as energy and construction materials, that would be irretrievably committed should the proposed projects be built. ✷

APPENDIX A

Table A
LSRD Zoning Calculations

		Parcel	4	5	Notes	6A	6B[1]	7[2]	TOTAL
		Stage (approved)	V (1985,1986), VI (1995)	III (1977)		II (1973)	IV (1982)	I (1972)	
		Block	248	247		246	246	245	
		Lot	15, 70, 76	1, 2		1,5	Condo 1101-1057	1	
ZR Section		**Item**							
Map 12d	1.	**ZONING DISTRICT**	C6-4	C6-4		C6-4	C6-4	C6-4	C6-4
	2.	**LOT AREA**	69,210	145,031		71,357	53,821	31,657	371,076
32-00	3.	**USES PERMITTED**	Use group 1-2 (residential); 3-4 (community facility); 5-12 (retail & commercial)						
	4A.	**Uses existing**	UG 2,3,4,6	UG 2,6		UG 2			
	4B.	**Uses proposed**	UG 2,6	UG 2,4,6	a	UG 2,6			
35-31	5.	**FLOOR AREA PERMITTED**	(R=Residential; CF=Community Facility; C=Commercial)						
33-122, 23-15	5A.	**FAR permitted (R/CF/C)**	10	10		10	10	10	
23-154(a), 23-90		**FAR per. R Inclusionary**	2	2		2	NA	NA	
33-123		**Total FAR Permitted**	12	12		12			
35-23	5B.	**Floor area permitted**							
			69,210 x 12 =	145,031 x 12 =		71,357 x 12 =	53,821 x 10 =	31,657 x 10 =	
		Total any of all uses	830,520	1,740,372		856,284	538,210	316,570	4,281,956
	6.	**FLOOR AREA PROPOSED**							
	6A.	**Residential**							
		Existing (to remain)	289,561	613,047	d	262,877	65,793	278,000	1,509,278
		New	501,518	1,103,620		590,387			2,195,525
		Total	791,079	1,716,667		853,264	65,793	278,000	3,704,803
	6B.	**Community facility**							
		Existing (to remain)	26,322	0		0		5,500	31,822
		New	0	16,362		0			16,362
		Total	26,322	16,362		0	0	5,500	48,184
	6C.	**Commercial**							
		Existing (to remain)	10,726	2,024	b	0			12,750
		New	2,393	5,319		2,506			10,218
		Total	13,119	7,343		2,506	0	0	22,968

[1] Parcel 6B is within the LSRD, but it is not part of the proposed project.
[2] Parcel 7 is within the LSRD, but it is not part of the proposed project.

Table A (cont'd)
LSRD Zoning Calculations

		Parcel	4	5	Notes	6A	6B[3]	7[4]	TOTAL
	6D.	**Total floor area proposed**							
		Existing (to remain)	326,609	615,071	b,d	262,877	65,793	283,500	1,553,850
		New	503,911	1,125,301		593,411	0	0	2,222,105
		Total	830,520	1,740,372		856,288	65,793	283,500	3,775,955
35-40	7.	**DENSITY** (factor = 680)	LSRD refers to "zoning rooms" which no longer exists; currently "dwelling units" are permitted						
23-22			830,520 – 26,322 – 13,119= 791,079	1,740,372 – 16,362 – 7,343 = 1,716,667		856,284 – 0 – 2,506 = 853,778	538,210 – 0 – 0 = 538,210	316,570 – 5,500 – 0 = 311,070	
			790,099 / 680 =	1,716,667 / 680 =		853,264 / 680=	538,210 / 680 =	311,070 / 680 =	
	7A.	**Dwelling units permitted**	1,163	2,525		1,256	791	457	6,192
	7B.	**Dwelling units proposed**							
		Existing	307	490		256	57	250	1,360
		New	660	1,350		765	0	0	2,775
		Total	967	1,840		1,021	57	250	4,135
	8A.	**LOT COVERAGE**	Not applicable						
12-10	8B.	**Lot coverage proposed**	LSRD refers to "lot coverage" for Urban Renewal purposes (expired)						
		Existing	25,728	24,335		13,836	21,931	10,563	96,393
		New	5,952	31,008		15,696	0	0	52,656
		Total	31,680	55,343		29,532	21,931	10,563	149,049
	9A.	**OPEN SPACE**	Not applicable						
12-10	9B.	**Open space proposed**							
		Existing	43,920	120,696		57,521	31,890	21,094	275,121
		Proposed	37,530	89,688		41,825			169,043
35-50	10.	**YARDS**	Existing, no change	Complies		30'			
33-20, 23-40									

[3] Parcel 6B is within the LSRD, but it is not part of the proposed project.
[4] Parcel 7 is within the LSRD, but it is not part of the proposed project.

Table A (cont'd)
LSRD Zoning Calculations

		Parcel	4	5	Notes	6A	6B[3]	7[4]	TOTAL
23-65 35-60, 35-63	11.	**HEIGHT & SETBACK***	Existing, no change	Complies		Tower setback 15' from narrow street and 10' from wide street			
33-40, 23-60									
23-663	12.	**REAR SETBACKS**	Existing, no change	Not required		Not required			
23-711	13.	**MINIMUM DISTANCE****	Existing, no change	Complies		Not applicable			
13-012	14.	**PARKING**							
13-41		**Required accessory**	No new accessory parking required						
		Proposed accessory	Existing, no changes						
		Parking proposed							
		Existing	11	103	b	34	12	30	190
		New	-4	0		0	0	0	-4
		Total	7	103	c	34	12	30	186
36-61	15.	**LOADING**							
36-62		Required accessory	No accessory loading required for community facility, or first 25,000 SF of retail						
		Loading proposed	Existing, no changes						

Notes:
a. UG4 (community facility without sleeping accommodations).
b. Based on Oct. 1976 LSRD plan submitted to CPC with parcel 5 application (760143 ZLM) and Certificate of Occupancy dated Oct. 19, 1979.
c. 103 spaces to be relocated from surface parking lot to parking garage below grade.
d. Existing Residential Floor Area is based on calculation by Handel Architects dated Feb 22, 2016.

A. SUMMARY OF PREVIOUSLY GRANTED LSRD CERTIFICATIONS, AUTHORIZATIONS & SPECIAL PERMITS

PARCEL 7 (STAGE I) AUTHORIZATION—CP 21885

1. Sec. 78-311(a) to permit the distribution of zoning rooms without regard for zoning lot lines and district boundary lines as required by Sec. 23-223.
2. Sec. 78-311(d) to permit the location of buildings without regard for yard regulations as required by Sec. 23-47 and 23-53.
3. Section 78-311(e) to permit the location of buildings without regard for height and setback regulations on the interior of the project as required by Sec. 23-632 and 23-64.

PARCEL 7 (STAGE I) SPECIAL PERMIT—CP21885

4. Sec. 78-312(d) to permit the locations of buildings without regard for height and setback regulations, on the periphery of the project as required by Sec. 23-632 and 23-64.

PARCEL 6A (STAGE II) AUTHORIZATION—CP21885

5. Sec. 78-311(d) to permit the location of buildings without regard for yard regulations as required by Sec. 23-47 and 23-53.

PARCEL 5 (STAGE ILL) SPECIAL PERMITS—C 760143 ZLM

6. Sec. 78-312(d) to authorize minor variations in the front height and setback regulations on the periphery of the development.
7. Sec. 78-312(f) to permit modification of the minimum spacing requirements consistent with the intent of the provisions of Sec. 23-71 (Minimum distance between buildings on a single zoning lot) and to authorize modification of the spacing required by Sec. 78-311(d) (for distance between east building on Parcel 5 and building on Parcel 6A).

PARCEL 6B (STAGE IV) AUTHORIZATIONS—N 830316 ZAM

8. Sec. 78-311(d) to authorize the location of the west building without regard for yard regulations which would otherwise apply along portions of the rear lot line wholly within the development.
9. Sec. 78-311(h) to modify the minimum spacing requirements between the west building on Parcel 6B and the building on Parcel 6A.

PARCEL 4A (STAGE V) AUTHORIZATIONS—N 850737 ZAM

10. Sec. 78-311(e) to authorize minor variations in setback regulations within the development. Deletion of Parcel 8 of Urban Renewal Plan from LSRD Plan Area.

PARCEL 4A (STAGE V) AUTHORIZATIONS—N 860727 ZAM

11. Sec. 78-41 to authorize permitted accessory, off-street parking spaces to be located within the development without regard to zoning lot lines to provide four parking spaces for Parcel 4A.

PARCEL 4B (STAGE VI) AUTHORIZATION—C 950078 ZSM

12. Sec. 78-311(e) authorize location of building without regard for height & setback regulations.

PARCEL 4B (STAGE VI) SPECIAL PERMIT—C 950078 ZSM

13. Sec. 78-312(f) authorize modification of minimum spacing requirements.

PARCEL 4B (STAGE VI) CERTIFICATIONS—C 950078 ZSM

14. Sec. 26-07 certification to modify the no curb cut on wide street regulations as required by Sec. 26-05.
15. Sec. 37-015 certification to waive retail continuity on wide street.

PARCEL 5 (UNDEVELOPED 2013 APPROVAL)—M 120183 ZSM

16. Modification to the LSRD site plan to permit an increase in community facility and total zoning floor area; to authorize a relocation of existing and development of new parking spaces; and to correct zoning calculations

B. HEIGHT & SETBACK(*) AND BUILDING SPACING(**) CONDITIONS PREVIOUSLY GRANTED AUTHORIZATION & SPECIAL PERMITS

*

Site	Location of Front Wall	Sky Exposure Plane Penetration Proposed
4A	8 ft. from Rutgers Slip	None
4B	Rutgers Slip	114.5 feet
5	Cherry Street	140.5 feet
7	Clinton Street	155 feet
	South Street	57 feet

**

Site	Location of Front Wall	Required Distance	Distance Provided
4	4B bldg. to 1 story stores	40.0a feet	30.0 feet
5	East bldg. to West bldg.	222.4 feet	160.0 feet
	East bldg. on 5 to 6A	148.5 feet	60.0 feet
6	West bldg. on 6B to 6A	87.95 feet	37.0 feet

Note: Zoning regulations have changed since these actions were granted (wall to wall = 40'; window to wall = 50'; window to window= 60').

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Draft Travel Demand Factors Memorandum

To: Two Bridges Project File
From: AKRF, Inc.
Date: March 27, 2017
Re: Travel Demand Analysis

A. INTRODUCTION

This memorandum details the trip generation assumptions and travel demand estimates for the Two Bridges Large Scale Residential Development (LSRD) projects in the Lower East Side neighborhood of Manhattan (see **Figure 1**). The three project sites—Site 4 (4A/4B), Site 5, and Site 6A within the Two Bridges LSRD—are generally bounded by Cherry Street to the north, Pike Street to the west, Clinton Street to the east, and South Street to the south. Trip assignments were developed for the proposed projects to identify transportation elements requiring a detailed analysis of potential impacts.

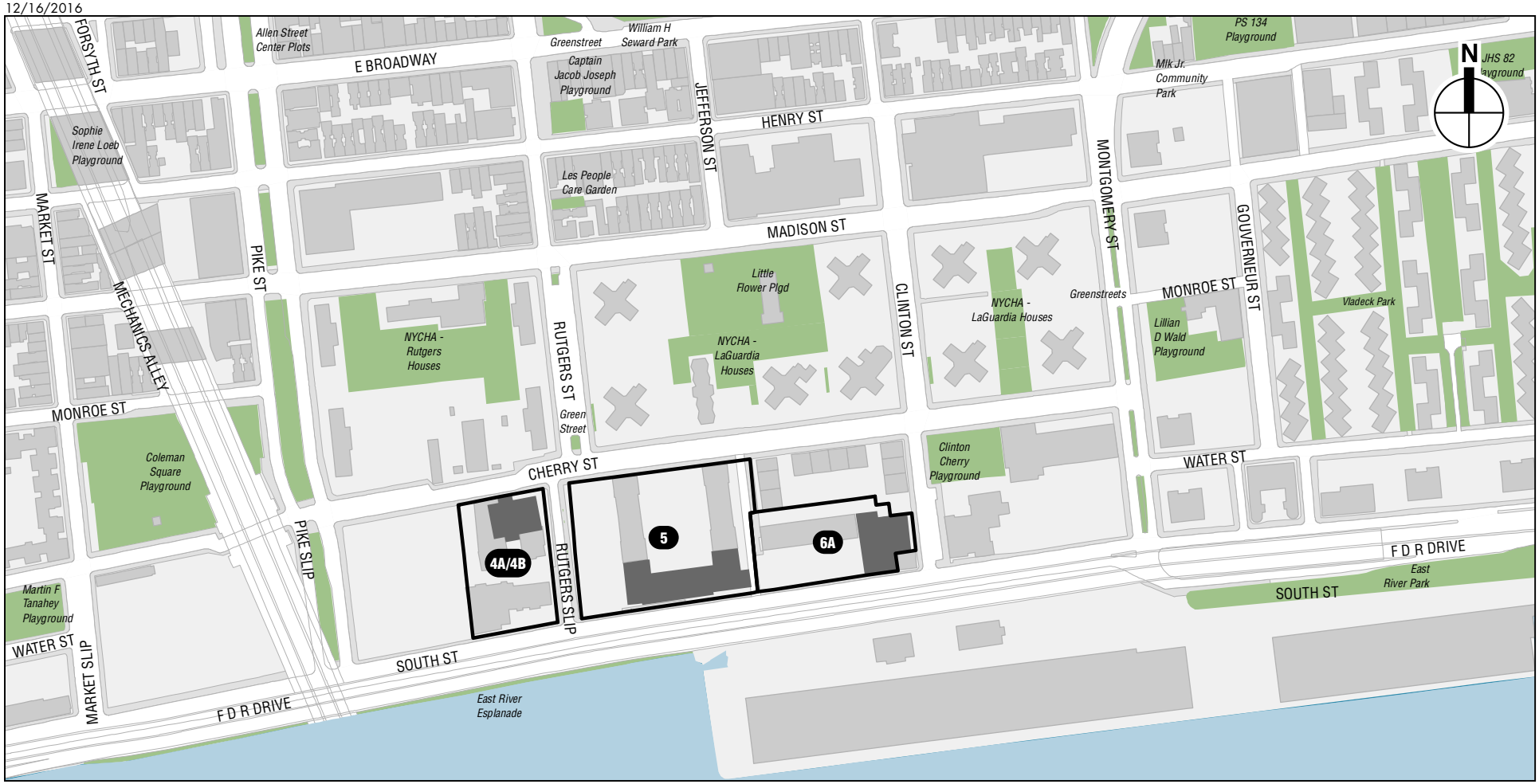
In the future with the proposed actions, the project sites would be developed with a total of approximately 2,775 dwelling units, 10,888 gross square feet (gsf) of local retail, and a 17,028 gsf community facility. The community facility space on Site 5 is as yet unprogrammed; however, for the purposes of a conservative analysis, it is assumed that this space could be utilized as an accessory early childhood educational facility.

Table 1 provides program assumptions under the Reasonable Worst Case Development Scenario (RWCDS) With Action conditions.

Table 1
Future With the Proposed Actions (RWCDS)

Site	Components	Future With the Proposed Actions (With Action)
4A/4B	Residential (dwelling units)	660
	Local Retail (1,000 gsf)	3,124
5	Residential (dwelling units)	1,350
	Local Retail (1,000 gsf)	5,258
	Community Facility (1,000 gsf)	17,028
6A	Residential (dwelling units)	765
	Local Retail (1,000 gsf)	2,506
Note: The programs noted above do not include existing uses on the three sites that would remain in the With Action condition.		

12/16/2016



Project Sites

Proposed Buildings

0 400 FEET

TWO BRIDGES LSRD

Project Location
Figure 1

PRINCIPAL CONCLUSIONS

TRAFFIC

Based on the detailed assignment of project-generated vehicle trips, numerous area intersections would incur incremental trips exceeding the *City Environmental Quality Review (CEQR) Technical Manual* analysis threshold of 50 peak hour vehicle-trips. In consideration of the area's existing traffic conditions and project-generated vehicle trip assignment patterns, 31 intersections are recommended for inclusion in the detailed analysis of potential traffic impacts.

TRANSIT

The detailed assignment of projected transit trips concluded that the East Broadway Station and the F subway line would incur more than 200 trips during the weekday AM and PM peak hours. Therefore, a detailed subway station analysis of the East Broadway Station and a line-haul analysis of the F subway line would be conducted.

Project-generated bus trips would be dispersed among the multiple local bus routes serving the study area, such that no single bus route is expected to incur incremental ridership exceeding the *CEQR Technical Manual* analysis threshold of 50 or more peak hour bus riders in a single direction. Therefore, a detailed bus line-haul analysis is not warranted, and the proposed project is not expected to result in any significant adverse bus line-haul impacts.

PEDESTRIANS

The detailed assignment of project-generated pedestrian trips concluded that incremental pedestrian volumes at 17 sidewalks, 23 corner reservoirs, and 12 crosswalks at 11 intersections would exceed the *CEQR Technical Manual* analysis threshold of 200 peak hour pedestrian trips. Therefore, a detailed pedestrian analysis would be conducted for these elements.

B. PRELIMINARY ANALYSIS METHODOLOGY

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Level 1) to estimate the volume of person and vehicle trips attributable to the proposed project. If the proposed project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that the proposed project would result in 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, parking, and vehicular and pedestrian safety.

C. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the numbers of person and vehicle trips by mode expected to be generated by the proposed projects during the weekday AM, midday, and PM peak hours. These estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the proposed projects were developed based on information from the 2014 *CEQR Technical Manual*, U.S. Census Data, and other established sources and approved studies—as summarized in **Table 2**.

Table 2
Travel Demand Assumptions

Use	Residential			Local Retail			Community Facility Students			Community Facility Parents			Community Facility Staff		
Total Daily Person Trip	(1) Weekday 8.075 Trips / DU			(1) Weekday 205 Trips / 1000 SF			(1) Weekday 2.0 trips/person			(1) Weekday 4.0 trip/person			(1) Weekday 2.0 trips / person		
Trip Linkage	0%			25%			0%			0%			0%		
Net Daily Person trip	Weekday 8.075 Trips / DU			Weekday 153.75 Trips / 1000 SF			Weekday 2.0 Trips / Student			Weekday 4.0 Trips / Student			Weekday 2.0 Trips / Staff		
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
Temporal	(1)			(1)			(2)			(2)			(2)		
	10%	5%	11%	3%	19%	10%	49.5%	0%	49.5%	49.5%	0%	49.5%	40%	0%	40%
Direction	(2)			(2)			(4)			(4)			(4)		
In	15%	50%	70%	50%	50%	50%	100%	0%	0%	50%	0%	50%	100%	0%	0%
Out	85%	50%	30%	50%	50%	50%	0%	0%	100%	50%	0%	50%	0%	0%	100%
Total	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%
Modal Split	(3)			(2)			(4)			(5)(9)			(6)		
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**
Auto	14.0%	14.0%	14.0%	2.0%	2.0%	2.0%	10.0%	10.0%	10.0%	0.0%	0.0%	0.0%	18.0%	18.0%	18.0%
Taxi	5.0%	5.0%	5.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	1.0%	1.0%	1.0%
Subway	44.0%	44.0%	44.0%	6.0%	6.0%	6.0%	8.0%	8.0%	8.0%	23.0%	23.0%	23.0%	58.0%	58.0%	58.0%
Bus	4.0%	4.0%	4.0%	6.0%	6.0%	6.0%	7.0%	7.0%	7.0%	20.0%	20.0%	20.0%	10.0%	10.0%	10.0%
School Bus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.0%	53.0%	53.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk	33.0%	33.0%	33.0%	83.0%	83.0%	83.0%	20.0%	20.0%	20.0%	57.0%	57.0%	57.0%	13.0%	13.0%	13.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle Occupancy	(2)(3) Weekday			(2) Weekday			(9) Weekday						(6)(7) Weekday		
Auto	1.30			1.65			1.30						1.27		
Taxi	1.40			1.40			1.30						1.27		
School Bus	N/A			N/A			35.0						N/A		
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			(1) Weekday 0.35 Delivery Trips / KSF			(8) Weekday 0.03 Delivery Trips / students								
	AM	**MD**	**PM**	**AM**	**MD**	**PM**	**AM**	**MD**	**PM**						
Delivery Temporal	(1)			(1)			(8)								
	12%	9%	2%	8%	11%	2%	9.6%	11.0%	1.0%						
Delivery Direction	(1)			(1)			(8)								
In	50%	50%	50%	50%	50%	50%	50%	50%	50%						
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%						
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%						

Sources:
(1) 2014 *CEQR Technical Manual*
(2) *Seward Park Mixed-Use Development Project FGEIS* (2012)
(3) U.S. Census Bureau, ACS 2011-2015 Five-Year Estimates - Journey-to-Work (JTW) Data for Census Tract 2.01, 6, 8, 14.01, and 16.
(4) Seward Park Mixed-Use Development Tech Memo (2012)
(5) Assumes 1 parent for every 1.30 students taking subway, bus and walk modes to the school and the same temporal distribution as students.
(6) U.S. Census Bureau Reverse-Journey to Work ACS 2006-2010 five-year estimates.
(7) The staff taxi occupancy is assumed to be the same as the staff vehicle occupancy.
(8) No. 7 Subway Extension-Hudson Yards Rezoning and Development Program FGEIS (2004)
(9) East New York Rezoning FEIS (2016)

TRIP GENERATION SUMMARY

As summarized in **Table 3**, in the future with the proposed actions, a total of 2,475, 1,444, and 2,817 person trips would be generated during the weekday AM, midday, and PM peak hours, respectively. Correspondingly, 435, 214, and 424 vehicle trips would be generated during the same respective peak hours.

Table 3
Trip Generation Summary: Future With the Proposed Actions

	Program	Peak Hour	In/Out	Person Trip Auto	Taxi	Subway	Bus	School Bus	Walk	Total	Vehicle Trip Auto	Taxi	School Bus	Delivery	Total
Site 4	Residential 660 DUs	AM	In	11	4	35	3	0	26	79	8	17	0	2	27
			Out	63	23	199	18	0	149	452	48	17	0	2	67
			Total	74	27	234	21	0	175	531	56	34	0	4	94
		Midday	In	19	7	59	5	0	44	134	15	8	0	2	25
			Out	19	7	59	5	0	44	134	15	8	0	2	25
			Total	38	14	118	10	0	88	268	30	16	0	4	50
		PM	In	57	21	181	16	0	135	410	44	15	0	0	59
			Out	25	9	77	7	0	58	176	19	15	0	0	34
			Total	82	30	258	23	0	193	586	63	30	0	0	93
	Local Retail 3,124 gsf	AM	In	0	0	0	0	0	6	6	0	0	0	0	0
			Out	0	0	0	0	0	6	6	0	0	0	0	0
			Total	0	0	0	0	0	12	12	0	0	0	0	0
		Midday	In	1	1	3	3	0	38	46	1	1	0	0	2
			Out	1	1	3	3	0	38	46	1	1	0	0	2
			Total	2	2	6	6	0	76	92	2	2	0	0	4
		PM	In	0	1	1	1	0	20	23	0	1	0	0	1
			Out	0	1	1	1	0	20	23	0	1	0	0	1
			Total	0	2	2	2	0	40	46	0	2	0	0	2
Site 5	Residential 1,350 DUs	AM	In	23	8	72	7	0	54	164	18	35	0	5	58
			Out	130	46	408	37	0	306	927	100	35	0	5	140
			Total	153	54	480	44	0	360	1,091	118	70	0	10	198
		Midday	In	38	14	120	11	0	90	273	29	15	0	4	48
			Out	38	14	120	11	0	90	273	29	15	0	4	48
			Total	76	28	240	22	0	180	546	58	30	0	8	96
		PM	In	118	42	369	34	0	277	840	91	29	0	1	121
			Out	50	18	158	14	0	119	359	38	29	0	1	68
			Total	168	60	527	48	0	396	1,199	129	58	0	2	189
	Local Retail 5,258 gsf	AM	In	0	0	1	1	0	10	12	0	0	0	0	0
			Out	0	0	1	1	0	10	12	0	0	0	0	0
			Total	0	0	2	2	0	20	24	0	0	0	0	0
		Midday	In	2	2	5	5	0	64	78	1	1	0	0	2
			Out	2	2	5	5	0	64	78	1	1	0	0	2
			Total	4	4	10	10	0	128	156	2	2	0	0	4
		PM	In	1	1	2	2	0	34	40	1	1	0	0	2
			Out	1	1	2	2	0	34	40	1	1	0	0	2
			Total	2	2	4	4	0	68	80	2	2	0	0	4
	Community Facility 118 Students	AM	In	12	2	9	8	62	23	116	9	2	2	0	13
			Out	0	0	0	0	0	0	0	9	2	2	0	13
			Total	12	2	9	8	62	23	116	18	4	4	0	26
		Midday	In	0	0	0	0	0	0	0	0	0	0	0	0
			Out	0	0	0	0	0	0	0	0	0	0	0	0
			Total	0	0	0	0	0	0	0	0	0	0	0	0
		PM	In	0	0	0	0	0	0	0	9	1	2	0	12
			Out	12	2	9	8	62	23	116	9	1	2	0	12
			Total	12	2	9	8	62	23	116	18	2	4	0	24
	Community Facility 32 Parents	AM	In	0	0	7	6	0	18	31	0	0	0	0	0
			Out	0	0	7	6	0	18	31	0	0	0	0	0
			Total	0	0	14	12	0	36	62	0	0	0	0	0
		Midday	In	0	0	0	0	0	0	0	0	0	0	0	0
			Out	0	0	0	0	0	0	0	0	0	0	0	0
			Total	0	0	0	0	0	0	0	0	0	0	0	0
		PM	In	0	0	7	6	0	18	31	0	0	0	0	0
			Out	0	0	7	6	0	18	31	0	0	0	0	0
			Total	0	0	14	12	0	36	62	0	0	0	0	0
	Community Facility 12 Staff	AM	In	2	0	6	1	0	1	10	2	0	0	0	2
			Out	0	0	0	0	0	0	0	0	0	0	0	0
			Total	2	0	6	1	0	1	10	2	0	0	0	2
		Midday	In	0	0	0	0	0	0	0	0	0	0	0	0
			Out	0	0	0	0	0	0	0	0	0	0	0	0
			Total	0	0	0	0	0	0	0	0	0	0	0	0
		PM	In	0	0	0	0	0	0	0	0	0	0	0	0
			Out	2	0	6	1	0	1	10	2	0	0	0	2
			Total	2	0	6	1	0	1	10	2	0	0	0	2

Table 3 (cont'd)
Trip Generation Summary: Future With the Proposed Actions

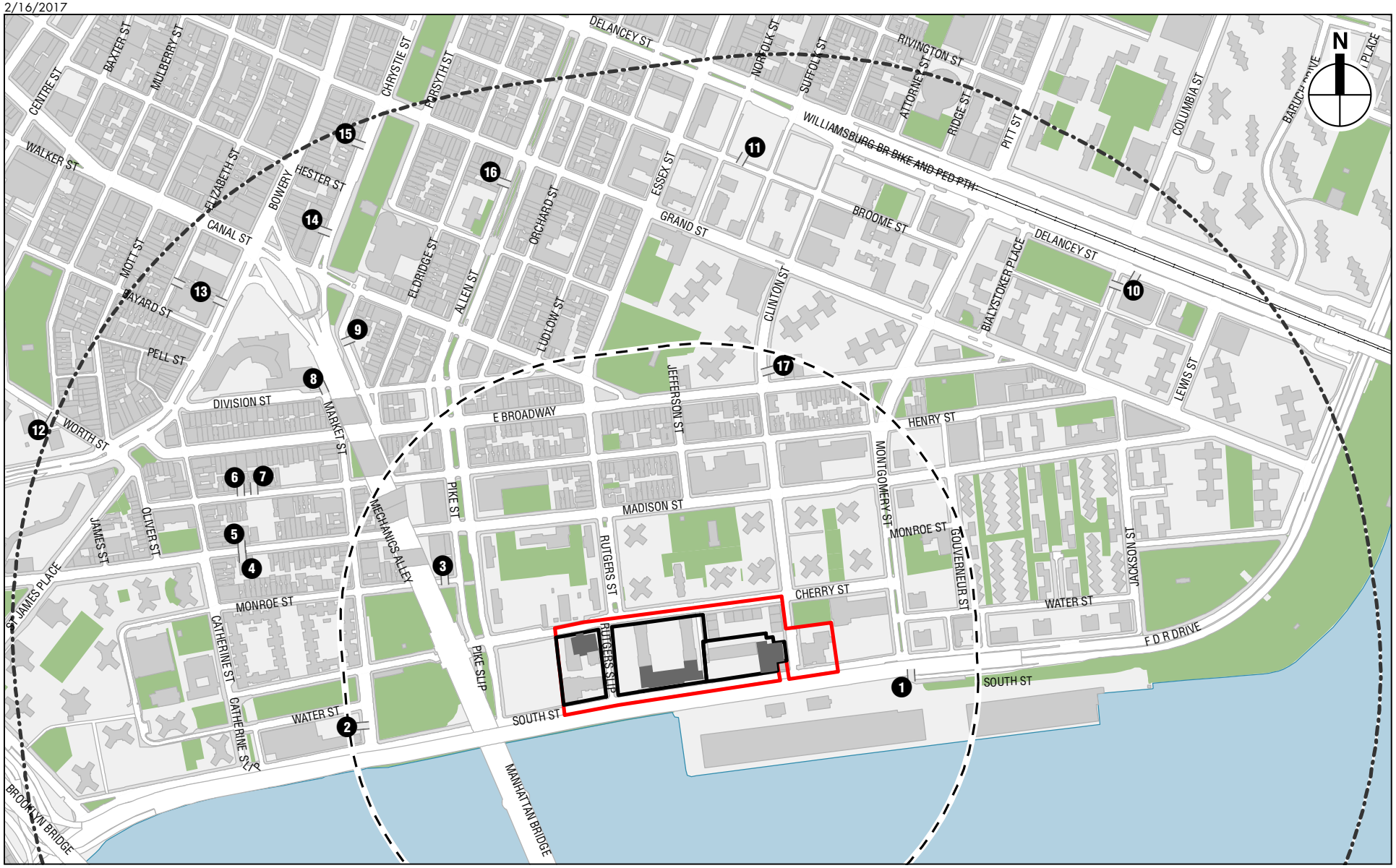
	Program	Peak Hour	In/Out	Person Trip Auto	Taxi	Subway	Bus	School Bus	Walk	Total	Vehicle Trip Auto	Taxi	School Bus	Delivery	Total
Site 6A	Residential 765 DUs	AM	In	13	5	41	4	0	31	94	10	21	0	3	34
			Out	74	26	231	21	0	173	525	57	21	0	3	81
			Total	87	31	272	25	0	204	619	67	42	0	6	115
		Midday	In	22	8	68	6	0	51	155	17	9	0	2	28
			Out	22	8	68	6	0	51	155	17	9	0	2	28
			Total	44	16	136	12	0	102	310	34	18	0	4	56
		PM	In	67	24	209	19	0	157	476	52	17	0	0	69
			Out	29	10	90	8	0	67	204	22	17	0	0	39
			Total	96	34	299	27	0	224	680	74	34	0	0	108
	Local Retail 2,506 gsf	AM	In	0	0	0	0	0	5	5	0	0	0	0	0
			Out	0	0	0	0	0	5	5	0	0	0	0	0
			Total	0	0	0	0	0	10	10	0	0	0	0	0
		Midday	In	1	1	2	2	0	30	36	1	1	0	0	2
			Out	1	1	2	2	0	30	36	1	1	0	0	2
			Total	2	2	4	4	0	60	72	2	2	0	0	4
		PM	In	0	1	1	1	0	16	19	0	1	0	0	1
			Out	0	1	1	1	0	16	19	0	1	0	0	1
			Total	0	2	2	2	0	32	38	0	2	0	0	2
Grand Total		AM	In	61	19	171	30	62	174	517	47	75	2	10	134
			Out	267	95	846	83	0	667	1,958	214	75	2	10	301
			Total	328	114	1,017	113	62	841	2,475	261	150	4	20	435
		Midday	In	83	33	257	32	0	317	722	64	35	0	8	107
			Out	83	33	257	32	0	317	722	64	35	0	8	107
			Total	166	66	514	64	0	634	1,444	128	70	0	16	214
		PM	In	243	90	770	79	0	657	1,839	197	65	2	1	265
			Out	119	42	351	48	62	356	978	91	65	2	1	159
			Total	362	132	1,121	127	62	1,013	2,817	288	130	4	2	424

D. LEVEL 2 SCREENING ASSESSMENT

TRAFFIC

As shown in **Table 3**, incremental vehicle trips resulting from the proposed projects would exceed the *CEQR* Level 1 screening threshold during all peak hours. Although the proposed project for Site 5 would maintain the 103 parking spaces that currently exist on that site, those spaces would be used solely to accommodate the existing parking demand on Site 5. Off-site parking resources would be used to accommodate the parking demand for the three proposed projects. A ¼-mile off-street parking survey was conducted to determine the available off-street parking resources in the study area. Availability of off-street parking spaces within the ¼-mile study area is limited; therefore, the off-street parking survey was expanded slightly beyond the ¼-mile study area to identify other available off-street parking resources within a ½-mile. As summarized in **Table 4** and depicted on **Figure 2**, there are nine off-street parking facilities identified within approximately ¼-mile of the project sites, providing nearly 1,200 parking spaces; however, it should be noted that the 400-space Imperial Parking location (#1) is planned for redevelopment, and thus is expected to be closed in the future. Within the ½-mile study area there are eight additional off-street parking facilities providing nearly 1,900 additional parking spaces.

2/16/2017



Project Sites

Boundary of Two Bridges LSRD

Proposed Buildings

Study Area (Quarter-mile boundary)

Study Area (Half-mile boundary)

Off-Street Parking

TWO BRIDGES LSRD

Off-Street Parking Facilities

Figure 2

Table 4
Existing Weekday Off-Street Parking Utilization
Approximately ½-mile Study Area

Map #	Name/Operator and Address/Location	License Number	Licensed Capacity	Utilization Rate				Utilized Spaces				Available Spaces			
				AM	MD	PM	ON	AM	MD	PM	ON	AM	MD	PM	ON
1	Imperial Parking LLC: Pier 42, South FDR	1446819	400	85%	85%	85%	85%	340	340	340	340	60	60	60	60
2	Edison NY Parking LLC: 220 South Street	1134501	63	80%	85%	50%	50%	50	54	32	32	13	9	31	31
3	Kaylee Operating LLC: 148 Madison Street	1155046	66	80%	85%	50%	50%	53	56	33	33	13	10	33	33
4	Madison Street Operating Corp: 88 Madison Street	908352	50	80%	80%	50%	Closed	40	40	25	Closed	10	10	25	Closed
5	10 Street Parking Corp: 38 Henry Street	925245	150	75%	75%	80%	80%	113	113	120	120	37	37	30	30
6	Henry Operating Corp: 47 Henry Street	1057433	8	100%	100%	100%	Closed	8	8	8	Closed	0	0	0	Closed
7	Henry Operating Corp: 49-59 Henry Street	1039024	114	40%	70%	40%	40%	46	80	46	46	68	34	68	68
8	Champion Confucius: 2-68 Division Street	1146910	300	70%	85%	85%	50%	210	255	255	150	90	45	45	150
9	Bridge View Auto Service Center: 26 Forsyth Street	954225	42	90%	90%	90%	90%	38	38	38	38	4	4	4	4
¼-Mile Area Only Totals			**1,193**	**75%**	**82%**	**75%**	**64%**	**898**	**984**	**897**	**759**	**295**	**209**	**296**	**376**
10	Area Garage LLC: (unlisted)	429851	457	40%	88%	60%	25%	183	402	274	114	274	55	183	343
11	Lower East Side District Mgmt. Assoc. - 135-163 Delancey Street	2008327	294	70%	90%	75%	55%	206	265	221	162	88	29	73	132
12	Chatham Parking Systems Inc. – 180 Park Row	368910	130	65%	85%	85%	65%	85	111	111	85	45	19	19	45
13	Quik Park Garage Inc. – 2-8 Elizabeth Street	1461597	140	60%	85%	60%	30%	84	119	84	42	56	21	56	98
14	T&K Park Inc. – 61 Christie Street	1344945	50	20%	90%	55%	25%	10	45	28	13	40	5	22	37
15	MTP Operating Corp. – 89-93 Christie Street	977117	116	80%	80%	60%	60%	93	93	70	70	23	23	46	46
16	59 Allen Street Garage Corp. – 59-63 Allen Street	1192853	200	65%	85%	75%	55%	130	170	150	110	70	30	50	90
17	Clinton Grand Parking LLC – 240 E. Broadway	2034514	505	60%	90%	60%	55%	303	455	303	278	202	50	202	227
Total ½-Mile Area			**3,085**	**65%**	**86%**	**69%**	**53%**	**1,992**	**2,644**	**2,138**	**1,633**	**1,093**	**441**	**947**	**1,394**

Notes: MD = Midday; ON = Overnight; CLD = Closed
Sources: Survey conducted by AKRF Inc. in February and September, 2016.

Project-generated vehicle trips were assigned to study area intersections based on the most likely travel routes to and from the project sites, prevailing travel patterns, commuter origin-destination (O-D) summaries from the census data, and configuration of the roadway network. Since available parking spaces at off-site parking facilities within a ¼-mile are expected to be insufficient to accommodate the proposed projects' anticipated parking demand; project-generated trips were also assigned to parking resources between ¼-mile and ½-mile distance from the project sites. Non-pick-up and drop-off auto trips were assigned to the parking facilities summarized above (excluding #1, as that facility is planned for redevelopment). Taxi trips were assigned to the various project sites' frontages along South Street, Rutgers Street, and Clinton Street. All delivery trips were assigned to the project sites via the New York City Department of Transportation (NYCDOT) designated truck routes. Traffic assignments for autos, taxis, and deliveries for the various development uses are discussed below.

RESIDENTIAL

Auto trips generated by the proposed residential uses were assigned to the surrounding roadway network based on the 2006-2010 U.S. Census ACS JTW origin-destination estimates. Many of the residential trips would be traveling to work destinations within the local region of Manhattan (31 percent), with the remaining trips traveling to Brooklyn (17 percent), New Jersey (17 percent), Queens (11 percent), Upstate New York and others (10 percent), Staten Island (8 percent), the Bronx (4 percent), and Long Island (2

percent). Residential trips would originate from off-site parking facilities to which project-generated trips were assigned and use the most direct routes for travel to their destinations. Overall, vehicle trips generated by the proposed residential uses were distributed to the study area roadway network in the following manner: approximately 34 percent assigned to points north of the project site, 30 percent to points west, 24 percent to points southeast, and 12 percent to points east. The majority of trips traveling to Brooklyn and Staten Island south were assigned to the FDR Drive, with the remaining trips utilizing West Street, the Manhattan Bridge, the Queensboro Bridge, the Queens-Midtown Tunnel, the Williamsburg Bridge, and the Brooklyn Bridge, as well as Allen Street and Canal Street. Vehicles heading to New Jersey, Pennsylvania, and Manhattan west of the project site were assigned primarily to South Street and Worth Street. Eastbound trips to Queens and Long Island were assigned to the Queensboro Bridge, Queen-Midtown Tunnel, and the Williamsburg Bridge. Vehicles traveling to Manhattan north of the project site, the Bronx, and Upstate were assigned to the FDR Drive and West Street.

COMMUNITY FACILITY

The proposed community facility use is expected to serve patrons primarily from the immediate area. Therefore, auto trips were generally assigned from local origins within the neighborhood and adjacent residential areas. Overall, the vehicle trips generated by the proposed community facility use were distributed to the study area roadway network in the following manner: approximately 35 percent assigned to points north of the project site, 35 percent to points east, and 30 percent to points southeast.

LOCAL RETAIL

The proposed local retail uses are expected to also serve patrons primarily from the immediate area, following the same general distribution described above for the community facility. Travel to the various off-site parking options would occur via the major roadways surrounding the project sites, including Bowery, Allen Street, and Grand Street.

TAXIS

Taxi pick-ups and drop-offs for the proposed residential components were split among the project sites' frontages along South Street, Rutgers Street, and Clinton Street. Taxi trips for the proposed local retail components were assigned to the Cherry Street and Rutgers Street curbsides facing the sites. All taxi trips for the proposed community facility were assigned to the South Street curbside in front of Site 5.

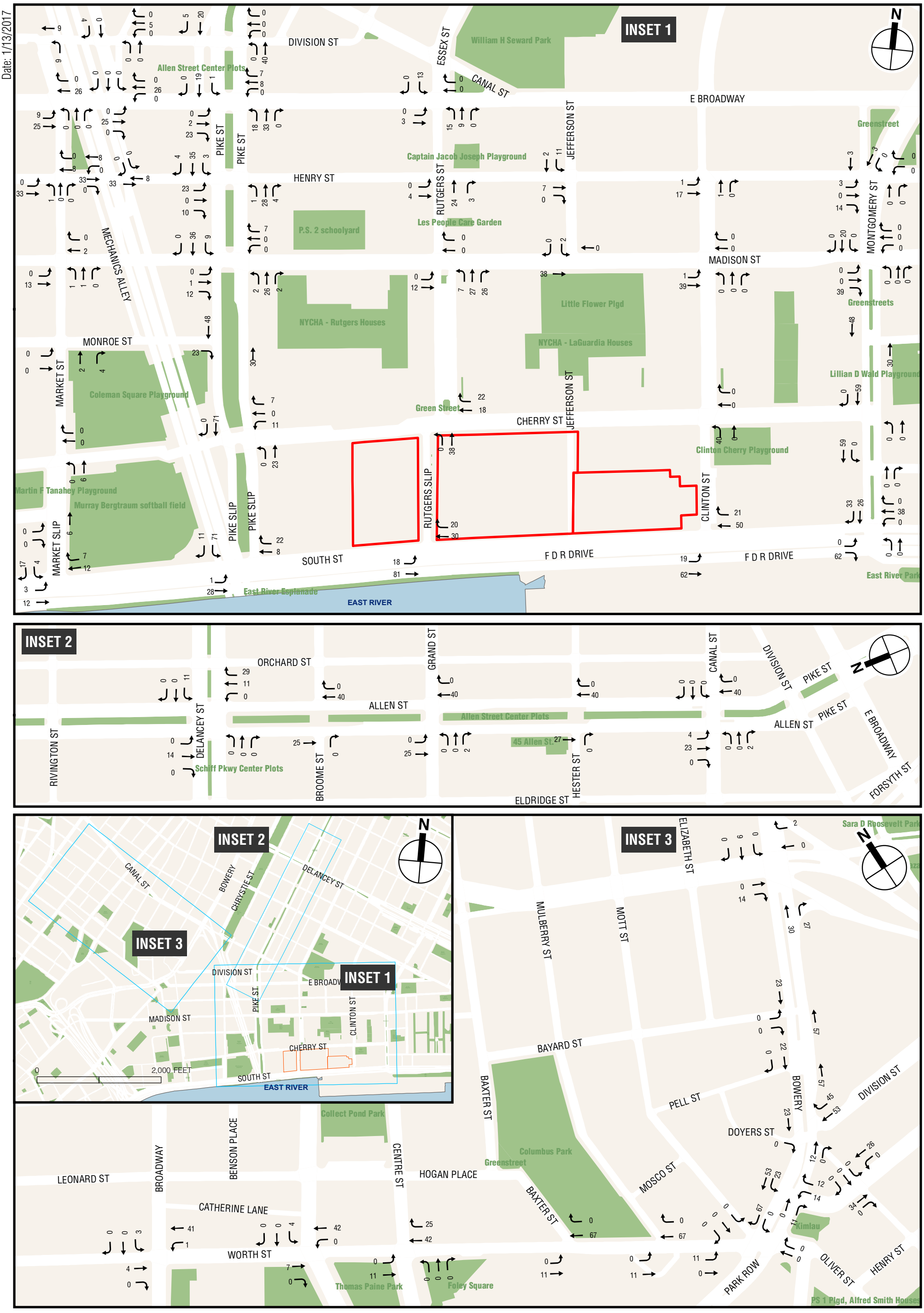
DELIVERIES

Truck delivery trips for all land uses were assigned to NYCDOT-designated truck routes as long as possible until reaching the area surrounding the project sites. These trips were then distributed primarily along South Street and Cherry Street.

SUMMARY

As shown in **Figures 3 through 5** and summarized in **Table 5**, 31 intersections comprising the traffic study area have been selected for analysis. The selected traffic analysis locations are shown in **Figure 6**.

Date: 1/13/2017

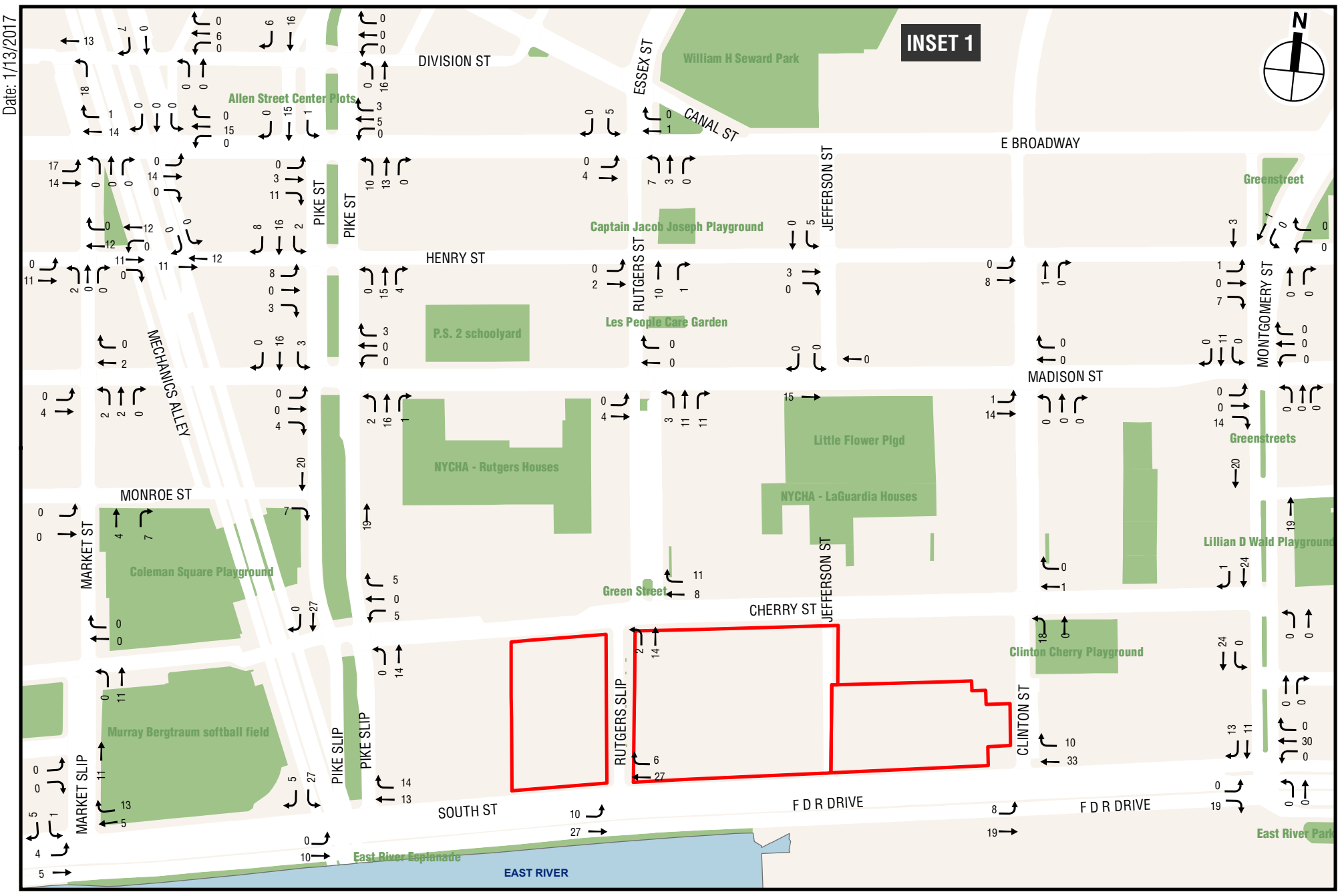


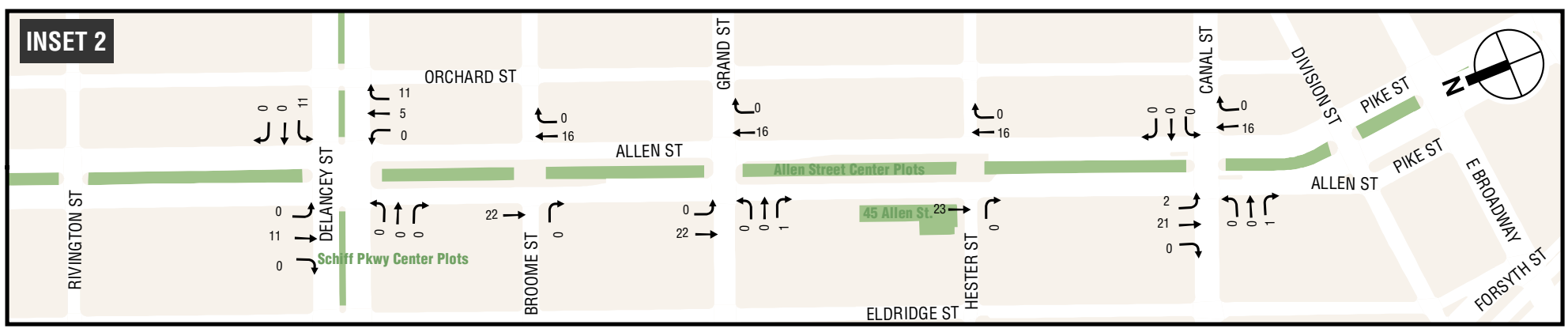
Project Site

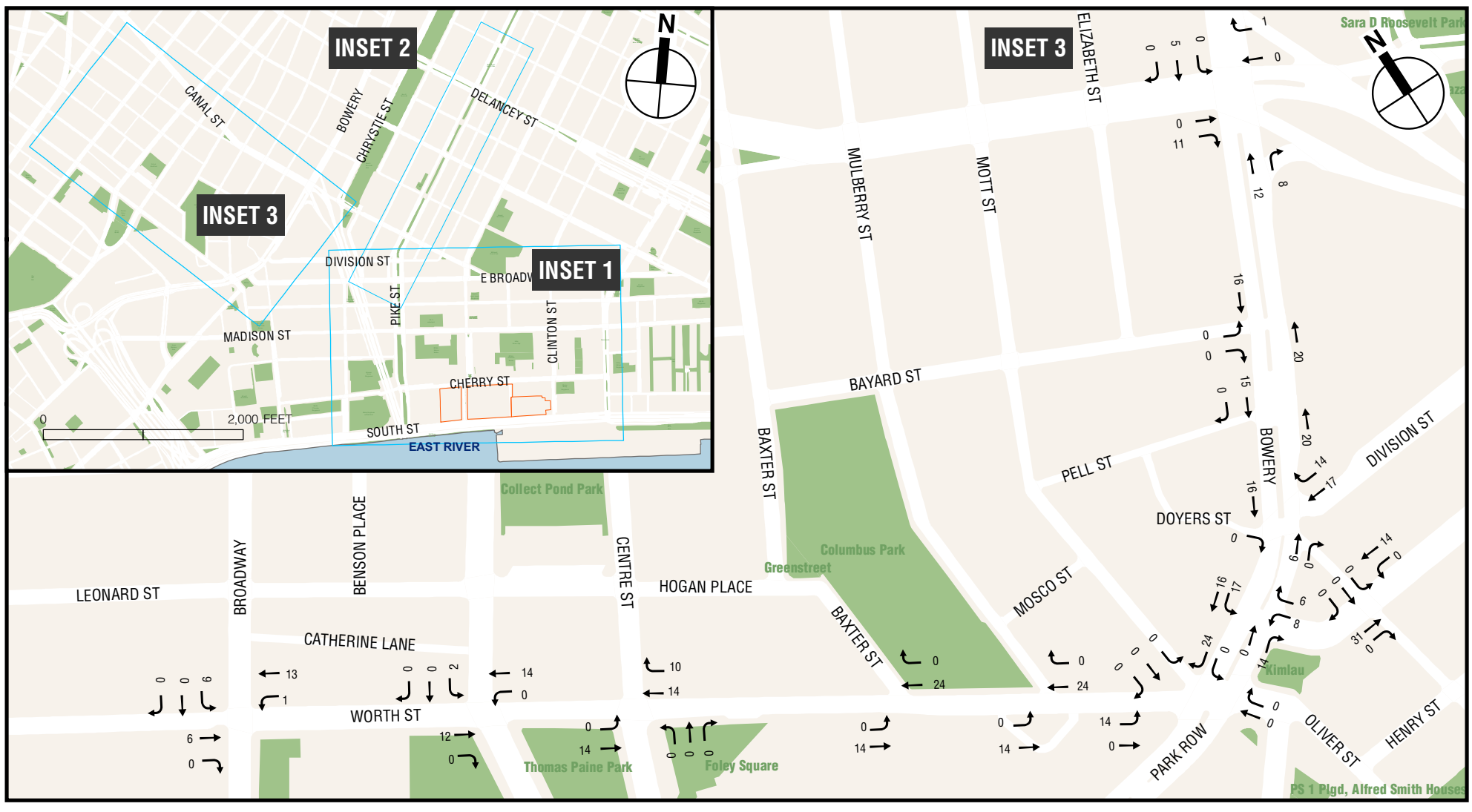
Proposed Project Incremental Vehicle Trips
Weekday AM Peak Hour
Figure 3

TWO BRIDGES LSRD

Date: 1/13/2017







Project Site

Proposed Project Incremental Vehicle Trips
Weekday MD Peak Hour
Figure 4

TWO BRIDGES LSRD

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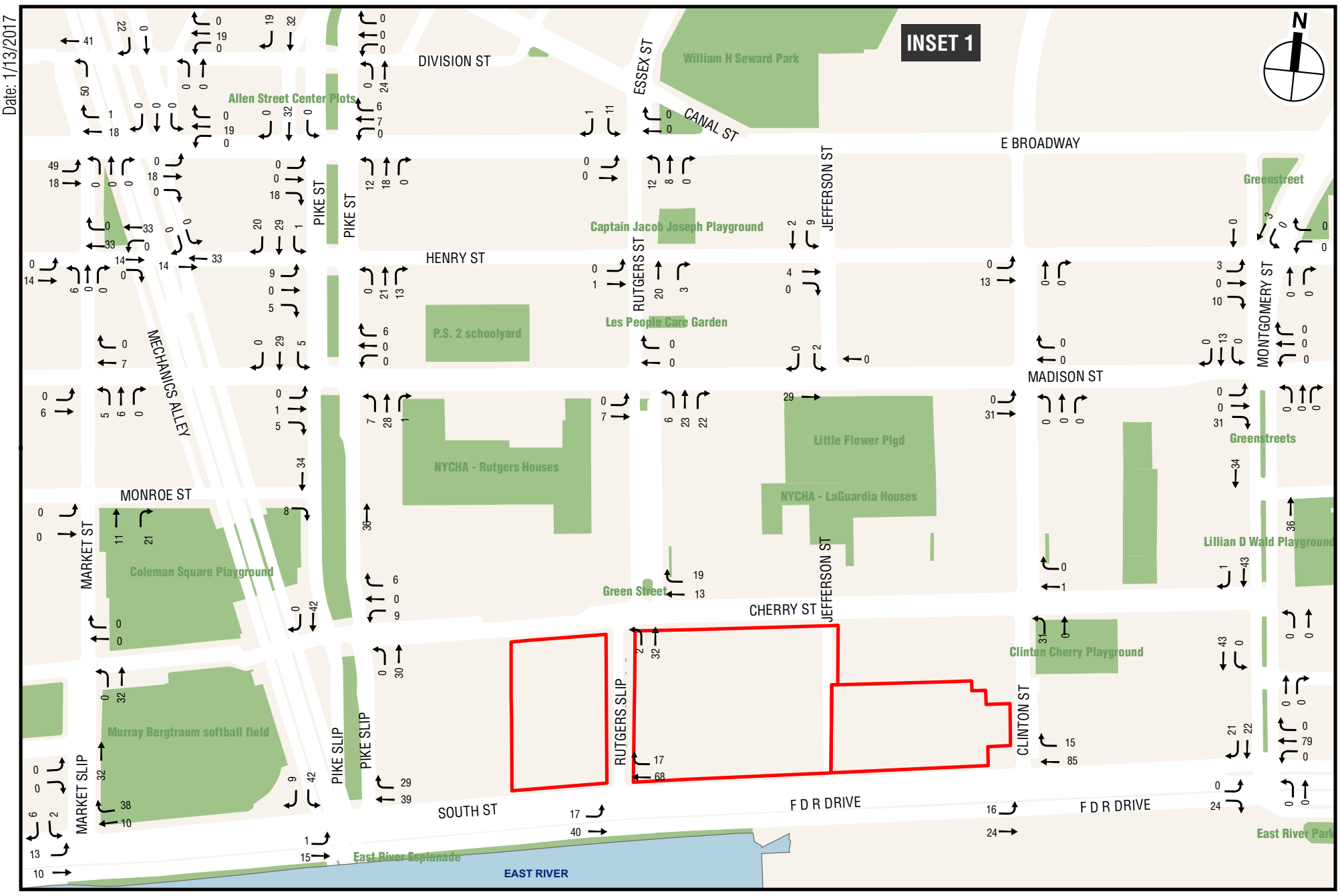

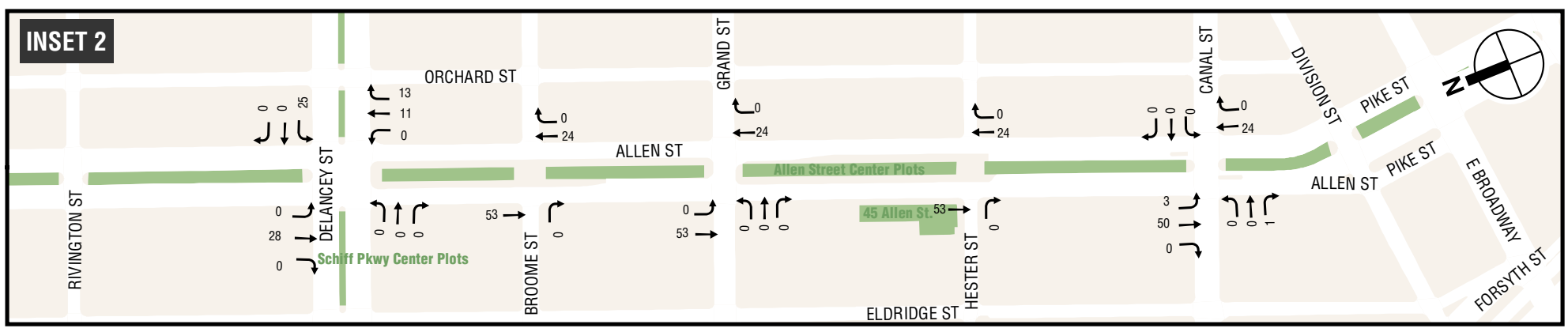

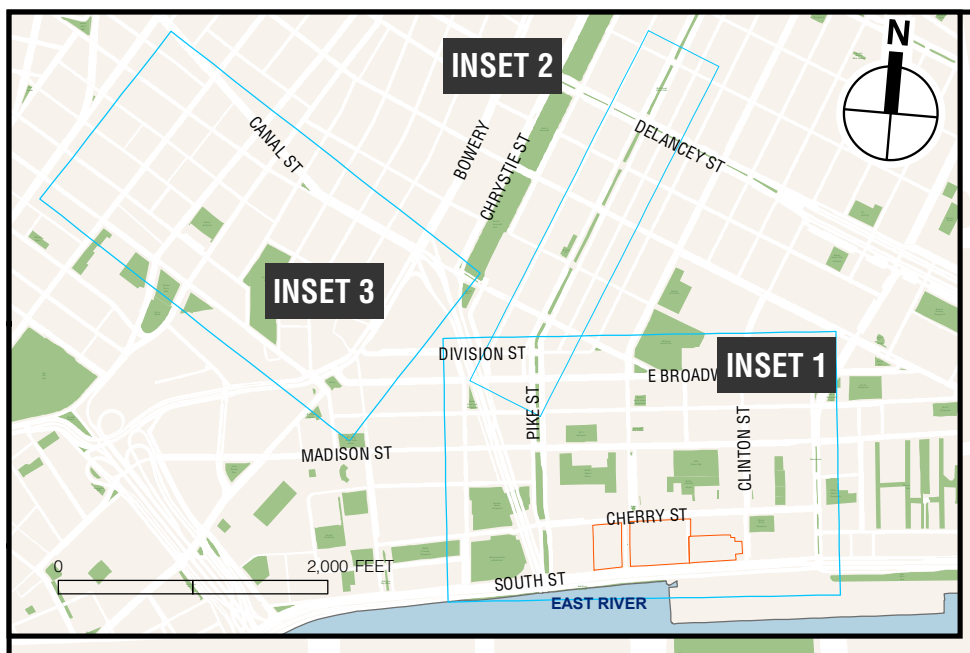

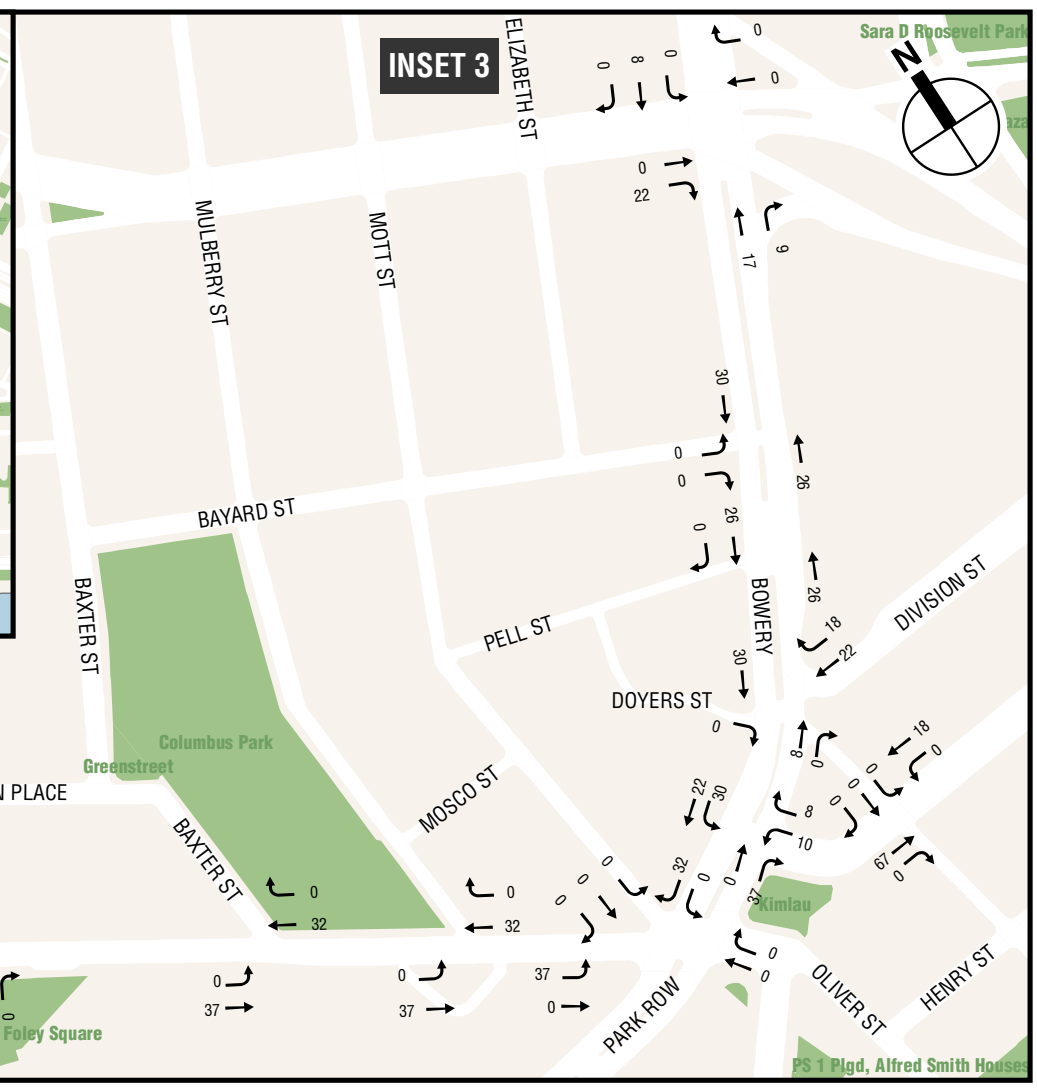

Project Site

Proposed Project Incremental Vehicle Trips
Weekday PM Peak Hour
Figure 5

TWO BRIDGES LSRD

1/13/2017

Recommended Traffic Analysis Locations

Figure 6

TWO BRIDGES LSRD

Table 5
Traffic Level 2 Screening Analysis Results – Recommended Analysis Locations

Traffic Intersections	AM	MD	PM	Recommended Analysis Location
Grand Street and Bowery	41	18	25	
Grand Street and Allen Street	67	39	77	✓
Hester Street and Bowery	41	18	25	
Hester Street and Pike Street	67	39	77	
Canal Street/Manhattan Bridge Entrance (BK) and Bowery Street	82	37	56	✓
Canal Street and Manhattan Bridge Lower Level	2	1	0	
Canal Street and Manhattan bridge Upper Level/ Chrystie Street	6	8	23	
Canal Street and Forsyth Street	6	8	23	
Canal Street and Eldridge Street	2	1	1	
Canal Street and Allen Street	69	40	78	✓
Bowery and Bayard Street	80	36	56	✓
Pell Street and Bowery	79	35	52	
Division Street and Bowery	133	53	78	✓
Division Street and Market Street	18	31	91	✓
Division Street and Forsyth Street/Eldridge Street	9	13	41	
Division Street and Allen Street	65	38	75	✓
Worth Street and Mott Street	78	38	69	✓
Chatham Square and East Broadway	113	61	107	✓
East Broadway and Catherine Street	60	45	85	✓
East Broadway and Market Street	60	46	86	✓
East Broadway and Forsyth Street	51	29	37	
East Broadway and Allen Street	111	61	93	✓
East Broadway and Essex Street	40	20	32	
Henry Street and Market Street	42	25	53	✓
Henry Street and Mechanics Alley	41	23	47	
Henry Street and Forsyth Street	41	23	47	
Henry Street and Pike Street	108	56	98	✓
Henry Street and Rutgers Street	31	13	24	
Henry Street and Jefferson Street	20	8	15	
Henry Street and Clinton Street	19	9	13	
Henry Street and Montgomery Street	20	11	13	
Madison Street and Market Street	17	10	24	
Madison Street and Mechanics Alley	15	6	13	
Madison Street and Pike Street	95	45	82	✓
Madison Street and Rutgers Street	72	29	58	✓
Madison Street and Jefferson Street	40	15	31	
Madison Street and Clinton Street	40	15	31	
Madison Street and Montgomery Street	59	25	44	✓
Monroe Street and Market Street	6	11	32	
Monroe Street and Mechanics Alley	4	7	21	
Monroe Street and Pike Street	101	46	78	✓
Monroe Street/ Catherine Street and Montgomery Street	59	25	44	
Cherry Street and Market Street	6	11	32	
Cherry Street and Pike Street	112	51	87	✓
Cherry Street and Rutgers Street	78	35	66	✓
Cherry Street and Clinton Street	40	19	32	✓
Cherry Street and Montgomery Street	59	25	44	✓
Water Street and Market Street	6	11	32	
Water Street and Montgomery Street	59	24	43	
South Street and Market Street	55	33	79	✓
South Street and Pike Street	141	69	135	✓
South Street and Rutgers Street	149	70	142	✓
South Street and Clinton Street	152	70	140	✓
South Street/ FDR North Ramp and Montgomery Street	159	73	146	✓
Worth Street and Church Street	45	19	34	
Worth Street and Broadway	49	26	51	✓
Worth Street and Lafayette Street	53	28	54	✓
Worth Street and Centre Street	78	38	69	✓
Worth Street and Baxter Street	78	38	69	
Worth Street and Mullberry Street	78	38	69	
Delancy Street and Allen Street	65	38	77	✓
Broome Street and Allen Street	65	38	77	

Note: ✓ denotes intersections recommended for detailed traffic analysis.

TRANSIT

As shown in **Table 3**, the incremental subway trips generated by the proposed projects would be 1,017, 514, and 1,121 person trips during the weekday AM, midday, and PM peak hours, respectively. Since the incremental subway trips would be greater than 200 during the weekday AM and PM peak hours and the

majority of these trips would be expected to use the East Broadway Station (F line), a detailed analysis of subway facilities at this station and line-haul conditions on the F line would be conducted. Also as shown in **Table 3**, the incremental bus trips generated by the proposed projects would be 113, 64, and 127 person trips during the weekday AM, midday, and PM peak hours, respectively. Considering that these trips would be further dispersed among the multiple local bus routes serving the study area, including the M9, M15, M15Select and M22, no single bus route would exceed the *CEQR Technical Manual* analysis threshold of 50 or more peak hour bus riders in a single direction. Therefore, a detailed bus line-haul analysis would not be warranted, and the proposed projects are not expected to result in any significant adverse bus line-haul impacts.

PEDESTRIANS

All person trips generated by the proposed projects would traverse the pedestrian elements (i.e., sidewalks, corners, and crosswalks) surrounding the project sites. As shown in **Table 3**, the net incremental pedestrian trips would be greater than 200 during the weekday AM, midday, and PM peak hours. A Level 2 screening assessment (presented below) was conducted to identify specific pedestrian elements that are expected to incur 200 or more peak hour pedestrian-trips and which would be subject to a detailed analysis of potential pedestrian impacts.

- Auto Trips – Motorists would park at the nearby off-site parking facilities and travel along the area intersections to enter the project sites via adjacent sidewalks.
- Taxi Trips – Taxi users would get dropped off and picked up near the entrances of the project sites.
- Bus Trips – Bus riders would use numerous area bus routes (M9, M15 local, M15 SBS, and M22) and would get on and off at the bus stops located in the vicinity of the project sites.
- Subway Trips – The majority of the project-generated subway riders were assigned to the East Broadway (F line) station and a small portion were assigned to Grand Street (B and D) station.
- Walk-Only Trips – Pedestrian walk-only trip assignments were developed by reviewing the proposed projects' various land uses and population distribution within walking distance from the project sites and distributing the walk-only person trips to surrounding pedestrian facilities, including sidewalks, corner reservoirs, and crosswalks.

Based on the detailed assignment of pedestrian trips, shown in **Figures 7 through 9**, 17 sidewalks, 23 corner reservoirs, and 12 crosswalks were selected for a detailed analysis of weekday peak hour conditions. These locations and associated trip increments are summarized in **Table 6** and depicted in **Figure 10**.

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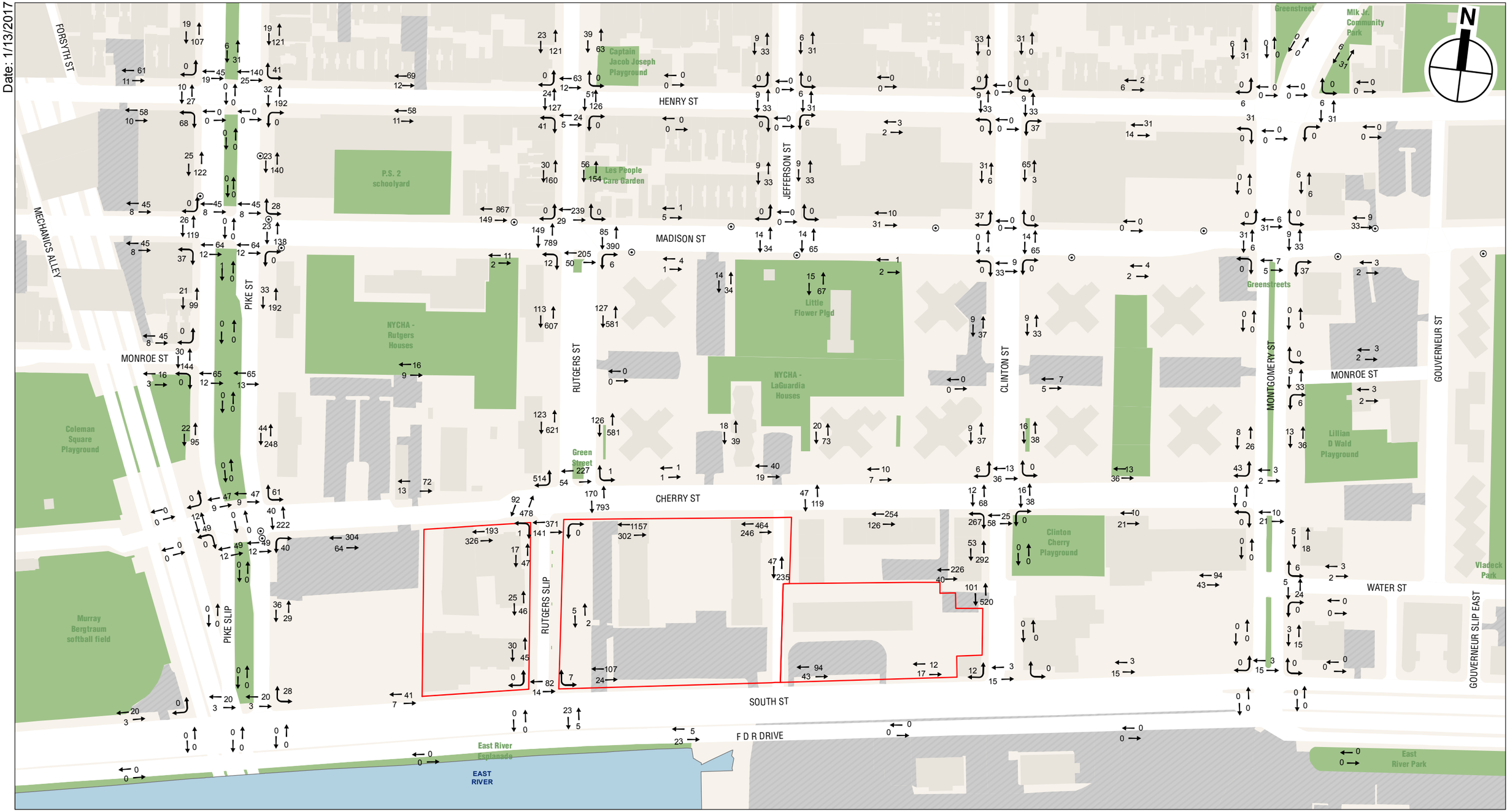
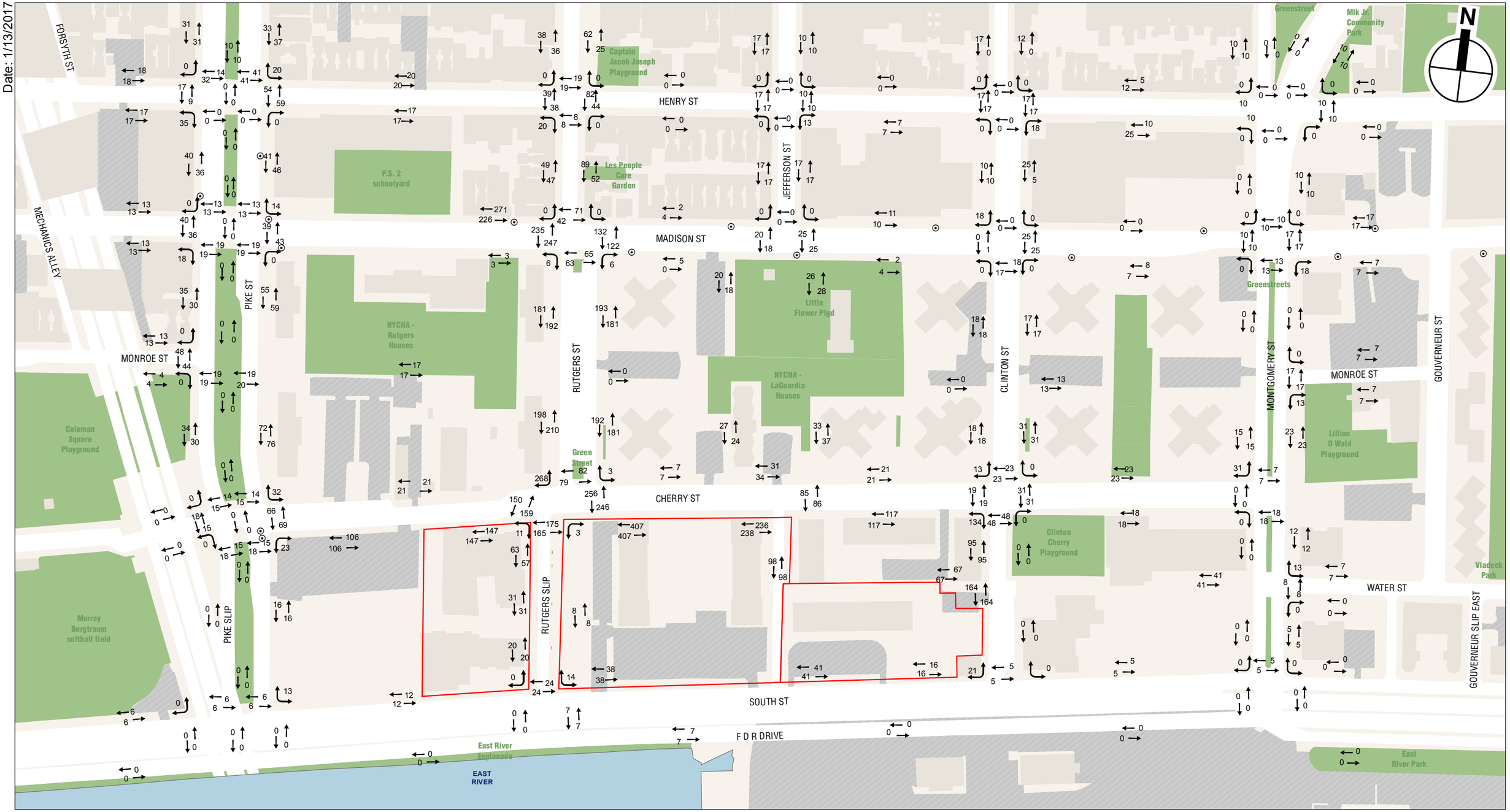


Project Site

Proposed Project Incremental Pedestrian Trips
Weekday AM Peak Hour
Figure 7

TWO BRIDGES LSRD

Date: 1/13/2017



Project Site

TWO BRIDGES LSRD

Proposed Project Incremental Pedestrian Trips
Weekday MD Peak Hour
Figure 8

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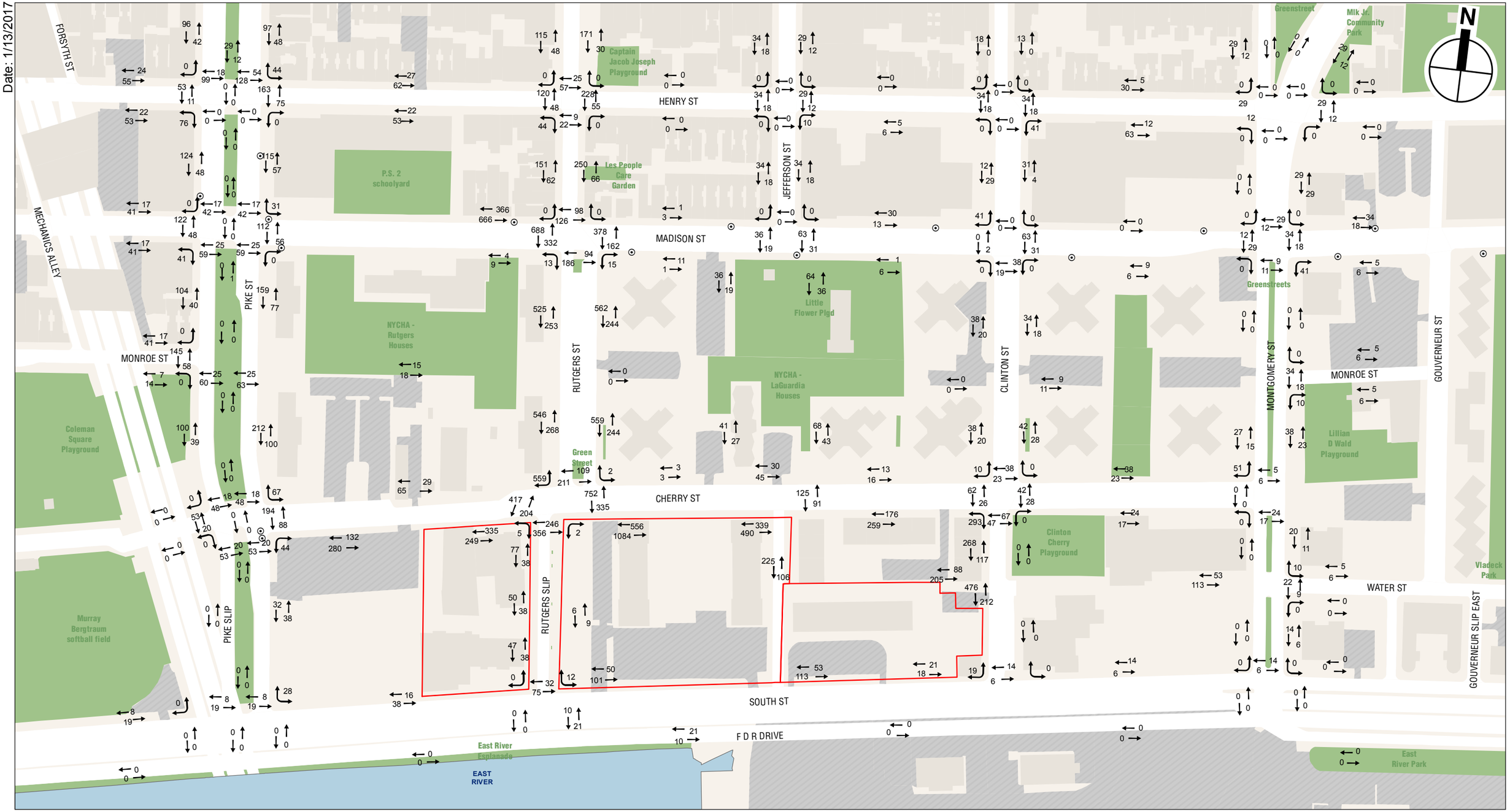
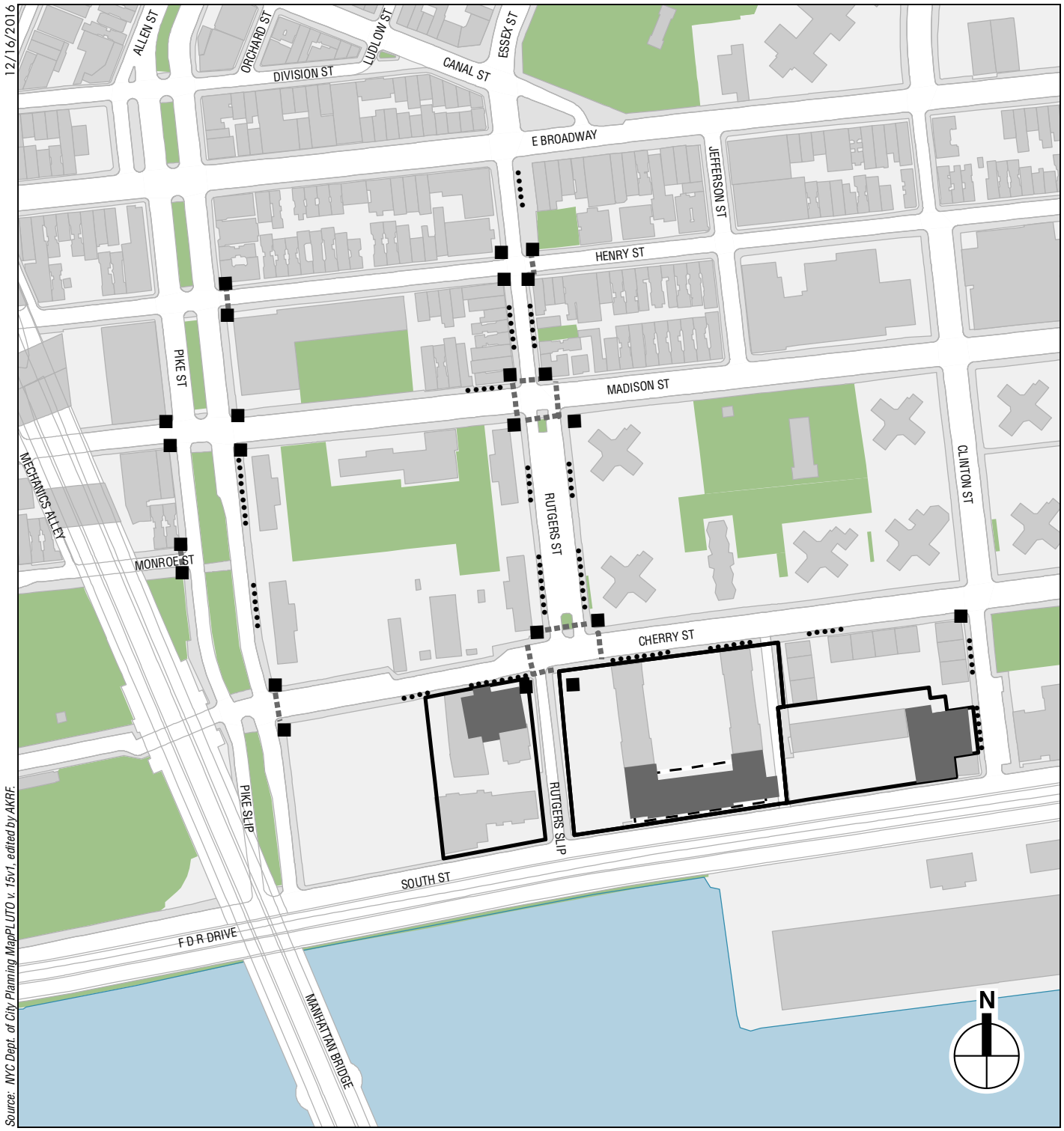


Project Site

TWO BRIDGES LSRD

Proposed Project Incremental Pedestrian Trips
Weekday PM Peak Hour
Figure 9



Recommended Pedestrian Analysis Locations

TWO BRIDGES LSRD

Figure 10

Table 6

Pedestrian Level 2 Screening Analysis Results: Incremental Pedestrian Volumes

Pedestrian Elements	AM	MD	PM
Pike Street and Henry Street			
East Crosswalk	**224**	113	**238**
NE Corner	**430**	**215**	**464**
SE Corner	**224**	113	**238**
Rutgers Street and Henry Street			
East Crosswalk	177	126	**283**
NE Corner	**252**	164	**365**
SE Corner	**206**	142	**314**
SW Corner	**221**	113	**243**
NW Corner	**226**	115	**250**
East Sidewalk between Henry Street and E. Broadway	102	87	**201**
East Sidewalk between Madison Street and Henry Street	**210**	141	**316**
West Sidewalk between Madison Street and Henry Street	190	96	**213**
Pike Street and Madison Street (West)			
SW Corner	**258**	132	**295**
NW Corner	**198**	102	**229**
Pike Street and Madison Street (East)			
East Sidewalk between Madison Street and Monroe Street	**225**	114	**236**
NE Corner	**242**	122	**252**
SE Corner	**237**	120	**252**
Rutgers Street and Madison Street			
North Crosswalk	**268**	113	**224**
East Crosswalk	**475**	**254**	**540**
South Crosswalk	**255**	128	**280**
West Crosswalk	**938**	**482**	**1020**
NE Corner	**743**	**367**	**764**
SE Corner	**736**	**388**	**835**
SW Corner	**1205**	**616**	**1313**
NW Corner	**1206**	**595**	**1244**
North Sidewalk between Rutgers Street and Subway Entrance	**1016**	**497**	**1032**
East Sidewalk between Madison Street and Monroe Street	**708**	**374**	**806**
West Sidewalk between Madison Street and Monroe Street	**720**	**373**	**778**
Pike Street and Monroe Street			
West Crosswalk	174	92	**203**
SW Corner	**251**	130	**288**
NW Corner	174	92	**203**
East Sidewalk between Monroe Street and Cherry Street	**292**	148	**312**
Pike Street and Cherry Street			
East Crosswalk	**262**	**135**	**282**
NE Corner	**379**	**196**	**415**
SE Corner	**363**	**191**	**399**
South Sidewalk between Pike Street and S4 Residential Entrance	**368**	**212**	**412**
Rutgers Street/ Frank T. Modica Way and Cherry Street			
North Crosswalk	**281**	161	**320**
East Crosswalk	**963**	**502**	**1087**
South Crosswalk	**512**	**340**	**602**
West Crosswalk	**570**	**309**	**621**
NE Corner	**1245**	**666**	**1409**
SE Corner	**512**	**343**	**604**
SW Corner	**1083**	**660**	**1228**
NW Corner	**795**	**429**	**879**
East Sidewalk between Monroe Street and Cherry Street	**707**	**373**	**803**
South Sidewalk between Frank T. Modica Way and Site 5 Enterance	**1459**	**814**	**1640**
South Sidewalk (east) between Frank T. Modica Way and Site 4 Residential Entrance	**519**	**294**	**584**
West Sidewalk between Cherry St and Monroe Street	**744**	**408**	**814**
Cherry Street and Jefferson Street			
South Sidewalk Between Site5 Entrance and Clinton Street	**710**	**474**	**829**
Cherry Street and Clinton Street			
SW Corner	**430**	**268**	**495**
West Sidewalk(north) between Cherry Street and Plaza Entrance	**345**	**190**	**385**
South Sidewalk between Plaza entrance and Clinton St	**380**	**234**	**435**
South Street and Clinton Street			
West Sidewalk between Cherry Street and South Street	**621**	**328**	**688**

Notes: Bold numbers indicate pedestrian incremental volumes are above analysis threshold of 200.

✶