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ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) AND SUPPLEMENTAL STUDIES TO THE EAS

Lead Agency:
Department of City Planning
120 Broadway, 31St Floor
New York, NY 10271

Prepared for:
Quay Plaza LLC

Prepared by:
Equity Environmental Engineering
500 International Drive, Suite 150
Mount Olive, NJ 07828

June 17, 2021

79 Quay Street Rezoning
Greenpoint, Brooklyn NY
Block 2589, Lots 1, p/o 23, and p/o 13
Brooklyn Community District 1

79 Quay Street
Brooklyn, New York 11222

CEQR Reference No: 21DCP010K

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

FOR UNLISTED ACTIONS ONLY • *Please fill out and submit to the appropriate agency* (see instructions)

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 79 Quay Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP010K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210166ZMK, N210167ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY Department of City Planning, Environmental Assessment and Review Division(EARD, DCP)			NAME OF APPLICANT Quay Plaza LLC		
NAME OF LEAD AGENCY CONTACT PERSON Olga Abinader, Environmental Assessment and Review Division Director			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Kira Xiang		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 500 International Drive		
CITY New York	STATE NY	ZIP 10271	CITY Mount Olive	STATE NJ	ZIP 07828
TELEPHONE 212-720-3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 917-470-3077	EMAIL kira.xiang@equityenvironmental.com	

5. *Project Description*

The Applicant, Quay Plaza, LLC, is seeking the approval of a zoning map amendment and a zoning text amendment to facilitate the development of 79 Quay Street (Block 2589, Lot 1), 85 Quay Street (Block 2589, Lot 23), and 95 Quay Street (Block 2589, Lot 13). The Proposed Project would replace the existing building on 79 Quay Street with a 119,005 GSF, 9-story, 101-foot-tall mixed-use building to help induce the development of an underutilized lot along two major commercial corridors (Franklin Street and West Street) as well as to provide permanently affordable housing units in alignment with the needs of city's affordable housing provision goals.

The zoning map amendment would rezone Block 2589, Lots 1, p/o 23, and p/o 13 from M1-2/R6A (MX-8) zoning district to an M1-4/R7D (MX) zoning district. The zoning text amendment would affect Zoning Resolution section 123-63 by adding R7D to designated residence districts in MX-8 and Appendix F by modifying Brooklyn CD 1 Map with MIHA.

The proposed action is a discretionary action subject to environmental review. The NYC Department of City Planning shall be the lead agency on behalf of the City Planning Commission for environmental review under CEQR.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 1	STREET ADDRESS 79, 85, and 95 Quay Street
TAX BLOCK(S) AND LOT(S) Block 2589, Lots 1, p/o 23, p/o 13		ZIP CODE 11222
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Affected Area is generally bounded by Calyer Street to the north, Franklin Street to the east, Quay Street to the south, and West Street to the west.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-2/ R6A (MX-8)		ZONING SECTIONAL MAP NUMBER 12c

6. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT ☐ ZONING CERTIFICATION ☐ CONCESSION

☒ ZONING MAP AMENDMENT ☐ ZONING AUTHORIZATION ☐ UDAAP
☒ ZONING TEXT AMENDMENT ☐ ACQUISITION—REAL PROPERTY ☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY ☐ DISPOSITION—REAL PROPERTY ☐ FRANCHISE
☐ HOUSING PLAN & PROJECT ☐ OTHER, explain:
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Board of Standards and Appeals*:** ☐ YES ☒ NO
☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)
☐ LEGISLATION ☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING ☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES ☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL ☐ PERMITS, specify:
☐ OTHER, explain:

Other City Approvals Not Subject to CEQR (check all that apply)
☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

7. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☒ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)
Total directly affected area (sq. ft.): 23,538 Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.): Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 119,005
NUMBER OF BUILDINGS: 1 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 119,005
HEIGHT OF EACH BUILDING (ft.): 101' NUMBER OF STORIES OF EACH BUILDING: 9

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 16,500
The total square feet not owned or controlled by the applicant: 7,038

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 16,500 sq. ft. (width x length) VOLUME OF DISTURBANCE: 165,000 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 16,500 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	88,951	13,529		
Type (*e.g.,* retail, office, school)	96 units	Retail		

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 205 NUMBER OF ADDITIONAL WORKERS: 41

Provide a brief explanation of how these numbers were determined:

2.18 residents per dwelling unit;
3 employees per 1,000 gsf retail.

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☐ YES ☒ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2023

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO | IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:

10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☒ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Short EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☒	☐
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☒	☐
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☒	☐
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☒	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☒
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☒	☐
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. LPC letter confirmed that there are no architectural or archaeological resources located within the 400-foot area (see Appendix A).		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☒	☐
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: There is one REC associated with the Subject Property. The vent pipe along the western portion of the Subject Property indicating the presence of an underground storage tank (UST) is considered a REC.	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☒

	YES	NO
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 7,175 = (41 x 96 households) + (79 x 41 retail employees)		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 14,196,414 = (216.3 x 13,529 commercial gsf) + (126.7 x 88,951 large residential gsf)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☒
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☒
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒

	YES	NO
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☒	☐
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☐	☒
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☐	☒
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	DATE
Kira Xiang	6/18/2021

SIGNATURE *Kira Xiang*

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☒ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	City Planning Commission
NAME	DATE
Stephanie Shellooe	June 18, 2021
SIGNATURE	

NEGATIVE DECLARATION

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6 NYCRR, Part 617, State Environmental Quality Review, the Department of City Planning acting on behalf of the City Planning Commission assumed the role of lead agency for the environmental review of the proposed actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The Applicant, Quay Plaza LLC, proposes a series of actions including a Zoning Map Amendment to rezone the affected area (Brooklyn Block 2589, Lot 1 and portions of (p/o) Lots 13 and 23) from M1-2/R6A (MX-8) to M1-4/R7D (MX-8), and Zoning Text Amendments to add R7D to the designated residential districts in MX-8, and to establish a Mandatory Inclusionary Housing (MIH) area with MIH options 1 and 2 coterminous with the proposed rezoning area in the Greenpoint neighborhood of Brooklyn Community District 1. The proposed actions would facilitate the development of a new 119,005 gross square feet (GSF) mixed-use building at 79 Quay Street (Block 2589, Lot 1, Projected Development Site 1) including approximately 83 dwelling units, including up to approximately 25 affordable dwelling units pursuant to MIH, and ground floor commercial retail space. The uses of the other affected lots are not expected to change under the proposed actions due to existing lot characteristics (only a small portion of Lot 23, a zoning split lot, is within the affected area; the 6-unit residential building on Lot 13 was constructed in 1931 and was recently improved). The proposed actions would establish a medium-density, mixed-use residential district with mandatory affordable housing provisions. The proposed actions would result in the development of a new land use similar compared to the land use pattern of surrounding area under the No Action condition, including the Greenpoint neighborhood immediately to the north. The proposed rezoning area is located within the coastal zone, and the proposed actions would be consistent with all applicable policies of the Waterfront Revitalization Program (WRP #19-170). The analysis concludes that no significant adverse impacts are anticipated for land use, zoning, and public policy.

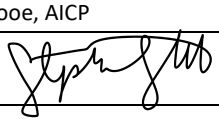
Shadows

A detailed analysis related to shadows is included in this EAS. Using a worst-case building height of 130 feet for Projected Development Site 1 (building height of 115 feet plus 15 feet for the mechanical bulkhead), the shadows screening assessment identified two sunlight-sensitive open space resources within the shadow study area: the 61 Franklin Street Garden and Bushwick Inlet Park. The detailed shadows analysis results indicate that Projected Development Site 1 could cast incremental shadows on portions of the 61 Franklin Street Garden for up to 1 hour on the December 21 analysis period, and on the northwestern corner of Bushwick Inlet Park for up to 33 minutes on the June 21 analysis period. The analysis findings demonstrate that vegetation in the affected portions of each resource would continue to receive adequate sunlight of at least four to six hours, per the guidance in the *2020 CEQR Technical Manual* found in Chapter 8, *Shadows*, on the affected analysis dates. The usability and viability of each resource, with respect to the survival of vegetation (including community garden plots) and the enjoyment of public recreation areas, would not be jeopardized as a result of project-generated incremental shadows. Therefore, the proposed actions would not result in significant adverse shadow impacts.

Hazardous Materials and Air Quality

An (E) designation (E-622) related to hazardous materials and air quality would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials or air quality.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Stacey Barron at +1 212-720-3419.

TITLE Deputy Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3328
NAME Stephanie Shellooe, AICP	DATE June 18, 2021
SIGNATURE 	
TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE June 21, 2021
SIGNATURE	

Project Name: 79 Quay Street Rezoning
CEQR # 21DCP010K
SEQRA Classification: Unlisted

Determination of Significance Appendix

The Proposed Actions were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 2589, Lot 1

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials and air quality, an (E) designation (**E-622**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1	X	X	

Hazardous Materials

The (E) designation requirements applicable to **Projected Development Site 1** for hazardous materials would apply as follows:

Task 1-Sampling Protocol

The applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum based contamination and non-petroleum based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol

A written report with findings and a summary of the data must he submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from 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. The applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

Project Name: 79 Quay Street Rezoning
CEQR # 21DCP010K
SEQRA Classification: Unlisted

Air Quality

The (E) designation requirements for air quality would apply as follows:

> ***Projected Development Site 1:*** *Any new residential and/or commercial development on the above-referenced property must ensure that the heating, ventilation, and air conditioning (HVAC) systems and/or the hot water equipment stack(s) is located at the building's highest level and at least 104 feet above grade to avoid any potential significant adverse air quality impacts.*

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Figure 1-1: Project Location Map



Figure 1-2: Existing Land Use and Zoning Map

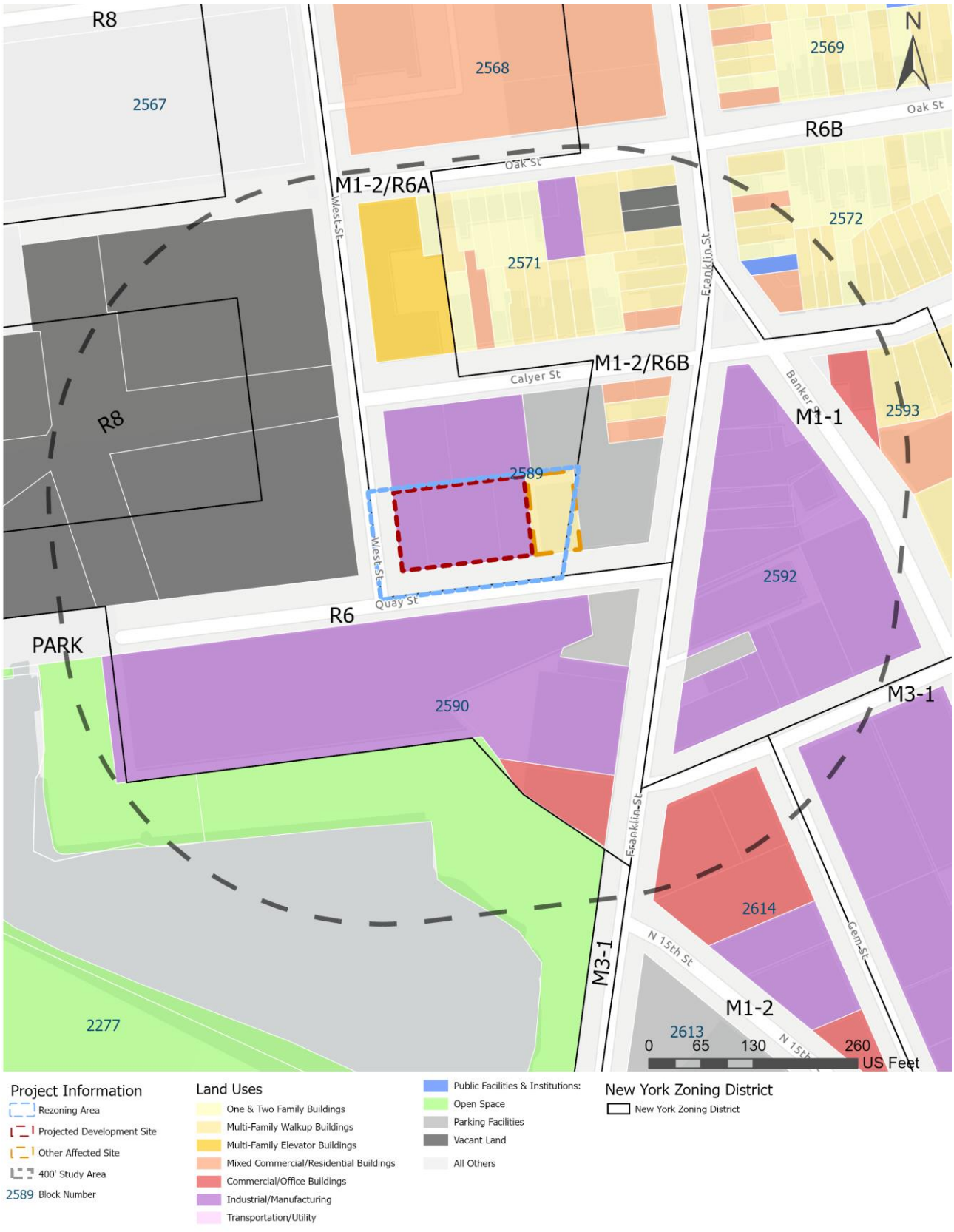


Figure 1-3: Zoning Sectional Map

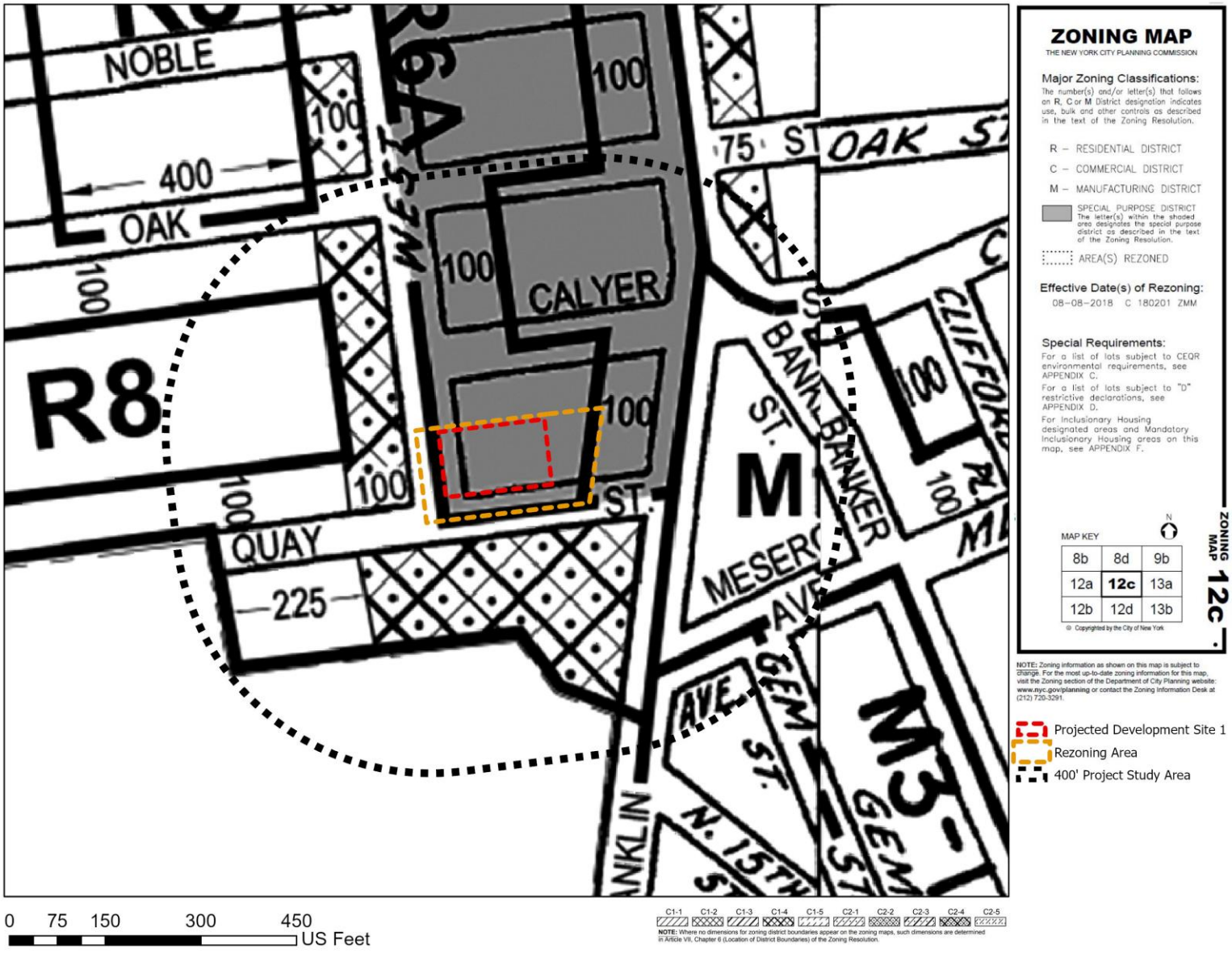
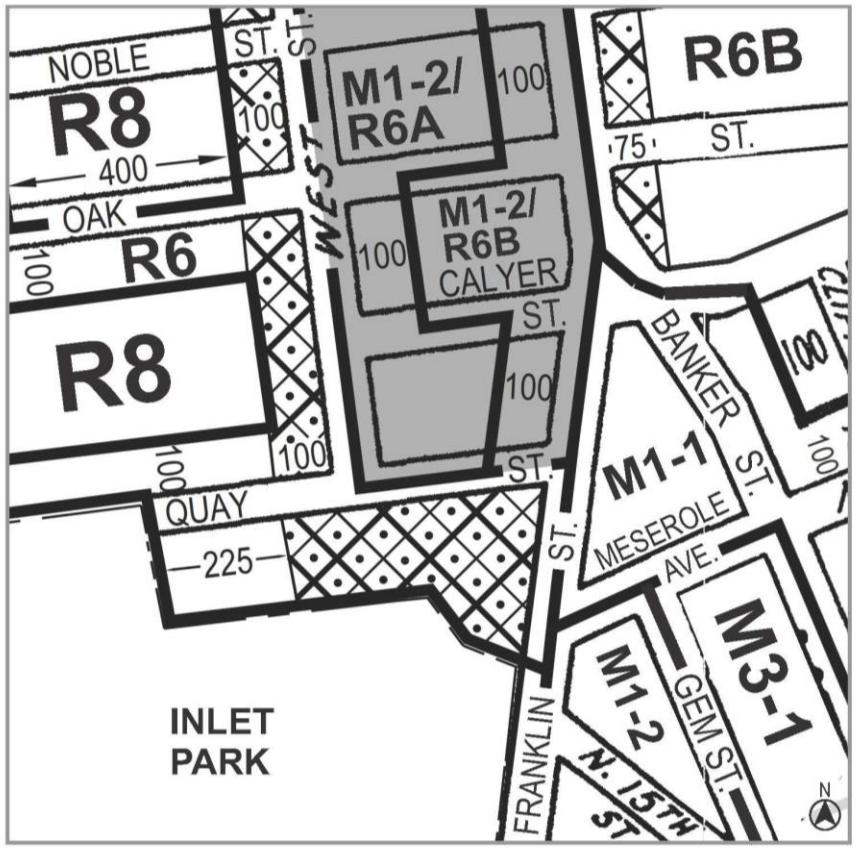
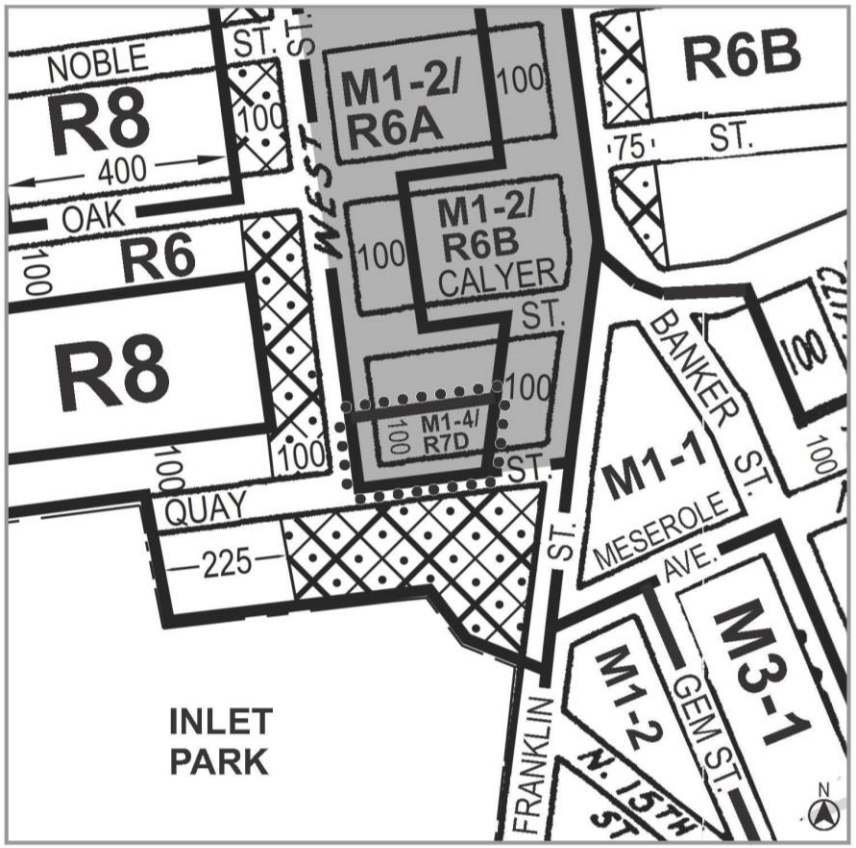


Figure 1-4: Zoning Change Map

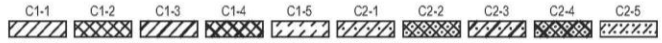


Current Zoning Map (12c & 13a)



Proposed Zoning Map (12c & 13a) - Area being rezoned is outlined with dotted lines

Rezoning from M1-2/R6A (MX-8) to M1-4/R7D (MX-8)



NOTE: Where no dimensions for zoning district boundaries appear on the zoning maps, such dimensions are determined in Article VII, Chapter 6 (Location of District Boundaries) of the Zoning Resolution.

Figure 1-5: Tax Map

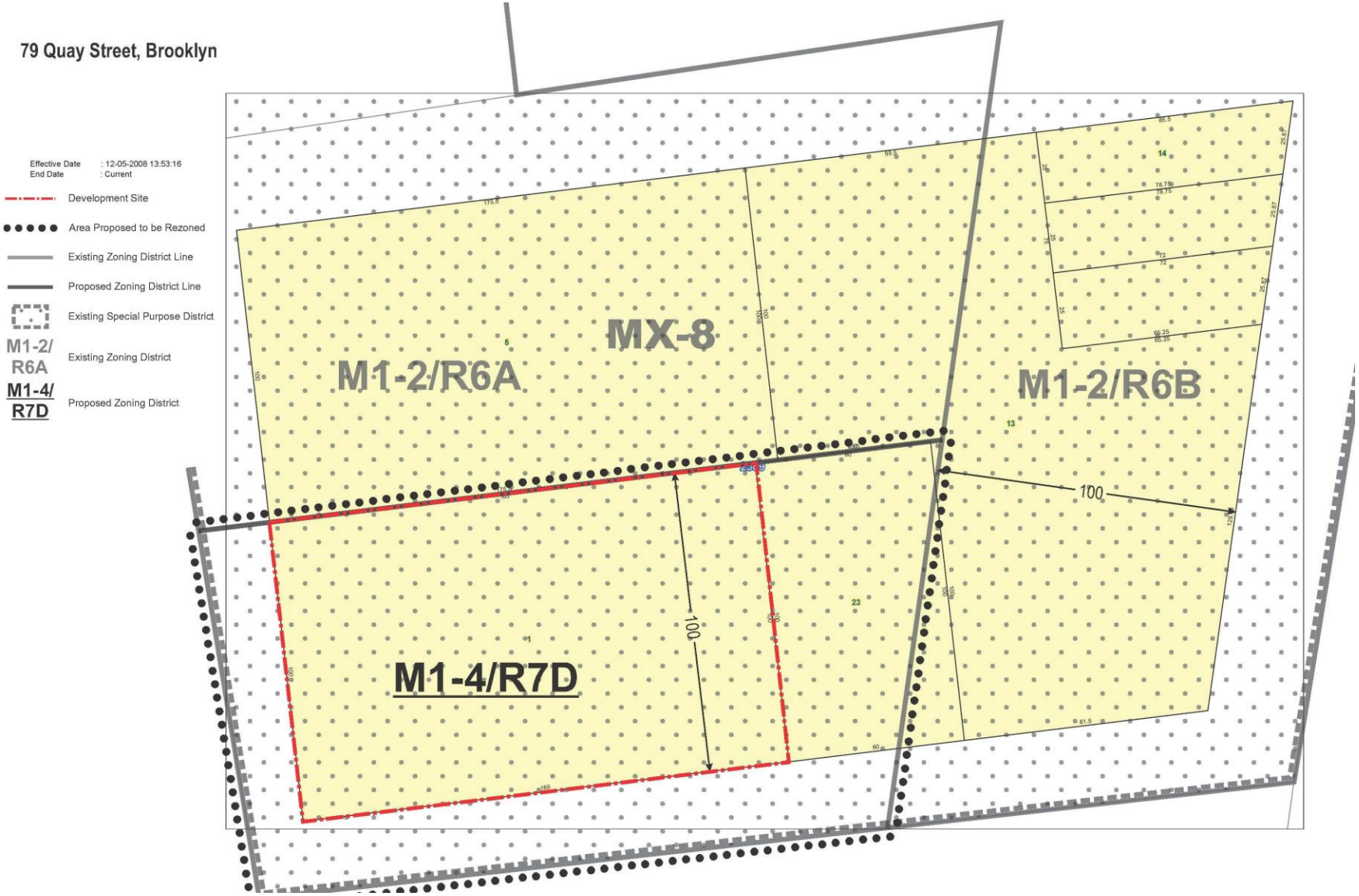


Figure 1-6.1: Site Photos 1-3 (All site photos were taken on June 2nd, 2020)



1. View of the lot opposite to the site across Quay Street



2. View of street parking along Quay Street facing west



3. View of Quay Street sidewalk facing east



Figure 1-6.2: Site Photos 4-6



4. View of the west portion of the site facing north



5. View of the site on Quay Street facing north



6. View of the lot on the right to the site



Figure 1-6.3: Site Photos 7-9



7. View of Franklin Street sidewalk facing north



8. View of the lots on Franklin Street facing east



9. View of the parking lot on Franklin Street facing south



h

Figure 1-6.4: Site Photos 10-12



10. View of corner lot at Calyer St and Franklin St facing north



11. View of the lots on Cayler Street facing east



12. View of Calyer Street facing west



Figure 1-6.5: Site Photos 13-15



13. View of the lot behind the site on Calyer St facing south



14. View of single-family residential buildings on Cayler St facing north



15. View of apartment building at West St and Calyer St facing north



Figure 1-6.6: Site Photos 16-18



16. View of West St facing north



17. View of the site on West St facing southeast

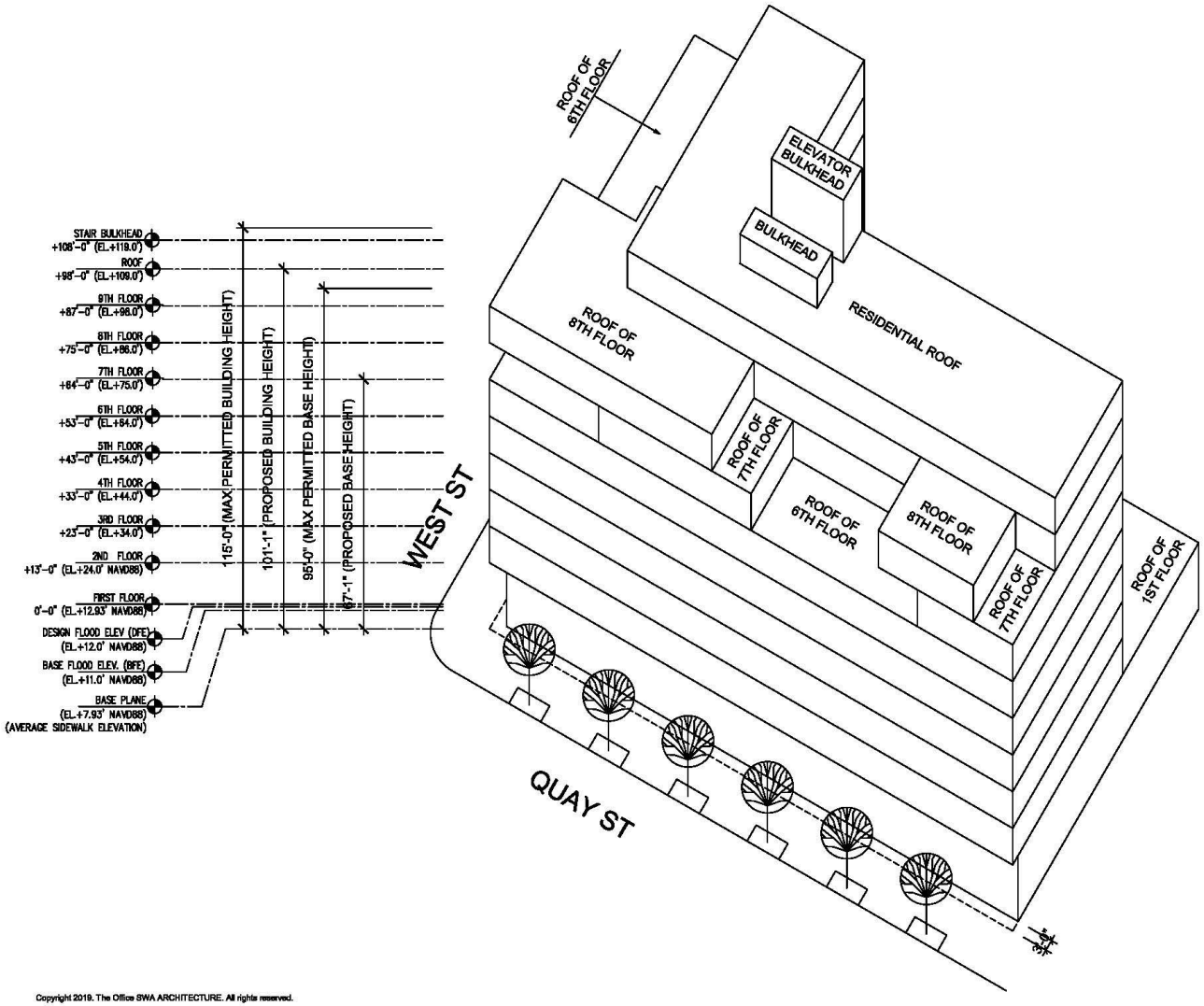


18. View of vacant land on West St facing northwest



k

Figure 1-7.1: Proposed Development - Illustrative Massing Diagram



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REGISTERED ARCHITECT OR PROF. ENGINEER
TO ALTER ANY ITEM IN ANY WAY.

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

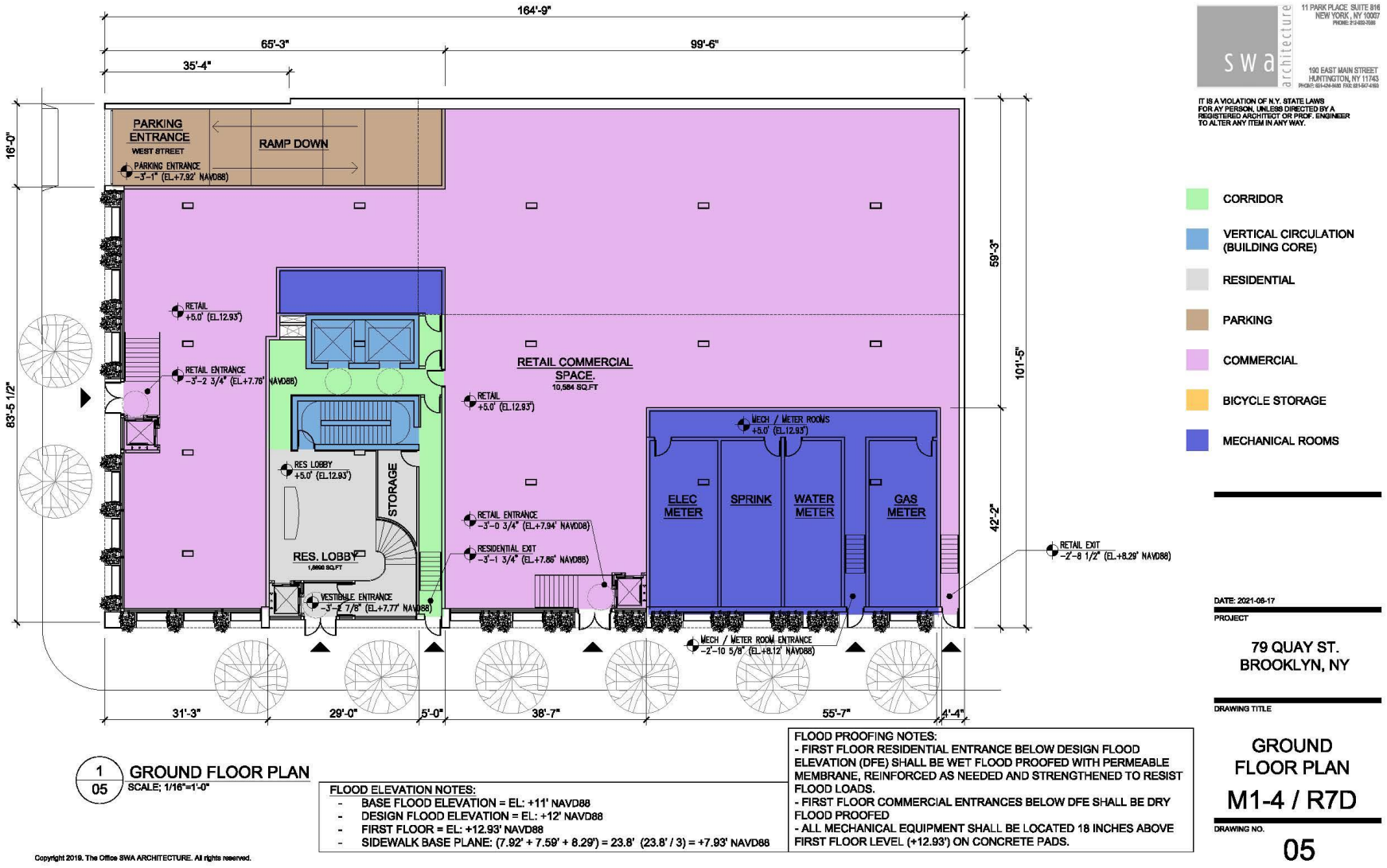
DRAWING TITLE

ZONING
MASSING
DIAGRAM
M1-4 / R7D

DRAWING NO.

03

Figure 1-7.2: Proposed Development – Illustrative Site Plan



1/05 GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"

FLOOD ELEVATION NOTES:
- BASE FLOOD ELEVATION = EL: +11' NAVD88
- DESIGN FLOOD ELEVATION = EL: +12' NAVD88
- FIRST FLOOR = EL: +12.93' NAVD88
- SIDEWALK BASE PLANE: (7.92' + 7.59' + 8.29') = 23.8' (23.8' / 3) = +7.93' NAVD88

FLOOD PROOFING NOTES:
- FIRST FLOOR RESIDENTIAL ENTRANCE BELOW DESIGN FLOOD ELEVATION (DFE) SHALL BE WET FLOOD PROOFED WITH PERMEABLE MEMBRANE, REINFORCED AS NEEDED AND STRENGTHENED TO RESIST FLOOD LOADS.
- FIRST FLOOR COMMERCIAL ENTRANCES BELOW DFE SHALL BE DRY FLOOD PROOFED
- ALL MECHANICAL EQUIPMENT SHALL BE LOCATED 18 INCHES ABOVE FIRST FLOOR LEVEL (+12.93') ON CONCRETE PADS.

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- CORRIDOR
- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

GROUND FLOOR PLAN

M1-4 / R7D

DRAWING NO.

05

Figure 1-7.3: Proposed Development – Illustrative Section

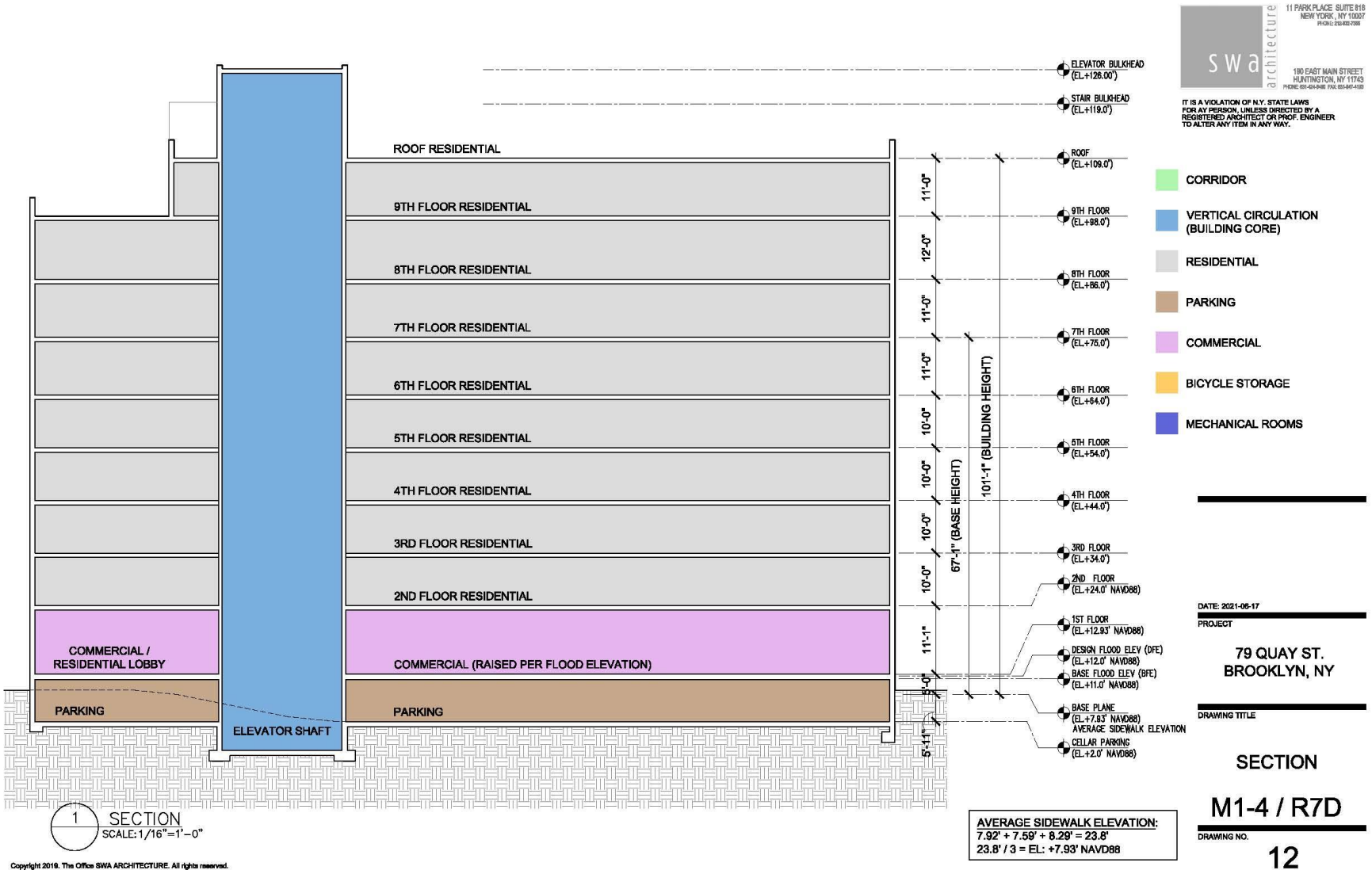
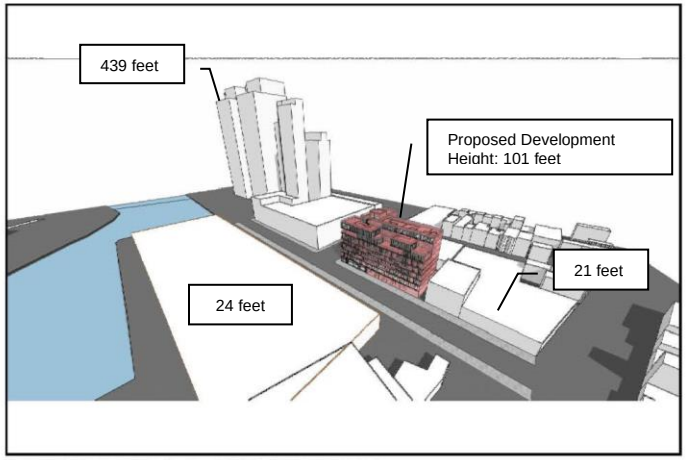
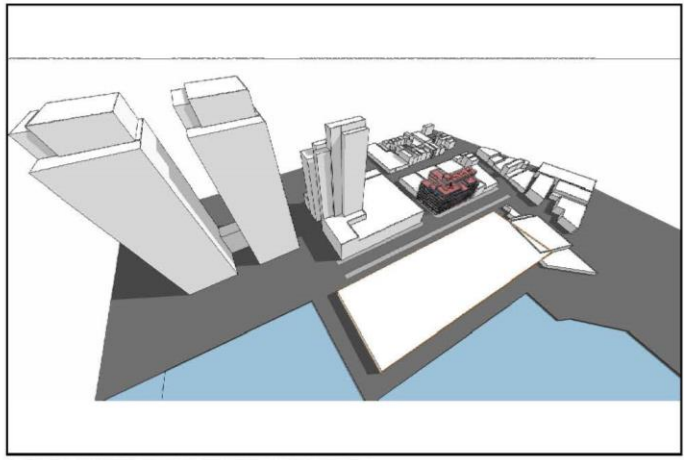


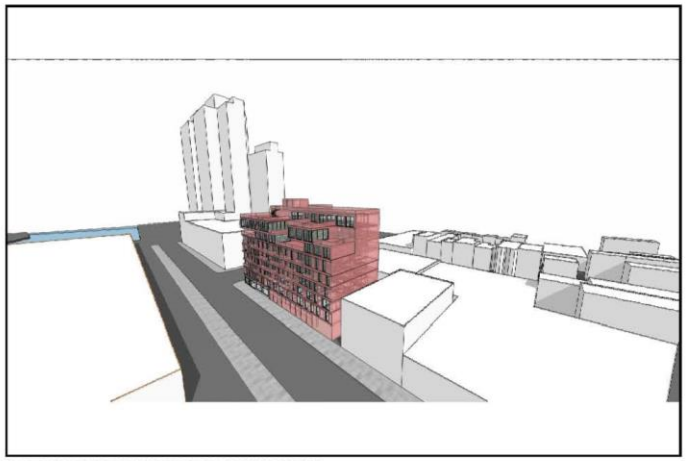
Figure 1-7.4: Proposed Development – Illustrative Axonometric[1]



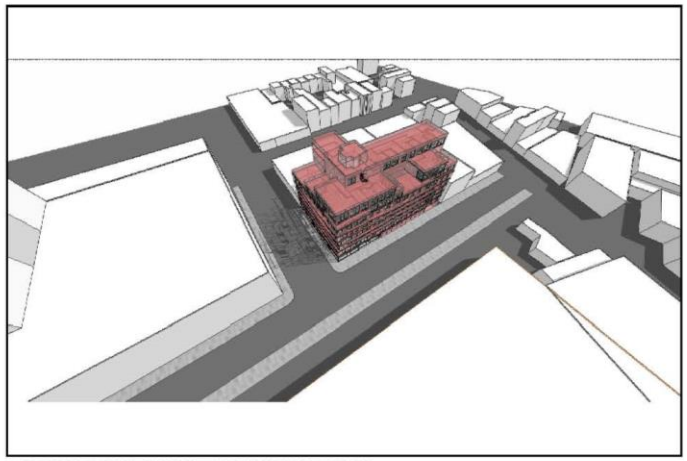
1 - PERSPECTIVE VIEW OF SITE LOOKING NORTH-WEST



2- PERSPECTIVE VIEW OF SITE LOOKING NORTH-EAST



3- PERSPECTIVE VIEW OF SITE LOOKING WEST



4- PERSPECTIVE VIEW OF SITE LOOKING NORTH-EAST

[1] The red building represents the Proposed Development on Block 2589 Lot 1. The high-rise towers are the proposed 40-story mixed-use development located at Block 2570 Lot 40 with New Building Permit (320909996-01-NB) that is partially approved by DOB on 05/21/2020. It is used for showing the contextual land use near the Proposed Development on Block 2589 Lot 1 in the future.

Figure 1-7.5: Proposed Development – Illustrative Rendering 1: View from Corner of West St and Quay St Looking Northeast



Figure 1-7.6: Proposed Development – Illustrative Rendering 2: View from Quay St Looking North



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1.0 PROPOSED ACTION

1.1 Introduction

"The Applicant", Quay Plaza LLC, seeks a Zoning Map Amendment affecting the southwestern portion of Block 2589 in the Greenpoint neighborhood of Brooklyn Community District 1 from M1-2/R6A (MX-8) to M1-4/R7D (MX-8). The Applicant also proposes two Zoning Text Amendments along with the Zoning Map Amendment: one Zoning Text Amendment to add R7D to the designated residential districts in MX-8 and one Zoning Text Amendment to Map 1 of Appendix F, adding Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing (MIH) Areas to Brooklyn Community District 1. The area proposed for rezoning includes the southwestern portion of Block 2589 bounded by Calyer Street to the north, Franklin Street to the east, Quay Street to the south, and West Street to the west, including Lots 1, p/o 23, and p/o 13 (the "Affected Area"). All the zoning changes the Applicant is pursuing for the Affected Area, including Zoning Map Amendment and Zoning Text Amendments, are referred as Proposed Actions.

The Proposed Actions are sought in order to facilitate the development of 79 Quay Street (Block 2589, Lot 1) (the "Projected Development Site 1") by replacing the existing warehouse and residential units with a new 119,005 Gross Square Feet (GSF), or 92,157 Zoning Square Feet (ZSF), 5.58 Floor Area Ratio (FAR), 9-story, 101-foot-tall [2], mixed-use building with approximately 86 dwelling units, including approximately 25 permanently affordable units set aside at or below 80% AMI, and local retail on the ground floor. The "Proposed Development" would contain a total (*not including cellar parking*) of approximately 102,480 GSF of floor area or approximately 92,157 ZSF (5.58 FAR). Of the 92,157 ZSF, 81,573 square feet is designated for residential use (4.94 FAR) and 10,584 square feet is designated for commercial use (0.64 FAR). Under the applicant's proposed development, all of the cellar level parking (16,525 GSF providing 29 parking spaces in total) would be set aside for the residents.

1.2 Background

The Affected Area is located in the southwestern part of the Greenpoint neighborhood. It was originally zoned M1-1 in the 1961 zoning ordinance before being rezoned to the current MX-8 (M1-2/R6A) as part of the Greenpoint-Williamsburg rezoning (N 050110 (A) ZRK, C 050111 (A) ZMK, effective May 11, 2005). A 1987 Certificate of Occupancy (CO) is on file for the building on site for a manufacturing building with a warehouse and accessory offices. And a December 2019 CO is on file for a manufacturing establishment with a warehouse, two accessory offices, and two residential dwelling units.

The Department of City Planning ("DCP") has initiated two large-scale rezoning in the Greenpoint-Williamsburg neighborhood.

In 2005, waterfront and upland portions of Greenpoint and Williamsburg neighborhoods were rezoned as part of the Greenpoint-Williamsburg Rezoning (N 050110 (A) ZRK, C 050111 (A) ZMK, effective May 11, 2005). The Greenpoint-Williamsburg Rezoning changed R6, C8-1, C8-2, M1-1, M1-2, M3-1, R6(M-1), R6(M1-2), M1-1(R6), and M1-2(R6) Districts to R6, R6A, R6B, R8,

[2] The proposed building height is calculated by adding the actual building height of 96 feet and an additional 5 feet, as underlying zoning regulations currently allow lots located within the 1% annual chance floodplain with height limits to measure the building envelope from the Base Flood Elevation.

M1-2, M1-2/R6, M1-2/R6A, M1-2/R6B and M1-2/R7A in nearly 200 blocks in the western Community District 1 in the borough of Brooklyn. Near Projected Development Site 1, the rezoning established C2-4 Districts along West Street and Quay Street and Special Mixed-Use Districts (MX-8) in the blocks located between West Street and Franklin Street. With the Greenpoint-Williamsburg Waterfront Rezoning, DCP proposed to allow for housing and open spaces, in tandem with light industry and commercial uses in the area.

In 2009, an approximately 175-block area to the east of the 2005 Greenpoint-Williamsburg Rezoning boundary was rezoned in the Greenpoint-Williamsburg Contextual Rezoning (N 090333 (A) ZRK, C 090334 (A) ZMK, effective July 29, 2009). The contextual rezoning eliminated C1-3, C2-2 and C2-3 districts from within an existing R6 district, changed R6, C4-3 and C8-2 Districts to R6A, R6B, R7A, C4-3A and C4-4A Districts, and established a C2-4 District within adopted R6A, R6B and R7A Districts. Separate from the 2005 Greenpoint-Williamsburg Waterfront Rezoning, this rezoning aims to preserve neighborhood character and scale by limiting the height of new development, to create opportunities and incentives for affordable housing through inclusionary zoning, and to support local retail corridors while protecting the residential character of nearby side streets.

Also, of note in the 400-foot Surrounding Area is a private application by Acme Smoked Fish Corporation requesting a zoning map amendment, zoning text amendment, large-scale general development (LSGD) special permit, and other land use actions to facilitate a new mixed-use commercial and industrial building at 30 Gem Street (20DCP009K). A public hearing on the Acme Fish Expansion Draft Environmental Impact Statement (DEIS) was held on February 17, 2021 in conjunction with the City Planning Commission's public hearing pursuant to ULURP and a Final Environmental Impact Statement (FEIS) was issued on March 26, 2021. The application was approved on June 2, 2021.

1.3 Description of Surrounding Area

The Affected Area, located in the Greenpoint neighborhood, within Community District 1 in the Borough of Brooklyn is located entirely within Block 2589, which is bounded by Calyer Street to the north, Franklin Street to the east, Quay Street to the south, and West Street to the west. Calyer Street is an east to west one-way road with curbside parking. Franklin Street is a north-south two-way road with one moving lane in each direction and curbside parking. Quay Street is an east to west one-way road with a single moving lane of traffic and curbside parking. West Street is a south to north one-way road with one moving lane of traffic and curbside parking.

Existing land uses within the 400-foot buffer around the Affected Area, referred as the Surrounding Area, primarily consist of single-family and multi-family residential, industrial and manufacturing, mixed residential and commercial, parking facilities, open space, and vacant land. To be more specific, an abundant mix of land uses is mapped, including open space surrounding the Bushwick Inlet, several mixed-use commercial and office buildings (a clothing store, bicycle store, bars and restaurants), three vacant lots, and two lots listed as parking facilities.

To the north and south of Calyer Street, the Surrounding Area contains a mix of residential, commercial, and light industrial uses, with manufacturing uses (chemical wholesaler, carpenter, uniform wholesaler) more predominant to the south and residential uses more predominant to the north. The blocks along the Franklin Street are predominantly industrial and manufacturing uses to the southeast of the Affected Area and mixed residential and commercial uses to the northeast. Western blocks on the West Street are mainly vacant lands and other miscellaneous

uses while the blocks to the south of the Quay Street have a mix of industrial and open space, with some commercial and office buildings interspersed.

Built form in the Surrounding Area varies by use, and generally consists of low-rise industrial and commercial buildings and one- to seven-story multi-family residential buildings. The manufacturing buildings are mostly 1 story in height, with a few of 2 or 3 stories. The residential buildings mainly consist of one- and two-family houses and multiple family apartment buildings, the majority of which are walk-up residential buildings ranging from 2 to 4 stories in height. The highest residential building in the Surrounding Area is located in 26 West Street, a multi-family elevator building with 7 stories in height.

Zoning districts in the Surrounding Area are MX-8 (M1-2/R6A and M1-2/R6B, R8, R6, R6B, and C2-4 commercial overlays along the eastern portion of Franklin Street and the western portion of West Street. The Affected Area is within an M1-2/R6A zoning district that extends north to Eagle Street, with the midblock between Greenpoint Avenue and Kent Street zoned M1-1. The neighboring area to the east of the Affected Area falls into M1-2/R6B. Areas to the east and west of the Affected Area are mapped with a variety of medium-density contextual zoning districts including R6, R6A, R6B, and R8. There exists a large public park to the south of the Affected Area. A further discussion of area zoning is provided in the following Land Use, Zoning, and Public Policy section of this document.

The Affected Area is located within a Transit Zone, where households are accessible to transit, retail and services and have low car ownership rates. Within these areas, parking would be optional for affordable housing units. The existing public transportation system around the Affected Area is sufficient to meet the residents' needs. Bus B24, connecting Williamsburg, Long Island City, and Greenpoint, has bus stops near the intersection of Greenpoint Avenue and Franklin Street, which is approximately 7-minute walk distance from the Affected Area. Bus B32, connecting Williamsburg Bridge Plaza and Long Island City, passes by the Affected Area on the east side along the Franklin Street, with two stops of both directions within 1-minute walk distance. The B62 bus, running between Downtown Brooklyn and Long Island City, serves the Affected Area at a farther stop location on the Manhattan Avenue, which would take 8 minutes to walk. The area also falls within the 10-minute-walk service area of B43 bus, which runs between Greenpoint and Lefferts Garden. The nearest stops of Bus B48, a bus line connecting Greenpoint and Lefferts Garden as well, are seated farther to the southeast of the Affected Area at the intersection of Lorimer Street and Nassau Avenue on the north corner of McCarren Park, which takes about 12 minutes to walk. There are also Greenpoint Avenue and Nassau Avenue subway stations of G train near the area within 10-minute walk distance. G train starts from Court Square in Queens and extends all the way south to Windsor Terrace near Prospect Park in Brooklyn.

1.4 Description of Affected Area

The Affected Area consists of the westernmost approximately 23,538 square feet portion of Block 2589, including the 3 contiguous tax lots and portions of tax lots, Lots 1, p/o 23, and p/o 13, described below (based on PLUTO data).

<u>The Applicant-Owned Projected Development Site 1</u>

The Applicant-Owned Projected Development Site 1 is located at 79 Quay Street (Block 2589, Lot 1). It consists of an approximately 16,500 square feet corner lot with 165 feet of frontage on Quay Street and 100 feet of frontage on West Street, both narrow, 60-foot wide streets. The

structure was originally built around 1931 and altered around 1957. Projected Development Site 1 is improved with a 23,500 GSF, 3-story industrial building currently inhabited by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units.

It was historically used for manufacturing uses. According to a 1987 Certificate of Occupancy (CO), the site was previously used for a manufacturing building with a warehouse and accessory offices. And a December 2019 CO is on file for a manufacturing establishment with a warehouse, two accessory offices, and two residential dwelling units.

Non-Applicant Controlled Sites

- Lot 13 (93 Quay Street) is an irregularly shaped through lot with frontage along Calyer Street, Franklin Street, and Quay Street. The lot is improved with a 18,537 GSF 1-story industrial facility constructed around 1931. The building is currently tenanted with a photography studio, Smashbox Studios BK; and
- Lot 23 (85 Quay Street) is a 6,000 SF interior lot that is improved with a 12,750 GSF, 3-story multi-family building with six dwelling units. The building was constructed around 1931 and was altered in 2017 to legalize the existing loft dwelling within the building. The lot has 60 feet of frontage along Quay Street and a lot depth of 100 feet.

1.5 Description of Proposed Development

Pursuant to the Proposed Actions, the Applicant proposes to build, on Projected Development Site 1, a new mixed commercial and residential building consisting of one 9-story structure with residential entrance on Quay Street and commercial/parking entrance on West Street. The nine-story structure of the proposed development has a height of 101 feet with a base height of 67 feet. The one-story commercial use portion would face west, towards West Street. The Proposed Development would contain a total (not including cellar parking) of approximately 102,480 GSF of floor area or approximately 92,157 ZSF (5.58 FAR). Of the 102,480 GSF, 88,951 square feet is designated for residential use (4.94 FAR) and 13,529 square feet is designated for commercial use (0.64 FAR). Under the applicant's proposed development, all of the cellar level parking (16,525 GSF providing 29 parking spaces in total) would be set aside for the residents. An associated new curb cut on West Street would provide access to the cellar parking level.

The entire ground floor would be occupied with Use Group 6 commercial (a total of approximately 13,529 GSF), which would be occupied by local retail tenants as permitted under the proposed MX-8 District, along with necessary residential lobby space. The 2nd through 9th stories would contain mixed market rate and inclusionary housing. On the upper floors, the proposed development contains approximately 88,951 GSF of residential floor area with 86 dwelling units developed pursuant to Quality Housing regulations. The Applicant is proposing MIH for the proposed development, which would result in 25 permanently affordable dwelling units for households at or below 80 percent of the Area Median Income ("AMI"). Cellar level parking accessible from a ramp on West Street would provide accessory parking for 29 cars. An associated new curb cut on West Street would provide access to the cellar parking level.

1.6 Action(s) Necessary to Facilitate the Project

The actions necessary to facilitate construction of the Proposed Development are approvals of:

(1) a Zoning Map Amendment (ZM) to map an M1-4/R7D (MX-8) zoning district in the Affected Area currently zoned as M1-2/R6A (MX-8);
(2) a Zoning Text Amendment (ZR) to amend Brooklyn Community District 1, Map 1 in Appendix F: Inclusionary Housing Designated Areas to establish the Affected Area as an MIH Area; and
(3) a Zoning Text Amendment (ZR) to add R7D to designated residence districts in MX-8.

1.7 Purpose and Need

The Affected Area is currently mapped within an M1-2/R6A (MX-8) zoning district, which makes it less attractive to investments due to the limited bulk (3.00 FAR residential, 2.00 commercial and industrial) and high parking requirements (1 space per 300 SF) for all commercial and industrial uses. The development under the current zoning district would produce far fewer dwelling units and require far more parking spaces than what is projected with the Proposed Actions, and would require a majority of the cellar level to be used for parking instead of storage or other more productive uses of building space.

As a result, the existing zoning cannot provide an incentive for new conforming mixed-use development in the Affected Area. The proposed rezoning would encourage reinvestment in the Affected Area that has seen no new construction in more than a decade,[3] while multiple new residential and mixed-use buildings have been developed in the nearby residential community. At 26 West Street, a block to the north of the Affected Area, a 96-unit apartment building was constructed in 2017 and a condo building at 80 West Street, four blocks to the north of the Affected Area, was constructed in 2015.

The Affected Area and Surrounding Area within the M1-2/R6A (MX-8) district are underutilized and present an opportunity for new mixed-use growth. It is in close proximity to existing residential and mixed-use districts and to mass transit. There are numerous public transportation options for bus and subway service near the Affected Area, including the three bus lines (B32, B43, and B62) and the Greenpoint Avenue subway station with G line service located at the intersection of Greenpoint Avenue and Manhattan Avenue.

The Applicant feels the proposed M1-4/R7D (MX-8) envelope is consistent with the M1-2/R6A (MX-8) districts mapped in the Surrounding Area. It would permit medium-density residential development at a maximum FAR of 5.6 for developments with a permanent affordable housing set aside pursuant to the MIH program. The maximum building height is 115 feet after a setback from the base height of up to 95 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 11 floors. Off-street parking is required for 50 percent of the residential dwelling units but is not required for income-restricted housing units within the Transit Zone. Within the proposed MX district, the bulk regulations of Article XII, Chapter 3 would apply to manufacturing, commercial, and community facility uses. M1-4 districts permit a maximum of 2.0 FAR for commercial or manufacturing use. It should be noted that M1-4 permits 6.5 FAR for community facilities (ZR

[3] According to Department of Buildings records, no conforming New Building ("NB") applications were filed in the past ten years for properties located on the M1-2/R6A district of Block 2589 from 2009 to 2019 in Brooklyn Community Board 1. Accordingly, no new development has occurred. The most recent record filed in Block 2589 was alteration of building type on 90 Calyer Street (Block 2589, Lot 14) in 2008, filing for new CO to remove existing violations at first floor store and apartment. Note that there is an NB application filed in 2014 with new development built in 2017 for a new 7-story residential building at 26 West Street (Block 2571, Lot 1), and a new 2-story residential building on Block 2571, Lot 7501 was constructed with a final Certificate of Occupancy issued in August 2018.

43-122), but the MX rules alter that so that the maximum community facility FAR is governed by the residential district (123-62). Since the maximum community facility FAR within R7D districts is 4.2, M1-4 would also adopt 4.2 FAR as the maximum community facility FAR. Off-Street parking is not required in M1-4 districts. At this density, the Applicant would be able to construct a mixed-use residential and commercial building with 96 units, of which 19 would be permanently affordable at low-income levels under MIH program according to CEQR analysis standards.

The proposed rezoning would provide new opportunities for affordable and market-rate housing development to revitalize an area experiencing population decline for the past decade. While the total population in Greenpoint Tabulation Area decreased by 8.2 percent between 2000 and 2010, the population in the local census tract encompassing the Affected Area, Brooklyn 561, shrank even more dramatically by 11.6 percent. Additionally, new affordable housing is a critical need in Brooklyn Community District 1, where almost 40 percent of the households are rent burdened. According to the U.S. Census Bureau, American Community Survey (ACS) 2013-17 Five Year Estimates for Public Use Microdata Area (PUMA) 4001 (which approximates Brooklyn Community District 1), 40.3 percent of households spend 35 percent or more of their income on rent. The number of rent burdened households has grown significantly by 11.7% from ACS 2006-2010 data to ACS 2013-17 data. Meanwhile, the median gross rent in Brooklyn Community District 1 has risen sharply by 39.1% from 1,193 dollar per month to 1,659 dollar per month between the two American Community Surveys. It is much higher than the median gross rent in Brooklyn of 1,314 dollar per month and New York City of 1,340 dollar per month.

Besides, 24 percent of Brooklyn Community District 1 residents have incomes below the NYC.gov Poverty Threshold, above the estimated 21.9 percent in Brooklyn and 19.6 percent Citywide. According to the Furman Center's "State of New York City's Housing and Neighborhoods in 2018", median monthly rent in Community District 1 has risen from $900 in the year 2000 to $2,000 in 2017 as the demand for housing has placed upward pressure on the supply of housing. It reports median asking rents were substantially higher at $2,980 in 2017 having risen rapidly from $2,500 in 2010.[4] The proposed development would add an estimated 96 dwelling units including 19 affordable units to meet this demand on a site now used for manufacturing warehouse and would provide opportunities for additional housing supply, including affordable housing on other non-residential sites.

In addition to opportunities for medium-density housing development under the MIH program, changing the existing R6A/M1-2 (MX-8) zoning district to an R7D/M1-4 (MX-8) district within the Affected Area provides opportunities for more active, non-residential ground floor use. Changing the existing MX zoning regulations from R6A/M1-2 to R7D/M1-4 would promote a transition to a mix of uses as envisioned by Community Board 1 with larger bulks and higher FAR, helping to foster both residential growth with affordable housing and revitalization of an underutilized manufacturing district. The changed MX composition from M1-2 to M1-4 would also encourage job creation and provide increased walk-to-work opportunities for a diverse mix of business uses, while also allowing existing industrial uses to remain in conformance. The proposed zoning map amendment would thus allow the productive and more intensive reuse of underutilized property. In addition, it would better help reknit the urban fabric in the area and better integrate it within the predominately residential portions of the Greenpoint neighborhood surrounding the M1-1 district.

[4] See New York University Furman Center, State of New York City's Housing and Neighborhoods in 2018, 52; available at: http://furmancenter.org/files/sotc/SOC_2018_Full.pdf.

The proposed text amendment of ZR Appendix F is necessary to establish an MIH Area, which would require new developments to set aside 25-30 percent of the residential floor area for affordable housing. MIH Option 1 requires an affordable housing set aside of 25 percent of the residential floor area at an average of 60 percent of AMI with 10 percent at 40 percent AMI. MIH Option 2 requires an affordable housing set aside of 30 percent of the residential floor area at an average of 80 percent AMI.[5] The Applicant proposes mapping both MIH Option 1 and Option 2 within the Affected Area to provide maximum flexibility for both Applicant controlled and non-Applicant controlled sites. The MIH program for Projected Development Site 1 would result in approximately 19 permanently affordable units. The proposed affordable housing set-asides would ensure that development within the Affected Area would address the critical need for new affordable housing in Brooklyn Community District 1. The proposed MIH Area would address the City's Housing New York: A Five-Borough, Ten-Year Plan goals by increasing affordable housing to help ensure the community remains economically diverse in the face of increasing pressure for market-rate development.

The Proposed Actions are consistent with many of the City's Stated Policy goals, such as the concession of more affordable housing, supportive transit-oriented housing, job creation, and the provision of first floor commercial uses that serve the needs of the local community. The Special Mixed-Use District (MX: R7D/M1-4) proposed would encourage neighborhood investment as well as protect light industrial/manufacturing uses, critical to the City's economic viability, from encroachment. The proposed rezoning would respond to the evolving needs of the industrial and manufacturing economy as well as enhance the vitality of the existing neighborhood by ensuring a balanced variety of uses. Due to the proximity between industrial, community facility, commercial and residential uses, the Affected Area is well suited for the Proposed Actions and would serve as both a paradigm and a platform for new mixed-use communities throughout the City's boroughs.

1.8 Analysis Framework

The analysis framework would compare the incremental difference between the proposed and potential development under the Proposed Actions (With-Action) and the development which could occur under the existing M1-2/R6A zoning (No-Action). This EAS studies the potential for individual and cumulative environmental impacts related to the Proposed Actions occurring in a study area of approximately 400-feet around the Affected Area. This environmental assessment considers the potential effects of the Proposed Actions compared to future conditions without the approvals sought by the project sponsor. This analysis framework is described below:

Reasonable Worst-Case Development Scenario

Discretionary actions sometimes permit a range of project characteristics, or development scenarios, to occur even though the action may be sought in order to facilitate a specific development. From the range of possible scenarios that are considered reasonable and likely, the scenario with the worst environmental consequences is chosen for analysis. This is considered to be the Reasonable Worst-Case Development Scenario (RWCDS), the use of which ensures that, regardless of which scenario actually occurs, its impacts would be no worse

than those considered in the environmental review. The environmental assessment examines the incremental differences between the RWCDS of the future without the project in place (No-Action condition) and the future with the project in operation (With-Action condition).

Build Year

The build year is projected to be 2023, factoring the Environmental Approval process and ULURP process of 18 months and an 18-month construction schedule for Projected Development Site 1.

Future Without the Proposed Actions

Projected Development Site 1
Under Projected Development Site 1's existing M1-2/R6A zoning, development of residential use at up to 3.0 FAR and commercial or light industrial uses at up to 2.0 FAR would be permitted in the future without the Proposed Actions. For most uses, one (1) parking space is required for every 300 sf of development under an M1-2 zone per ZT § 44-21. Parking is waived per ZT § 44-23 if the requirement thereby calculated is less than 15 spaces.

The Applicant believes that the redevelopment of Block 2589, Lot 1 is not economically feasible in the absence of the Proposed Actions due to the limited bulk and high parking requirements for all commercial and industrial uses within the existing M1-2/R6A zoning district. Therefore, it is expected that without the Proposed Actions, the Affected Area would remain the same as the existing conditions, which is a 1.42 FAR mixed-use industrial and residential building. However, for the purpose of the analysis, a No Action development is considered.

If redeveloped, a potential development on Projected Development Site 1 under the existing zoning regulations could produce a 7-story, 75-foot-tall residential and commercial building with qualifying ground floor. The building could include 16,500 GSF of ground floor commercial uses and 33,000 GSF of residential uses through floor 2 to 7, providing approximately 33 dwelling units. One dwelling unit would take up 1,000 GSF on average since the development would not include MIH units. The development would require 72 total parking spaces within an approximately 10,000 sf parking garage at the cellar level, including 55 accessory commercial parking spaces and 17 accessory residential parking spaces.

Other Affected Sites
Pursuant to *2020 CEQR Technical Manual* methodology, sites may be considered 'soft' if they are built to substantially less than the maximum allowable floor area ratio and are of sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. The minimum size for an economically viable development site is typically considered to be approximately 5,000 square feet. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use. The existing building on Block 2589, Lot 23 does not meet the CEQR Technical Manual's soft site criteria under existing zoning given its recent investment for building alteration in 2017. It is expected that it would continue in its current use under the No-Action scenario.

Block 2589, Lot 13 was improved with a 18,537 GSF 1-story industrial facility constructed around 1931. The building on the lot is currently being demolished. According to the records from Department of Buildings, the property owner filed an application (Application Number: 322005067) for demolition of the one-story masonry building on October 31, 2019, which is in process right now. If demolished and redeveloped under existing zoning, the potential

development could produce a 7-story, 75-foot-tall residential and commercial building with qualifying ground floor with a story height of at least 15 feet.

Future with the Proposed Actions

Projected Development Site 1
While the proposed development as described above constitutes the applicant's intended use of Projected Development Site 1, in order to provide a conservative analysis framework, a development scenario is identified for the site that maximizes building size and height under Mandatory Inclusionary Housing (MIH) and Zoning for Quality and Affordability (ZQA).

Under MIH and ZQA, a mixed residential and commercial development with a maximum FAR of 5.6 would be permitted. This is essentially the same amount of floor area as proposed by the Applicant (13,529 GSF ground floor commercial and 88,951 GSF residential uses), but building height would be 11 stories and 115 feet, with the provision of a qualifying ground floor. Therefore, analysis of Projected Development Site 1 would be for the same mix of uses as proposed by the Applicant, but with a building height of up to 115 feet, rather than 101 feet as proposed by the Applicant. In addition, a smaller average dwelling unit size and 100% lot coverage will be studied for a more conservative CEQR analysis. The Applicant is proposing an average dwelling unit size of 1,016 GSF, while the RWCDS will consider an average dwelling unit size of 850 GSF, which is the typical average size used in a CEQR analysis with MIH. This will analyze a total of 96 dwelling units instead of the 86 units proposed. Among all dwelling units, 20 percent or 19 units will be set aside at or below 80 percent AMI for the analysis. The Applicant is also proposing a lot coverage that would not be maximized in the proposed zoning district, which should be assumed to be the maximum permitted for the RWCDS.

Based on the assumptions above, a 119,005 GSF (92,157 ZSF, 5.58 FAR) 11-story, 115-foot-tall mixed-use building would be constructed for CEQR analysis. The building would include 13,529 GSF of ground floor commercial uses, 88,951 GSF of floors 2-11 residential uses, and 16,525 GSF of cellar level parking. There would be 96 total dwelling units, 19 of which would be permanently set aside at or below 80% AMI. 38 residential accessory parking spaces would be required and are provided at cellar level in an enclosed garage. No commercial parking spaces are required within an M1-4 zoning district.

Other Affected Sites
The proposed zoning map amendment would affect multiple properties not under the Applicant's control. Owners of sites that are currently underdeveloped with respect to the proposed zoning may take advantage of the expanded floor area and uses allowed under the proposed R7D/M1-4.

Block 2589, Lot 23 is now developed with a 6-unit multi-family walk-up building constructed around 1931 and significantly altered in 2017. The existing property on the site has seen a significant recent investment for the building alteration, and is only 70% built out given the current zoning district. Therefore, it is not anticipated that redevelopment would occur as a result of the Proposed Actions.

New York Zoning Regulation adopts the 25-foot-rule to zoning lots located in two or more zoning districts and divided by a zoning district boundary. It indicates that when the width of one zoning district measures 25 feet or less at every point of the lot, the use and bulk regulations of the larger zoning district can be applied to the entire lot. Since approximately 45 square feet of Block 2589, Lot 13 is included in the Affected Area, according to the 25-foot-rule, no changes

would occur to the site's zoning, and redevelopment as a result of the Proposed Actions is not anticipated.

Projected Development Site 1 and Other Affected Site are shown in **Figure 1-1** while the RWCDS Analysis Framework described above is shown in **Table 1.8-1**.

While development of the Other Affected Site will be considered for potential impacts to site-specific aspects of environmental review such as design, noise levels, and air emissions, incremental development under the Proposed Actions, which would be the basis for analysis of density-related aspects of the environment such as traffic, school utilization, and socioeconomic conditions, would be based on the increment between the No-Action and With-Action condition on Projected Development Site 1. This incremental development would consist of 94 dwelling units; 75 market rate and 19 affordable. The net residential square footage would equal 79,573 ZSF or 86,851 GSF and the net commercial square footage would equal 10,584 ZSF or 13,529 GSF while a reduction of 21,500 square feet of manufacturing space would occur with the proposed development. Further, an increase of 38 parking spaces would result in the With-Action condition compared to the No-Action condition.

The existing, No-Action, and With-Action conditions on the lots within Projected Development Site 1 are presented in the **Table 1.8-2 Incremental Analysis Table.**

Table 1.8-1: RWCDS Analysis Framework – Existing, No-Action and With-Action Calculations

Existing

	Address	Block	Lot	Lot Size SF	Projected Site Lot Size SF	Existing Zoning		TOTAL FAR		Residential FAR		Commercial FAR		Community Facility FAR		Manufacturing FAR		# of Stories		Height		TOTAL SF		Residential SF		Commercial SF		Community Facility SF		Manufacturing SF		Parking SF	Total DU (Market + Affordable)	Affordable DU		Market-rate DU	Parking		
								Exist.	Max.	Exist.	Max.	Exist.	Max.	Exist.	Max.	Exist.	Max.	Exist.	Max.	Exist.	Max.	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF						Residential	Commercial	Community
Projected Development Site 1	79 Quay Street	2589	1	16,500	16,500	M1-2/R6A		1.42	3.00	0.12	3.00	0.00	2.00	0.00	3.00	1.30	2.00	3	7	35	75	23,500	23,500	2,000	2,000	0	0	0	0	21,500	21,500		2	0		2	0	0	0
TOTAL																						23,500	23,500	2,000	2,000	0	0	0	0	21,500	21,500	0	2	0		2	0	0	0

No-Action Scenario

	Address	Block	Lot	Lot Size SF	Projected Site Lot Size SF	Existing Zoning		TOTAL FAR		Residential FAR		Commercial FAR		Community Facility FAR		Manufacturing FAR		# of Stories		Height		TOTAL SF		Residential SF		Commercial SF		Community Facility SF		Manufacturing SF		Parking SF	Total DU (Market + Affordable)	Affordable DU		Market-rate DU	Parking		
								Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF						Residential	Commercial	Community
Projected Development Site 1	79 Quay Street	2589	1	16,500	16,500	M1-2/R6A		1.42	3.00	0.12	3.00	0.00	2.00	0.00	3.00	1.30	2.00	3	7	35	75	23,500	23,500	2,000	2,000	0	0	0	0	21,500	21,500		2	0		2	0	0	0
TOTAL				16,500	16,500																	23,500	23,500	2,000	2,000	0	0	0	0	21,500	21,500	0	2	0		2	0	0	0

With-Action Scenario

	Address	Block	Lot	Lot Size SF	Projected Site Lot Size SF	Existing Zoning	Proposed Zoning	TOTAL FAR		Residential FAR		Commercial FAR		Community Facility FAR		Manufacturing FAR		# of Stories		Height		TOTAL SF		Residential SF		Commercial SF		Community Facility SF		Manufacturing SF		Parking SF	Total DU (Market + Affordable)	Affordable DU (100% per HPD)	Affordable DU (@ 80% AMI)	Market-rate DU	Parking		
								Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	Prop.	Max.	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF	GSF	ZSF						Residential	Commercial	Community
Projected Development Site 1	79 Quay Street	2589	1	16,500	16,500	M1-2/R6A	M1-4/R7D	5.58	5.60	4.94	5.60	0.64	2.00	0.00	4.20	0	2.00	11	11	115	115	119,005	92,157	88,951	81,573	13,529	10,584	0	0	0	0	16525	96	0	19	77	38	0	0
TOTAL				16,500	16,500																	119,005	92,157	88,951	81,573	13,529	10,584	0	0	0	0	16,525	96	0	19	77	38	0	0
INCREMENT				0	0																	95,505	68,657	86,951	79,573	13,529	10,584	0	0	(21,500)	(21,500)	16,525	94	0	19	75	38	0	0

Table 1.8-2: RWCDS Incremental Analysis Table

Description of Existing and Proposed Conditions — **Part II - RWCDS Analysis Framework Table**

	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	3-story mixed-use	3-story mixed-use	11-story mixed-use	
No. of dwelling units	2	2	96	94
No. of low- to moderate-income units	0	0	19	19
Gross floor area (sq. ft.)	2,000	2,000	88,951	86,951
Commercial	☐ Yes ☑ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
Describe type (retail, office, other)	N/A	N/A	Retail	
Gross floor area (sq. ft.)	N/A	N/A	13,529	13,529
Manufacturing/Industrial	Yes	Yes	No	
If "yes," specify the following:				
Type of Use	Light Industrial	Light Industrial	N/A	
Gross floor area (sq. ft.)	21,500	21,500	N/A	-21,500
Open storage area (sq. ft.)	N/A	N/A	N/A	
If any enclosed activities, specify:	N/A	N/A	N/A	
Community Facility	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:				
Type of Use	N/A	N/A	N/A	
Gross floor area (sq. ft.)	N/A	N/A	N/A	
Vacant Land	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	☑ No
If "yes", describe:	N/A	N/A	N/A	
Publicly Accessible Open Space	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify type (mapped City, State, or Federal Parkland, wetland-mapped or otherwise known, other):	N/A	N/A	N/A	
Other Land Uses	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Parking				
Garages	☐ Yes ☐ No	☐ Yes ☑ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. of public spaces	N/A	N/A	0	
No. of accessory spaces	N/A	N/A	38	38
Operating hours	N/A	N/A	24/7	
Attended or non-attended	N/A	N/A	non-attended	
Lots	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," specify the following:	TRUE	TRUE	TRUE	
No. of public spaces	N/A	N/A	N/A	
No. of accessory spaces	N/A	N/A	N/A	
Operating hours	N/A	N/A	N/A	
Other (includes street parking)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If "yes," describe:	N/A	N/A	N/A	
Population				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Residents	☑ Yes ☐ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify number:	5	5	238	233
Briefly explain how the number of residents was calculated:	2.48 person dwelling unit average per Brooklyn CD 1 (2017 ACS)			
Businesses	☑ Yes ☐ No	☑ Yes ☐ No	☑ Yes ☐ No	
If "yes," specify the following:				
No. and type	Rock-climbing gym, furniture maker	Rock-climbing gym, furniture maker	6 local retail	
No. and type of workers by business	22	22	41 local retail	19
No. and type of non-residents who are not workers	323	323	2767	2444
Briefly explain how the number of businesses was calculated:	Employees: 3 employees per 1,000 SF for local retail; 1 employee per 250 SF for medical office; 1 employee per 250 SF office use. Patrons: 205 per 1,000 SF local retail; 15 per 1,000 SF light industrial. (Per transportation factors.)			
Other (students, visitors, concert-goers, *etc* .)	☐ Yes ☑ No	☐ Yes ☑ No	☐ Yes ☑ No	
If any, specify type and number:	N/A	N/A	N/A	
Briefly explain how the number was calculated:				
Zoning				
Zoning classification	M1-2/R6A	M1-2/R6A	M1-4/R7D	
Maximum amount of floor area that can be developed	3.00 Res. And CF; 2.00 Comm. And Man.	3.00 Res. And CF; 2.00 Comm. And Man.	5.60 Res; 4.20 CF; 2.00 Com. And Man.	
Predominant land use and zoning classifications within land use study area(s) or a 400 ft. radius of proposed project	Industrial, Commercial, Residential, Open Space; M1-2/R6A; M1-2/R6B; R8; R6; R6B; C2-4 overlay	Industrial, Commercial, Residential, Open Space; M1-2/R6A; M1-2/R6B; R8; R6; R6B; C2-4 overlay	Industrial, Commercial, Residential, Open Space; M1-2/R6A; M1-2/R6B; R8; R6; R6B; C2-4 overlay	
Attach any additional information that may be needed to describe the project. If your project involves changes that affect one or more sites not associated with a specific development, it is generally appropriate to include total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

2.0 ENVIRONMENTAL REVIEW

2.1 Land Use, Zoning, and Public Policy

The *2020 CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the Surrounding Area. Land use, zoning, and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to Projected Development Site 1 and the Surrounding Area as well as the larger area in which the Proposed Actions may have an effect. Because the Proposed Actions would permit the development of multiple family residential use with a larger bulk and reduce the parking requirements for commercial use, which would not be allowed under Projected Development Site 1's existing M1-2/R6A zoning, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 20v1 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot study area was performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

2.1.1 Land Use

The *2020 CEQR Technical Manual* suggests that a land use, zoning, and public policy study area should extend 400 feet from the site of the proposed action. Existing land use patterns of city blocks within approximately 400 feet of Projected Development Site 1 are presented in **Figure 2.1-1**. The proposed zoning map amendment would affect the following lots: Block 2589, Lots 1 (Projected Development Site 1), p/o 23 and p/o 13. Collectively these lots are identified as the Affected Area.

Existing Conditions

<u>Land Use Study Area</u>
The Affected Area is located in the Greenpoint neighborhood, within Community District 1 in the Borough of Brooklyn. Existing land uses within the 400' Surrounding Area around the Affected Area primarily consist of manufacturing, one- and two-family residences, multi-family residences, mixed commercial and office buildings, open space, parking facilities, and vacant land. Built form in the area varies by use, and generally consists of low-rise industrial and commercial buildings and one- to seven-story multi-family residential buildings.

<u>Affected Area</u>
The Affected Area is located entirely on Block 2589, which is bounded by Calyer Street to the north, Franklin Avenue to the east, Quay Street to the south, and West Street to the west. The Affected Area is composed of lots 1, p/o 23, and p/o 13, including Projected Development Site 1, which is identified as 79 Quay Street (Block 2589, Lot 1). The Affected Area encompasses approximately 222 feet on Quay Street from West Street to Franklin Street with a depth of 100 feet. The Affected Area is shown in **Figure 1.1** of this document.

The proposed Zoning Map Amendment would affect the following lots in the Affected Area:

- Lot 1 (79 Quay Street) is Applicant owned. The site has a frontage of 165 feet on Quay Street to the south and a frontage of 100 feet on West Street to the west. The 16,500-square-foot lot is presently occupied by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units.
- Lot 13 (93 Quay Street) is an irregularly shaped through lot with frontage along Calyer Street, Franklin Street, and Quay Street. The lot was improved with a 18,537 GSF 1-story industrial facility constructed around 1931. The building is currently being demolished with a permit from Department of Buildings (Application Number: 322005067) approved on October 31, 2019; and
- Lot 23 (85 Quay Street) is a 6,000 SF interior lot that is improved with a 12,750 GSF, 3-story multi-family building with six dwelling units. The building was constructed around 1931 and was altered in 2017 to legalize the existing loft dwelling within the building. The lot has 60 feet of frontage along Quay Street and a lot depth of 100 feet.

Projected Development Site 1
Projected Development Site 1 (Block 2589, Lot 1) is an improved lot with three 3-story buildings occupied by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units.

Analysis

Future No-Action Condition

Land Use Study Area
Existing land use patterns are generally expected to continue in the Surrounding Area in the future without the Proposed Actions. There is no known major land use change anticipated in the foreseeable future within the land use study area. Any new residential development in Surrounding Areas would be governed by contextual zoning districts established by the Greenpoint-Williamsburg Rezoning, adopted by the City Council in May 2005.

There are five active major construction projects happening in the 400-foot study area, totaling 322,113 square feet and 219 proposed dwelling units. The largest one is located at 29 West Street, northwest to the site between Calyer Street and Oak Street, seeking a New Building permit for a 14-story mixed-use building with residential and commercial uses. Giron Contracting Inc. has filed two New Building permits for their adjacent sites on 85-87 Calyer Street, proposing a 3-story penthouse with cellar and one family dwelling. In the same block (Block 2571) at 68 Oak Street, an alteration permit was issued on 03/19/2019 to convert the existing building from two to one family, including some partition, plumbing, and mechanical work. To the east of the site at 50 Franklin Street, another alteration permit was issued for vertical enlargement of existing 2-story manufacturing building, adding 3 stories on the top. The proposed building would be five stories for manufacturing and community facility uses.

It should be noted that within 400-foot area to the southwest of Projected Development Site 1, which is slightly larger than the study area, there is a private application by Acme Smoked Fish Corporation requesting a zoning map amendment, zoning text amendment, large-scale general development (LSGD) special permit, and other land use actions to facilitate a new mixed-use commercial/industrial building at 30 Gem Street (20DCP009K). A public hearing on the Acme Fish Expansion Draft Environmental Impact Statement (DEIS) was held on February 17, 2021 in

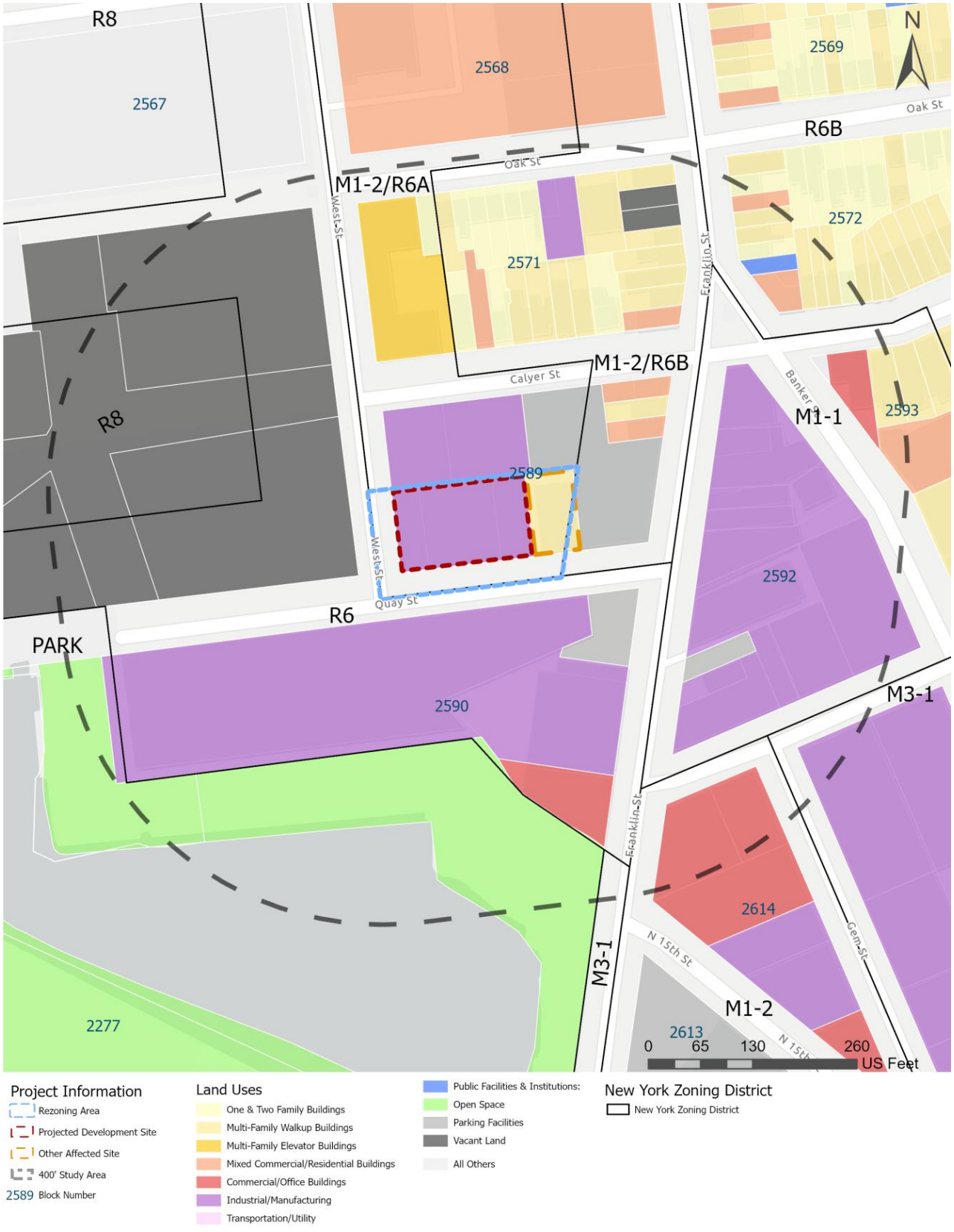
conjunction with the City Planning Commission's public hearing pursuant to ULURP and a Final Environmental Impact Statement (FEIS) was issued on March 26, 2021. The application was approved on June 2, 2021.

Affected Area
Redevelopment of Block 2589, Lot 1 is not economically feasible in the absence of the Proposed Actions due to the limited bulk and high parking requirements for all commercial and industrial uses within the existing M1-2/R6A zoning district. Therefore, it is expected that without the Proposed Actions, the Affected Area would remain the same as the existing conditions, which is a 1.42 FAR mixed-use industrial and residential building.

Pursuant to *2020 CEQR Technical Manual* methodology, the existing building on Block 2589, Lot 23 does not meet the soft site criteria under existing zoning given its recent investment for building alteration in 2017. It is expected that it would continue in its current use under the No-Action scenario.

Block 2589, Lot 13 is improved with a 18,537 GSF 1-story industrial facility constructed around 1931. The building is currently tenanted with a photography studio, Smashbox Studios BK. According to the records from Department of Buildings, the property owner filed an application (Application Number: 322005067) for demolition of the one-story masonry building on October 31, 2019, which is in process right now. If demolished and redeveloped under existing zoning, the potential development could produce a 7-story, 75-foot-tall residential and commercial building with qualifying ground floor.

Figure 2.1-1: Area to be Rezoned Overlaid Existing Land Use and Zoning Map



Future With-Action Condition

Land Use Study Area
Land use and development patterns in the Land Use study area are anticipated to remain unchanged in the future with the Proposed Actions. Any new development in the Surrounding Area would be consistent with the medium-density M1-2/R6A contextual zoning mapped during the Greenpoint-Williamsburg Rezoning or the proposed rezoning from M1-2/R6A to an MX District composed of R7D/M1-4 of a portion of Block 2589 to the west of the Affected Area as discussed previously.

Projected Development Site 1
While the proposed development as described above constitutes the applicant's intended use of Projected Development Site 1, in order to provide a conservative analysis framework, a development scenario was identified for the site that maximizes building size and height under Mandatory Inclusionary Housing (MIH) and Zoning for Quality and Affordability (ZQA).

According to MIH and ZQA regulations, a mixed residential and commercial development with a maximum FAR of 5.6 would be permitted. Under the reasonable worst-case development scenario, the rezoning would result in a 119,005 GSF (92,157 ZSF; 5.58 FAR), 11-story, 115-foot-tall development composed of 88,951 GSF of residential through floor two to eleven and 13,529 GSF of local retail commercial on the ground floor, and 16,525 GSF of cellar level parking. The building would house 96 units or 77 market rate units and 19 affordable units. Thirty-eight residential parking spaces would be provided. There is no accessory parking requirement for commercial under the MX District R7D/M1-4.

Other Affected Sites
The proposed zoning map amendment would affect multiple properties not under the applicant's control. Owners of sites that are currently underdeveloped with respect to the proposed zoning may take advantage of the expanded floor area and uses allowed under the proposed MX District R7D/M1-4. Pursuant to *2020 CEQR Technical Manual* methodology, sites may be considered 'soft' if they are built to substantially less than the maximum allowable floor area ratio and are of sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. The minimum size for an economically viable development site is typically considered to be approximately 5,000 square feet. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use.

Block 2589, Lot 23 is now developed with a 6-unit multi-family walk-up building constructed around 1931 and significantly altered in 2017. The existing property on the site has seen a significant recent investment for the building alteration, and is only 70% built out given the current zoning district. Therefore, it is not anticipated that redevelopment would occur as a result of the Proposed Actions.

New York Zoning Regulation adopts the 25-foot-rule to zoning lots located in two or more zoning districts and divided by a zoning district boundary. It indicates that when the width of one zoning district measures 25 feet or less at every point of the lot, the use and bulk regulations of the larger zoning district can be applied to the entire lot. Since approximately 45 square feet of Block 2589, Lot 13 is included in the Affected Area, according to the 25-foot-rule, no changes would occur to the site's zoning, and redevelopment as a result of the Proposed Actions is not anticipated.

Conclusion

The Proposed Rezoning would allow a change in land use, which would allow mixed-use developments composed of residential, commercial, and light-industrial with a higher residential density and less parking spaces required. The Surrounding Area already contains a stable and enduring residential population in low-rise and mid-rise type buildings as well as industrial and commercial land uses. The Applicant believes that the Proposed Rezoning would allow for the productive redevelopment of the Affected Area with land uses that are similar to the Surrounding Area and therefore the Proposed Development would not generate a land use that would be incompatible with surrounding uses.

2.1.2 Zoning

The *2020 CEQR Technical Manual* suggests that a land use, zoning, and public policy study area should extend 400 feet from the site of the proposed action. Existing zoning districts within approximately 400 feet of Projected Development Site 1 are presented in **Figure 2.1-1.** The proposed zoning map amendment would affect the following lots: Block 2589, Lots 1 (Projected Development Site 1), p/o 23, and p/o 13. Collectively these lots are identified as the Affected Area.

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Affected Area are M1-2/R6A, M1-2/R6B, the Special Mixed Use District (mapped here as MX-8), M1-1, M1-2, M3-1, R6, R6A, R6B, R8, and C2-4 commercial overlays along the eastern portion of Franklin Street and the western portion of West Street.

Table 2.1-2: Summary of Existing Zoning Regulations

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
M1-2/ R6A (MX-8)	UGs 1-14, 16-18	3.0 FAR - Residential 2.0 FAR - Commercial 3.0 FAR - Community Facility 2.0 FAR - Manufacturing	50 percent of dwelling units (waived if 5 or fewer spaces required)
M1-2/ R6B (MX-8)	UGs 1-14, 16-18	2.0 FAR - Residential 2.0 FAR - Commercial 2.0 FAR - Community Facility 2.0 FAR - Manufacturing	50 percent of dwelling units (waived if 5 or fewer spaces required)
M1-1	Light Manufacturing UGs 4-14, 16, 17	1.0 FAR - Manufacturing 1.0 FAR - Commercial 2.4 FAR - Community Facility	Varies by Use
M1-2	Light Manufacturing UGs 4-14, 16, 17	2.0 FAR - Manufacturing 2.0 FAR - Commercial 4.8 FAR - Community Facility	Varies by Use
M3-1	Heavy Manufacturing UGs 6-14, 16-18	2.0 FAR - Manufacturing 2.0 FAR - Commercial	Varies by Use
R6	Residential UGs 1-4	0.78-2.43 FAR - Residential 4.8 FAR - Community Facility	70 percent of dwelling units (waived if 5 or fewer spaces required)

R6A	Contextual Residential UGs 1-4	3.6 FAR - Residential 3.0 FAR - Community Facility	50 percent of dwelling units (waived if 5 or fewer spaces required)
R6B	Contextual Residential UGs 1-4	2.0 - 2.2 FAR - Residential 2.0 FAR - Community Facility	50 percent of dwelling units (waived if 5 or fewer spaces required)
R8	Residential UGs 1-4	0.94 – 6.02 FAR - Residential 7.2 FAR - Residential (Mandatory Inclusionary housing) 6.5 FAR - Community Facility	40 percent of dwelling units (waived if 5 or fewer spaces required)
C2-4	Commercial Overlay UGs 1-9 & 14	2.0 FAR - Commercial	Generally Not Required

Source: Zoning Handbook, New York City Department of City Planning, January 2006

Existing zoning districts in the Surrounding Area include:

M1-2/R6A (MX-8) & M1-2/R6B (MX-8)

The Affected Area is within a Special Mixed Use District MX-8 zoning district established in 1997, which starts from the site and extends to the north of the Affected Area for several blocks generally between Eagle Street to the north and Quay street to the south. The prevailing built form in the MX-8 district is primarily low-rise buildings for residential and commercial uses, including mixed-use buildings with qualified ground floor. There are some light industrial buildings interspersed north to the site in the midblock between Huron Street and Java Street. Bounded by Greenpoint Avenue to the south, Franklin Street to the east, Kent Street to the north, West Street to the west, nearly a whole block is occupied by commercial and office uses in the MX-8 district.

M1-1

An M1-1 district is located to the southeast of the Affected Area across Franklin Street. M1-1 zoning districts permit nearly all industrial uses subject to M1 performance standards. Commercial offices, hotels, and most retail uses are also permitted along with certain community facility uses. In 2017, the Department of City Planning began an environmental review of a proposed zoning text amendment to limit new hotels in M1 districts. New residential use is not permitted within M1-1 districts. The maximum floor area ratio (“FAR”) for permitted manufacturing and commercial uses within the M1-1 district is 1.0 and 2.4 for permitted community facility uses. The maximum base height before setback is 30 ft. or two-stories. Off-street parking is required for manufacturing and commercial uses, and for most uses is calculated based on the amount of floor area. In M1-1 districts, the off-street parking requirement may be waived if fewer than 15 spaces are required.

M1-2

To the south of the Affected Area, south of Quay Street along Franklin Street, there is a large M1-2 district designated for light industries as well as wholesale service and storage facility. Nearly fifty percent of the district is built with two- to four-story office and commercial buildings while the rest is occupied by low-rise light manufacturing buildings. Parking and loading requirements in M1-2 vary with the actual use of the land. M1-2 districts are subject to parking requirements based on the type of use and size of an establishment. Requirements for loading berths of specified dimensions also differ

according to building size and type of use.

M3-1

A small parcel of M3-1 district is zoned to the southeast of the Affected Area, between M1-1 and M1-2 districts mentioned above. The area is designated for heavy industries that generate noise, traffic or pollutants, which cannot be located close to residential areas. The M3-1 district has a maximum FAR of 2.0 and a maximum base height before setback of 60 feet for manufacturing uses only. M3-1 districts are subject to the same parking requirements as M1-1, M1-2, M1-3, M2-1 and M2-2 districts.

R6/C2-4

There are R6/C2-4 zoning districts mapped to the northwest of the Affected Area generally along the north side of West Street from Quay Street to Eagle Street. These areas are within an IHDA, where the Inclusionary Housing program provides zoning incentives for the creation and preservation of affordable housing in conjunction with new development.

R6 districts produce high lot coverage, five- to seven-story apartment buildings in medium-density neighborhoods in the boroughs of Brooklyn, Queens, and Bronx. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale “tower in the park” developments. R6 is a contextual district that allows for new medium-density residential development up to 3.6 FAR in IHDAs and MIH Areas and community facility uses up to 4.8 FAR. The building form requires a setback above the maximum base height and a maximum building height of up to 115 feet for Inclusionary Housing buildings with a qualifying ground floor. R6 districts require off-street parking for 50 percent of the dwelling units in a building, with an exemption from parking for income-restricted units within the Transit Zone.

The C2-4 commercial overlay permits Use Groups 5 through 9 and 14, allowing commercial development with up to 2.0 FAR. The C2-4 overlay requires one accessory parking space per 1,000 sq. ft. of commercial floor area for general retail or service uses. In C2-4 districts, the off-street parking requirement for commercial uses may be waived if fewer than 40 spaces are required.

R6A

R6A is a contextual district where the Quality Housing bulk regulations are mandatory. These regulations produce high lot coverage, six- to eight-story apartment buildings set at or near the street line. Designed to be compatible with older buildings found in medium-density neighborhoods, R6A districts are mapped in the Bronx, Brooklyn and Queens.

The basic residential FAR in R6A districts is 3.0. Above a minimum base height of 40 feet, the building must set back by at least 10 feet on a wide street and 15 feet on a narrow street before rising to its maximum height of 70 feet, or 75 feet if providing a qualifying ground floor. Higher maximum FAR and heights are available for buildings participating in the Inclusionary Housing Program or that provide certain senior facilities.

Off-street parking is generally required for 50 percent of a building’s dwelling units, but

requirements are lower for income-restricted housing units (IRHU) and are further modified in certain areas, such as within the Transit Zone and the Manhattan Core, or for lots less than 10,000 square feet. Parking can be waived if five or fewer spaces are required.

R6B

There is an R6B zoning districts mapped to the northeast of the Affected Area. The R6B zoning district permits residential uses with a maximum FAR of 2.0, a minimum street wall height of 30 feet, a maximum street wall height of 40 feet, and a maximum building height of 50 feet. R6B districts require off-street parking for 50 percent of the dwelling units in a building, with an exemption from parking for income-restricted units within the Transit Zone and a prohibition on curb cuts on zoning lots that are less than 40 feet in width. The Quality Housing program is mandatory for residential developments.

R8

There are scattered R8 zoning districts to the west of the Affected Area generally mapped along West Street, dispersed between Quay Street and Eagle Street. R8 districts are high-density contextual districts that permit residential and community facility uses. In this IHDA, the R8 district permits residential use at a maximum FAR of 7.2 with a certain proportion of affordable units set aside and community facility uses up to 6.5 FAR. The maximum building height for eligible buildings in the IHDA with a qualifying ground floor is 215 feet or 21 stories. Buildings must set back above a maximum base height of 85 feet to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising up to the maximum building height. R8 districts require off-street parking for 40 percent of the dwelling units in a building, with an exemption from parking for income-restricted units within the Transit Zone.

Affected Area

The Affected Area is zoned M1-2/R6A (MX-8), which permits residential and community facility uses at 3.0 FAR, and light industrial and commercial uses at 2.0 FAR.

Projected Development Site 1
Projected Development Site 1 is zoned M1-2/R6A (MX-8).

Other Affected Site
The Other Affected Site is zoned M1-2/R6A (MX-8).

Analysis

Future No-Action Condition

Zoning Study Area
No changes to zoning and public policy are anticipated in the future without the Proposed Actions in the Surrounding Area. Existing zoning patterns would generally remain.

Affected Area
No changes to zoning and public policy are anticipated in the future without the Proposed Actions within the Affected Area. The Affected Area would continue to be subject to R6A/M1-2 zoning.

Projected Development Site 1
Projected Development Site 1 would remain zoned R6A/M1-2 in the future without the Proposed Actions.

Future With-Action Condition

Zoning Study Area
No changes to Zoning and Public Policy would occur in the Surrounding Area in the future with the Proposed Actions. The area within 400 feet of the Affected Area is generally characterized by MX-8 (M1-2/R6A and M1-2/R6B), R6, and R6B medium-density contextual zoning districts to the north, east, and west that were established by the Greenpoint-Williamsburg Rezoning. M1-1, M1-2, M3-1 districts are located to the south of Projected Development Site 1. High-density R8 districts are mapped in the blocks to the west of Projected Development Site 1, interspersed between West Street and the waterfront from Quay Street to Eagle Street. Along the block fronts of west side of West Street and east side of Franklin Street, C2-4 overlays with the R6 and R6B to allow commercial uses for the two major corridors.

Affected Area – MX District (R7D/M1-4)
The Proposed Actions would change the existing M1-2/R6A (MX-8) zoning district to R7D/M1-4 (MX-8) zoning district within the Affected Area, including Projected Development Site 1 and the other affected sites, and would establish the Affected Area as a Mandatory Inclusionary Housing Area. The proposed R7D/M1-4 (MX-8) envelope is consistent with the M1-2/R6A (MX-8) districts mapped in the area. It would permit medium-density residential development at a maximum FAR of 5.6 for developments with a permanent affordable housing set aside pursuant to the MIH program. The maximum building height is 115 feet after a setback from the base height of up to 95 feet. Buildings must set back above the maximum base height to a depth of 10 feet on a wide street and 15 feet on a narrow street before rising to a maximum of 11 floors. Off-street parking is required for 50 percent of the residential dwelling units but is not required for income-restricted housing units within the Transit Zone. Within the proposed MX district, the bulk regulations of Article IV, Chapter 3 would apply to manufacturing, commercial, and community facility uses. M1-4 districts permit a maximum of 2.0 FAR for commercial or manufacturing use, and 6.5 for community facility uses. Parking is not required for industrial or commercial uses in the MX R7D/ M1-4 districts. On Projected Development Site 1, a worst-case scenario would allow up to 81,573 ZSF of residential and 10,584 ZSF of commercial or industrial uses containing 96 units, of which approximately 19 would be permanently affordable.

Conclusion

The Proposed Actions would establish a medium-density mixed-use residential district that would mandate provision of a substantial amount of affordable housing. This new development would be consistent with land use in Surrounding Areas zoned with medium-density R6A, R6B and high-density R8 zoning districts that were created by the Greenpoint-Williamsburg Rezoning approved by the City Council in May 2005. The Proposed Actions would extend these residential areas and allow redevelopment of underutilized land for new market rate and affordable housing in an area that is well served by transit as well as local commercial and community facility services. The development resulting from the Proposed Actions would not result in significant adverse impacts; therefore, no further analysis is required.

2.1.3 Public Policy

Projected Development Site 1 is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Fresh Zone, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Proposed Actions is also not a large publicly sponsored project, and as such, consistency with the City's PlaNYC 2030 for sustainability is not warranted. The Affected Area is located in a transit zone – where parking is optional for new affordable units.

Inclusionary Housing Program

Projected Development Site 1 is located within the boundaries of the Inclusionary Housing Zone. The Inclusionary Housing Program (IHP) promotes economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the creation or preservation of affordable housing, on-site or off-site, principally for low-income households.

In the Special Hudson Yards District, the Special West Chelsea District and in designated areas mapped on First Avenue between East 35th and East 41st Streets in Manhattan, and along the Greenpoint-Williamsburg waterfront in Brooklyn, a percentage of units may be set aside for moderate- or middle-income households if a greater percentage of affordable units is provided. All bonus floor area must be accommodated within the height and setback provisions of the underlying zoning district.

New York City Coastal Zone

Actions that are located within the designated boundaries of New York City's Coastal Management Zone are subject to an assessment for consistency with the City's Local Waterfront Revitalization Program (WRP). The WRP includes policy objectives that prioritize the development of water-dependent and water-enhancing uses on Coastal Management Zone properties, mandate public access to the waterfront within certain zoning districts, offer construction guidelines for flood zones, and address the maintenance of water quality.

Since the Affected Area is located in the Coastal Management Zone, a consistency review is warranted for the Proposed Actions (See Appendix E). The Proposed Actions would support and facilitate commercial and residential redevelopment in appropriate Coastal Zone areas, integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change. The WRP Consistency Assessment Form (CAF) was completed and is provided in Appendix E. The CAF assists the Applicant in identifying the relevant WRP policies and certifying that the project is consistent with the WRP.

The Proposed Actions would place a new mid-rise structure in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM) and the 2007 effective Flood Insurance Rate Maps (FIRMS).

Zone AE are areas that have a 1% probability of flooding every year (also known as the "100-year floodplain"), and where predicted flood water elevations above mean sea level have been established. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP) and are required to comply with Appendix G of the Building Code.

The CAF was completed to determine the consistency of the proposed project with the WRP's ten policies. Additionally, as the site is located within the boundaries of a flood zone, the Flood Evaluation Worksheet was also completed. The Flood Evaluation Worksheet allows the Applicant to calculate future flood elevations and assess site-specific risks to vulnerable or critical project features.

Based on the information provided in the CAF, a Detailed Methodology and Policy Response is provided in Appendix E, which incorporates the findings of the Flood Evaluation Worksheet, and the Proposed Actions' consistency with the applicable WRP Policies.

Waterfront Revitalization Program

Projected Development Site 1 is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures; therefore, the Proposed Actions must be reviewed and assessed for consistency with the policies set forth in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term.

Projected Development Site 1 is in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM) and the 2007 effective Flood Insurance Rate Maps (FIRMS).

The WRP Form was completed, and is attached as Appendix E. A write-up of how the project would conform with WRP is also provided in Appendix E.

Conclusion

The Proposed Actions would allow for the neighborhoods around the two major commercial corridors, Franklin Street and West Street, to transition more fully to a mixed residential/ commercial and industrial neighborhood. The current industrial style uses present in the Affected Area do not complement the overall character of the adjacent neighborhood. The Proposed Actions would therefore not have a significant impact on the extent of conformity with the current zoning in the Surrounding Area, and it would not adversely affect the viability of conforming uses on nearby properties.

In addition to opportunities for medium-density housing development under the MIH program, mapping an MX (R7D/M1-4) within the Affected Area provides opportunities for active, non-residential ground floor use. Establishing an MX district would promote a transition to a mix of uses as envisioned by Community Board 1, helping to foster both residential growth with affordable housing and revitalization of an underutilized manufacturing district. The MX district would encourage job creation and provide increased walk-to-work opportunities for a diverse mix of business uses, including both commercial and light industrial uses.

The proposed zoning map amendment would thus allow a more productive and more intensive reuse of the underutilized industrial property. In addition, it would help reknit the urban fabric in the area and better integrate it within the predominately residential portions of the Greenpoint neighborhood to the north of the site. The Special Mixed-Use District MX (R7D/M1-4) proposed would allow light industrial uses along with local retail and service uses, encouraging neighborhood investments and job creation. The proposed development would also include opportunities for employment growth in both light manufacturing and commercial.

Therefore, significant adverse impacts to land use, zoning, or public policy are not anticipated. No further analysis is warranted.

2.4 Open Space

Open space is defined as publicly or privately-owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment.

Pursuant to Chapter 7, Section 100 of the *2020 CEQR Technical Manual,* Open Space Resources are defined as active and/or passive, and may include, but is not limited to, the following:

- *Parks operated or managed by the City, State, or Federal governments and include neighborhood and regional parks, beaches, pools, golf courses, boardwalks, playgrounds, ballfields, and recreation centers that are available to the public at no cost or through a nominal fee, as in the case of recreation centers and golf courses;*
- *Open space designated through regulatory approvals (such as zoning), including large-scale permits that prescribe publicly accessible open space, such as public plazas;*
- *Outdoor schoolyards if available to the public during non-school hours;*
- *Publicly-accessible institutional campuses;*
- *Esplanades;*
- *Designated greenways, as shown on the City's Bike Map, and defined as multi-use pathways for non-motorized recreation and transportation along natural and manmade linear spaces such as rail and highway rights-of-way, river corridors, and waterfront spaces;*
- *Landscaped medians with seating;*
- *Housing complex grounds, if publicly accessible;*
- *Nature preserves, if publicly accessible;*
- *Gardens, if publicly accessible;*

The *2020 CEQR Technical Manual* defines the need for an open space assessment if the proposed action would have a direct or indirect effect on open space resources. Direct effects would occur if the proposed action would result in the physical loss of a public open space; change of use of an open space so that it no longer serves the same user population; limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether temporary or permanent. Indirect effects would occur if the proposed action resulted in an increase of population sufficiently large enough to noticeably diminish the ability of an area's open space to serve the future population.

Methodology

According to the guidelines of the City's *CEQR Technical Manual* for analysis of residential development, census tracts with at least half of their geographic area within a one-half mile radius of the development site should comprise the open space study area. Using current population figures, an open space ratio is calculated for both the future no-action and future with-action scenarios, expressed as the amount of open space acreage per 1,000 user population. Typically, a comparison is made to the median open space ratio, which is 1.50 acres per 1,000 residents, and the city's planning goal of 2.50 acres per 1,000 residents. A reduction in the open space ratio increment of more than 5 percent over future no-action conditions generally warrants

a more detailed analysis, unless the open space ratio is below the citywide average, in which case even a small reduction could be considered significant.

In addition to field surveys, information from the NYC Department of City Planning's Community District Needs Statements, NYC Parks Department website, and U.S. Census data were utilized in preparing the open space analysis.

Preliminary Open Space Assessment

The Proposed Actions would result in the total Projected Development of 119,005 GSF of development, including 88,951 GSF of residential floor area and 13,529 GSF of commercial floor area. The Proposed Actions are projected to result in the development of 96 dwelling units within the Affected Area. Assuming an average occupancy of 2.18 persons based on the average household size within the subject census tract (Brooklyn Census Tract 561)[6], population introduced as a result of the Proposed Actions would be approximately 205 residents. Additionally, the Proposed Actions, when compared to the future absent the Proposed Actions, would introduce a net additional number of approximately 41 workers to the area (3 employees per 1,000 square feet of commercial space increased). The residential population is above the relevant threshold size requiring assessment of open space utilization and availability. The Affected Area is within an area that is identified as underserved by open spaces, and therefore the threshold for assessment of the potential for indirect impacts is 50 new residents or 125 additional employees. Therefore, an assessment of indirect effects for on public open space resources is warranted.

Study Area Definition

In accordance with the guidelines established in the City's *2020 CEQR Technical Manual*, the open space study area is defined to analyze both the nearby open spaces and the population using those open space resources. It is generally defined by a reasonable walking distance that users would travel to reach local open spaces and recreational areas. Pursuant to the *2020 CEQR Technical Manual*, the open space study area includes all U.S. Census Tracts that have 50 percent or more of their area within a half-mile radius of the Affected Area, as shown in **Figure 2.4-1** below, consisting of the following Census Tracts shown in **Table 2.4-1** below. Using these criteria, the census tracts that have 50% or more of their area within the ½ mile study area are 517, 557, 561, 565, 569, 573, and 575.

Study Area Population

Secondary sources were used to determine the residential and non-residential populations served by the existing open space resources in the study area. Pursuant to CEQR Technical Manual Methodology, the total residential population for the study area was established using data from the most recent 2010 decennial census data with population adjustments based on subsequent population estimates from the 2013-2017 American Community Survey (ACS) Census for the study area developed by the Department of City Planning's (DCP) Population Division.

Based on the 2013-2017 ACS data, as of 2017, the study area had a residential population of 19,019 persons as shown in **Table 2.4-1** below.

[6] 2013-2017 American Community Survey Data

Figure 2.4-1: Open Space Study Area Census Tracts



Table 2.4-1: Study Area Population 2017

Census Tract	2017 Population
517	2,343
557	2,214
561[7]	3,348
565	3,049
569	1,537
573	2,593
575	3,935
Total	**19,019**

Existing Condition
As shown above, according to the 2017 American Community Survey, the existing population within the study area is 19,019.

Future No-Action Condition
In the future without the Proposed Actions, there are five active major constructions expected to take place within the Affected Area, totaling 322,113 square feet and 219 proposed dwelling units. Among the five construction projects, three are new buildings and two are enlargement of the existing buildings.

The largest one is located at 29 West Street, northwest to the site between Calyer Street and Oak Street, seeking a New Building permit for a 14-story mixed-use building with residential and commercial uses. Giron Contracting Inc. has filed two New Building permits for their adjacent sites on 85-87 Calyer Street, proposing a 3-story penthouse with cellar and one family dwelling. In the same block (Block 2571) at 68 Oak Street, an alteration permit was issued on 03/19/2019 to convert the existing building from two to one family, including some partition, plumbing, and mechanical work. To the east of the site at 50 Franklin Street, another alteration permit was issued for vertical enlargement of existing 2-story manufacturing building, adding 3 stories on the top. The proposed building would be five stories for manufacturing and community facility uses. **Table 2.4-2** contains the information of the five active construction projects.

Table 2.4-2: Major Active Constructions in the Study Area through 2023[8]

Address	Permit Type	Proposed Stories	Proposed Dwelling Units
29 West Street	New Building	14	216
85 Calyer Street	New Building	3	1
87 Calyer Street	New Building	3	1
68 Oak Street	ALT 1 Enlargement	3	1
50 Franklin Street	ALT 1 Enlargement	5	-
Total			**219**

[7] Note: Shaded Row indicates Census Tract of the Affected Area

[8] Source: NYC Active Major Construction

With the potential addition of the 219 dwelling units mentioned above, and factoring in 2.52 residents per dwelling units as per 2017 ACS data for Brooklyn CD 1, a possible 552 new residents may be added to the study area by the build year of 2023. Adding the 552 new residents from other proposed projects within the study area, the No-Action 2023 population would be 19,571.

Future With-Action Condition

The study area With-Action population is determined by adding the With-Action population increment of 205 residents derived from the 94 increased dwelling units under the reasonable worst-case scenario on the No-Action population of 19,571, resulting a study area population of 19,776.

Open Spaces Resources

There are 5 open space resources within the study area identified in **Table 2.4-3**. There are 60.80 acres of open space resources in the study area, of these 45.60 or 75% are active, and 15.20 or 25% are passive. The location of these resources present in the study area, are shown in **Figure 2.4-2.**

It should be noted that Bushwick Inlet Park consists of three parts: the area improved as parkland on the south between North 9 Street and North 10 Street, the area not yet improved from North 10 Street all the way north to Franklin Street, and the area proposed for the Greenpoint Monitor Museum along Quay Street. Since the majority area of the park is not improved as parkland yet, the analysis below only considers the portion that is already served as public open space. The only open portion of Bushwick Inlet Park is 86 Kent Ave, which is 3.9 acres. There is also a pop-up park at 50 Kent Avenue, which takes up 1.9 acres. Therefore, the total open space acreage of Bushwick Inlet Park is 5.8 acres currently.

Table 2.4-3: Open Space Resources

ID #	Name	Address	Ownership	Acreage	% Active	% Passive	Total Active	Total Passive	Features
1	Bushwick Inlet Park	Kent Ave btwn Quay St & N 9 St	NYC DPR	5.80	75	25	4.35	1.45	BR, SF, PG, FF, SS
2	WNYC Transmitter Park	West St btwn Kent St & Greenpoint Ave	NYC DPR	6.61	75	25	4.96	1.65	PG, SS, Fi
3	American Playground	Franklin St btwn Milton St & Noble St	NYC DPR	0.90	75	25	0.67	0.23	BC, HC, SS, BR, PG
4	East River State Park	Kent Ave btwn N 9 St & N 7 St	NYS OPRHP	11.00	75	25	8.25	2.75	BC, HB, PG, SS
5	McCarren Park	N 12 St, Lorimer St, Manhattan Ave btwn Bayard St & Berry St - Nassau Ave	NYC DPR	36.49	75	25	27.37	9.12	BA, BC, BF, BR, BoC, FE, FF, HC, OP, PG, RC, RT, SP, SF, SS, TC, ML
	TOTAL			**60.80**	**75**	**25**	**45.60**	**15.20**	

Features: BA=Barbecue Areas; BC=Basketball Courts; BoC=Bocce Courts; HC= Handball Courts; PG=Playground; BR=Bathrooms; BF=Baseball Fields; FE=Fitness Equipment; RT=Running Track; TC=Tennis Courts; SF=Soccer Fields; SS= Spray Showers; FF=Football Fields; Fi=Fishing; OP=Outdoor Pools; RC=Recreation Center; SP=Skate Parks; ML=Media Labs

Figure 2.4-2: Open Space Resources within the Study Area



Determination of Significance

Existing Condition
The study area has 60.80 acres of open space and an existing residential population of 19,019. Though the Greenpoint neighborhood is identified as an underserved area in terms of open space provision, the open space ratio (OSR) within the study area under existing conditions is much higher than the threshold 2.5 acres per thousand residents, reaching 3.20 acres per thousand residents.

McCarren Park – a 36.49-acre park of regional significance is located within a half mile or a ten-minute walk from Projected Development Site 1. Further, Bushwick Inlet Park and East River State Park are located at the southwestern edge of the study area, which in total provides the residents within the study area with a combined open space of 16.80 acres.

Future No-Action Condition
In the future absent the Proposed Actions, the population for the study area in the 2023 build year is forecasted to be 19,571 and is projected to be served by same 60.80 acres of open space as in the existing condition. With this population, the open space ratio would be 3.11 acres per thousand people. This is well above the citywide average of 1.5 acres per thousand people and reflects the study area's abundance of large park facilities within a ½-mile radius.

Future With-Action Condition
The Proposed Actions would result in an increase in No-Action population of 205 people by the 2023 build year. As noted above, this would increase population within the study area to 19,776. With this small addition to study area population, the open space ratio would be 3.07 acres per thousand people in the future With-Action condition.

While the Affected Area is within an area of Brooklyn identified in the *2020 CEQR Technical Manual* as being underserved with respect to open space and recreational facilities, it should be noted that within the study area of Projected Development Site 1, park facilities are sufficient and abundant to serve the increased population. It is expected that residents of induced development under the Proposed Actions would take advantage of the open spaces nearby and enjoy a quality life in the neighborhood.

Table 2.4-4: OSR Within Study Area

Existing		Future No-Action		Future With-Action	
Population	**OSR**	**Population**	**OSR**	**Population**	**OSR**
19,019	3.20	19,571	3.11	19,776	3.07

Conclusion

As shown in **Table 2.4-4** above, under the existing, No-Action and With-Action conditions, open space ratio in the study area would all be well above the citywide median ratio of 1.5 acres per thousand residents. By *2020 CEQR Technical Manual* methodology, a decrease in open space ratio in an underserved area that approaches or exceeds 5 percent is generally considered to be a substantial change warranting more detailed analysis. The *2020 CEQR Technical Manual* further states that detailed analysis of open space effects on residents is generally unnecessary if the open space ratio decreases by less than 1 percent. The Proposed Actions would decrease the open space ratio by 1.04% from 3.11 to 3.07, which is not a significant reduction to the open space ratio, compared to the No-Action condition in the 2023 build year. Therefore, further assessment is not warranted, and no significant impacts to open space utilization or availability would occur as a result of the Proposed Actions. Additionally, as stated above, though Greenpoint is identified as an underserved area in terms of open space provision, OSR within the study area under With-Action condition is 3.07 acres per thousand residents, much higher than the threshold ratio of 2.5.

2.5 Shadows

The *2020 CEQR Technical Manual* defines a shadow as the condition that results when a building or other built structure blocks the sunlight that would otherwise directly reach a certain area, space, or feature. An incremental shadow is an additional or new shadow that a building or other built structure resulting from a proposed project would cast on a sunlight-sensitive resource during the year. The sunlight-sensitive resources of concern are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity, including public open space, architectural resources, and natural resources. Shadows can have impacts on publicly accessible open spaces or natural features by adversely affecting their use and important landscaping and vegetation. In general, increases in shadow coverage make parks feel darker and colder, affecting the experience of park patrons. Shadows can also have impacts on historic resources whose features are sunlight-sensitive, such as stained-glass windows, by obscuring the features or details, which make the resources significant.

The duration and dimensions of shadows are determined by the geographic location of the area from which the shadow is cast and the time of day and season. Shadows cast during the morning and evening, when the sun is low in the sky, are longer, while midday shadows are shorter in length. Shadows in winter, when the sun arcs low across the southern sky, are also longer throughout the day than at corresponding times in spring and fall seasons. In summer, the high arc of the sun casts shorter shadows than at any other time of year, and early and late shadows during the summer are cast towards the south than shadows cast in early and late winter months.

The *2020 CEQR Technical Manual* states that a shadow assessment considers projects that result in new shadows long enough to reach a sunlight-sensitive resource. Therefore, a shadow assessment is warranted only if the project would either result in: (a) new structures (or additions to existing structures including the addition of rooftop mechanical equipment) of 50 feet or more; or, (b) be located adjacent to, or across the street from, a sunlight-sensitive resource. However, a project located adjacent to or across the street from a sunlight-sensitive open space resource (which is not a designated New York City Landmark or listed on the State/National Registers of Historic Places, or eligible for these programs) may not require a detailed shadow assessment if the project's height increase is ten feet or less.

In general, shadows on city streets and sidewalks or on other buildings are not considered significant. Some open spaces also contain facilities that are not sensitive to sunlight. These are usually paved such as handball or basketball courts, contain no seating areas and no vegetation, no unusual or historic plantings, or contain only unusual or historic plantings that are shade tolerant. These types of facilities do not need to be analyzed for shadow impacts. Additionally, it is generally not necessary to assess resources located to the south of projected development sites, as shadows cast by the action-generated development would not be cast in the direction of these resources. Furthermore, shadows occurring within one and one-half hour of sunrise or sunset generally are not considered significant in accordance with the *2020 CEQR Technical Manual*.

Methodology

A preliminary analysis of shadows follows the guidelines set forth in the *2020* CEQR Technical Manual for a preliminary assessment (Section 310). According to the *2020* CEQR Technical

Manual, a preliminary shadow assessment includes the development of a base map showing the site location in relation to any sunlight-sensitive resources as per guidelines provided in the *2020 CEQR Technical Manual*. Following these guidelines, the longest shadow study area is determined, and a Tier 1 screening assessment is conducted to determine if any sunlight-sensitive resources fall within the study area. If no resources are found, no further analysis would be needed. If sunlight-sensitive resources lay within the longest shadow study area, the next tier of screening assessment should be conducted. This preliminary assessment includes a basic description of the Proposed Development that would be facilitated by the Proposed Actions in order to determine whether a more detailed assessment would be appropriate.

Analysis

Projected Development Site 1 is located on Block 2589, Lot 1 in the Greenpoint neighborhood of Brooklyn. The development proposed by the Applicant would consist of a 9-story building of 101 feet in height. However, since the proposed R7D/M1-4 zoning district would allow development of up to 115 feet in height, the shadow analysis would assume a building of the maximum height. Additionally, the development would be expected to exceed the maximum building height for about 15 feet as a result of mechanical system installation, the shadow analysis adopts 130 feet as the potential building height. Block 2589, Lots 13, and 23 are identified as other affected sites under the Proposed Actions with no anticipation for redevelopment. The buildings on the two sites would be considered to remain the same even after the zoning changes. Accordingly, a preliminary assessment of shadows is warranted.

Tier 1 Screening Assessment

Under the Future With-Action condition, Projected Development Site 1 (Block 2589, Lot 1) could be developed with a new building having a maximum height of 130 feet and the longest action-induced shadow would be approximately 559 feet (4.3 x 130 feet) in length. The first step in a shadow analysis is to determine if there are any sunlight sensitive resources located within a radius of this length. As **Figure 2.5-1** shows, there are two sunlight sensitive resources, 61 Franklin Street Garden and Bushwick Inlet Park, within 559 feet of Projected Development Site 1. Therefore, a Tier 2 Screening Assessment is needed for the shadow analysis.

Figure 2.5-1: Tier 1 Shadow Study Screening



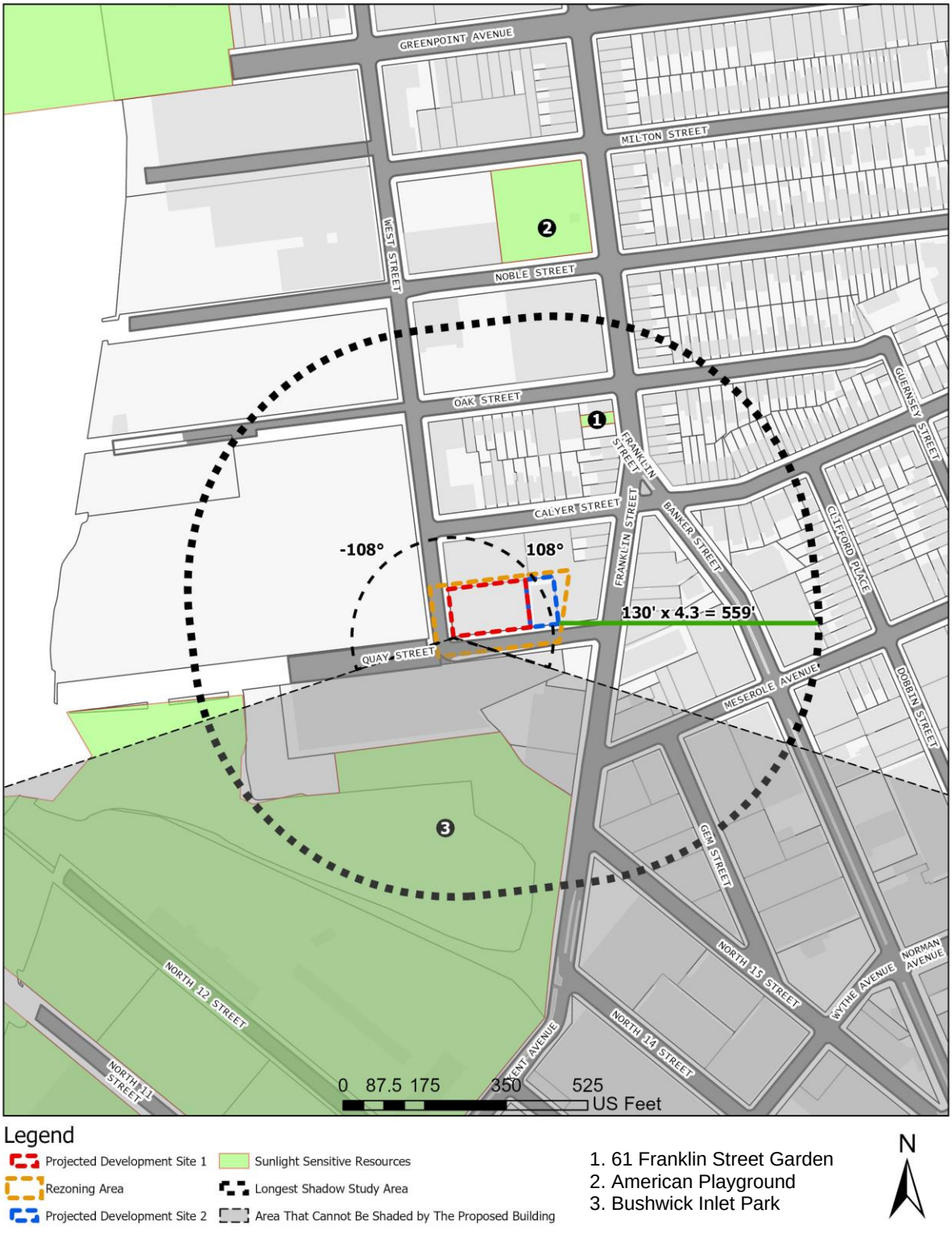
Tier 2 Screening Assessment

Since there are sunlight sensitive resources falling within the longest action-induced shadow area, the Tier 2 screening assessment is conducted to further study the potential impact of the Proposed Development on the resources. Given the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. As shown in **Figure 2.5-2**, the grey shaded triangle area to the south of the development is the area that would never be interrupted by the new building. In other words, only the complementing portion to the north within the longest shadow study area is the area that can be shaded by the proposed project.

Though most of the potential shaded area induced by the Proposed Development is excluded for Bushwick Inlet Park, a small portion on the northwestern corner of the park would still be affected by the proposed building. As for 61 Franklin Street Garden, the other sunlight sensitive resource that would likely be shaded by the Proposed Development, the existing condition near this community garden reveals the limited impact the Proposed Development has on the garden. 61 Franklin Street Garden is surrounded by three- and four-story multi-family walk-up buildings to its north, west, and south, with a main entrance at Franklin Street. The garden has already been shaded by these buildings under current situation. To the southwest of the garden stands a 3-story residential building with a height of 43 feet, the longest shadow area of which should be 184.9 feet (4.3*43 feet). The lot where 61 Franklin Street Garden locates has a length of 70 feet, far less than the radius of the building shadow impact area.

Based on the Tier 2 shadow analysis, a small portion on the northwestern corner of Bushwick Inlet Park and the 61 Franklin Street Garden would be affected by the Proposed Development. Consequently, a Tier 3 shadow screening assessment is necessary.

Figure 2.5-2: Tier 2 Shadow Study Screening



Tier 3 Screening Assessment

The *2020 CEQR Technical Manual* states that if any portion of a sunlight-sensitive resource is within the area that could be shaded by the Proposed Project, a Tier 3 screening assessment should be performed. Because the sun rises in the east and travels across the southern part of the sky to set in the west, a project's earliest shadows would be cast almost directly westward. Throughout the day, they would shift clockwise (moving northwest, then north, then northeast) until sunset, when they would fall east. Therefore, a project's earliest shadow on a sunlight-sensitive resource would occur in a similar pattern, depending in the location of the resource in relation to the project site. For a Tier 3 screening assessment, if the assessment determines that no shadows from the development would reach any of the sunlight-sensitive resources on any of the representative analysis days then no further assessment for those days is needed. If, however, in the absence of intervening buildings shadows from the proposed buildings would reach sunlight-sensitive resources on any of the representative analysis days, then a detailed shadow analysis would be warranted for those days.

As shown in **Figures 2.5-3 to 2.5-6** below, shadows from the projected building would reach the sunlight-sensitive resources in the longest action-induced shadow area. Therefore, a detailed shadow analysis was conducted to further determine the potential impact of the shadow of the proposed building.

Figure 2.5-3: Tier 3 Screening - December 21st

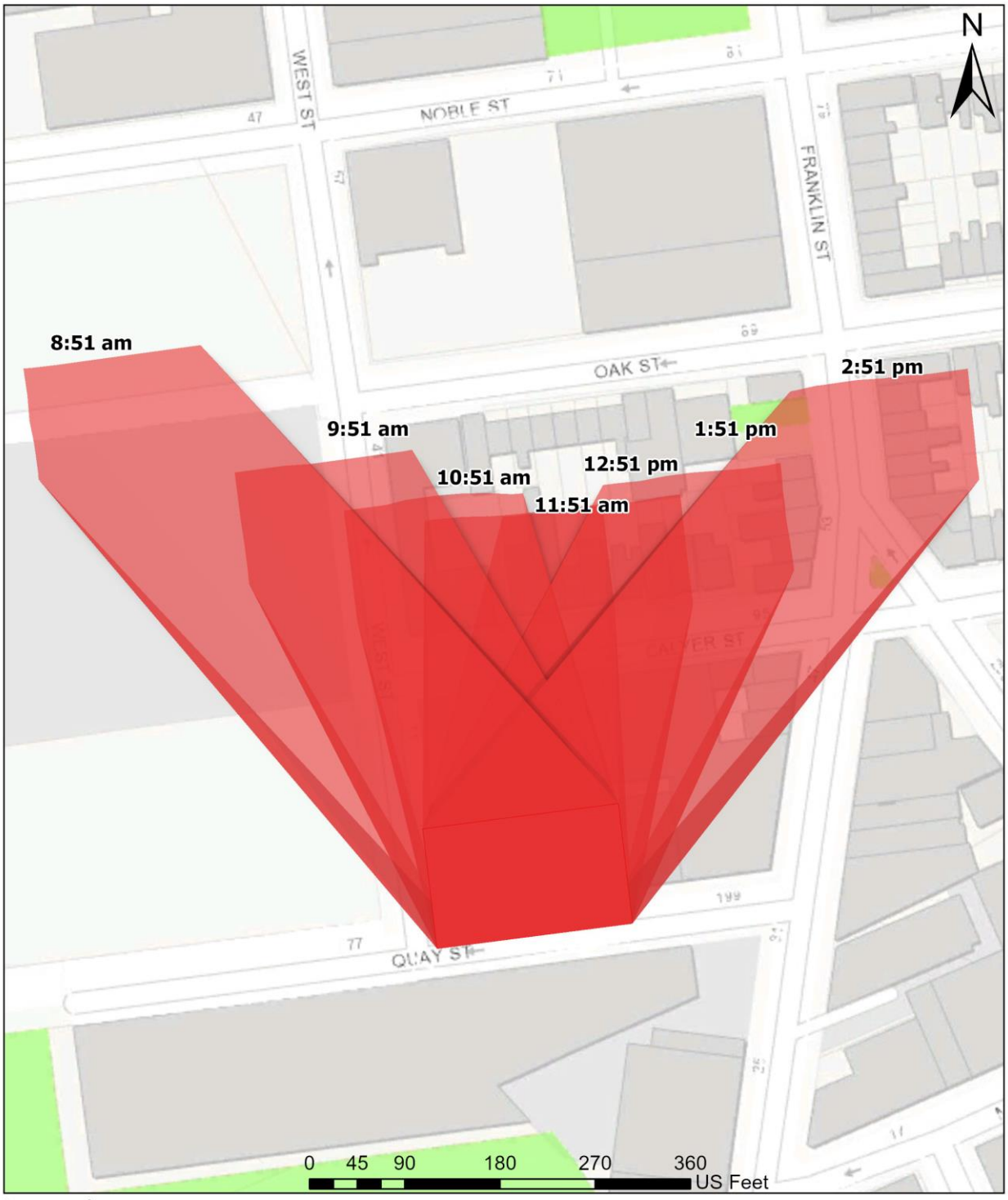


Figure 2.5-4: Tier 3 Screening – March/September



Figure 2.5-5: Tier 3 Screening – May/August

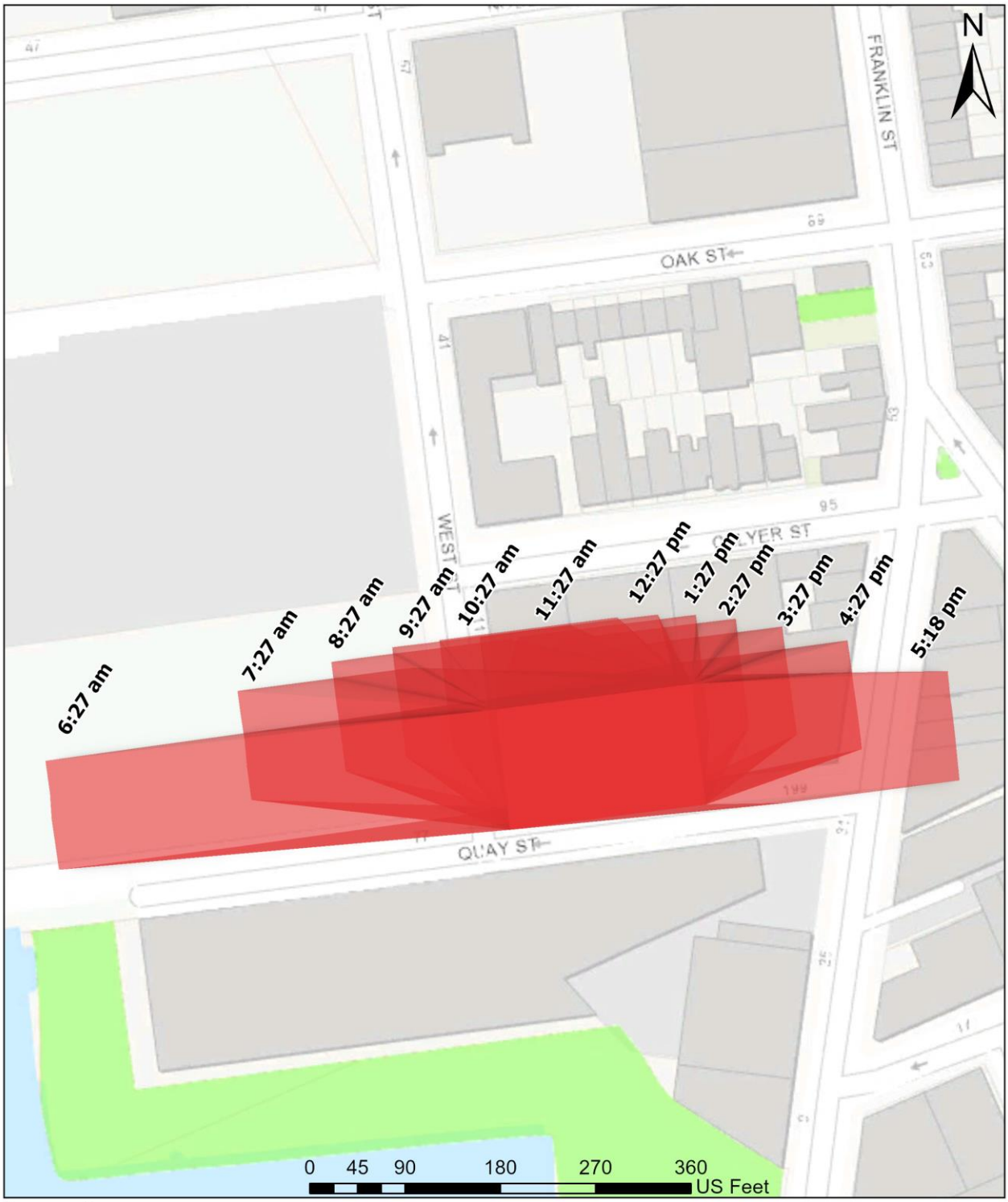
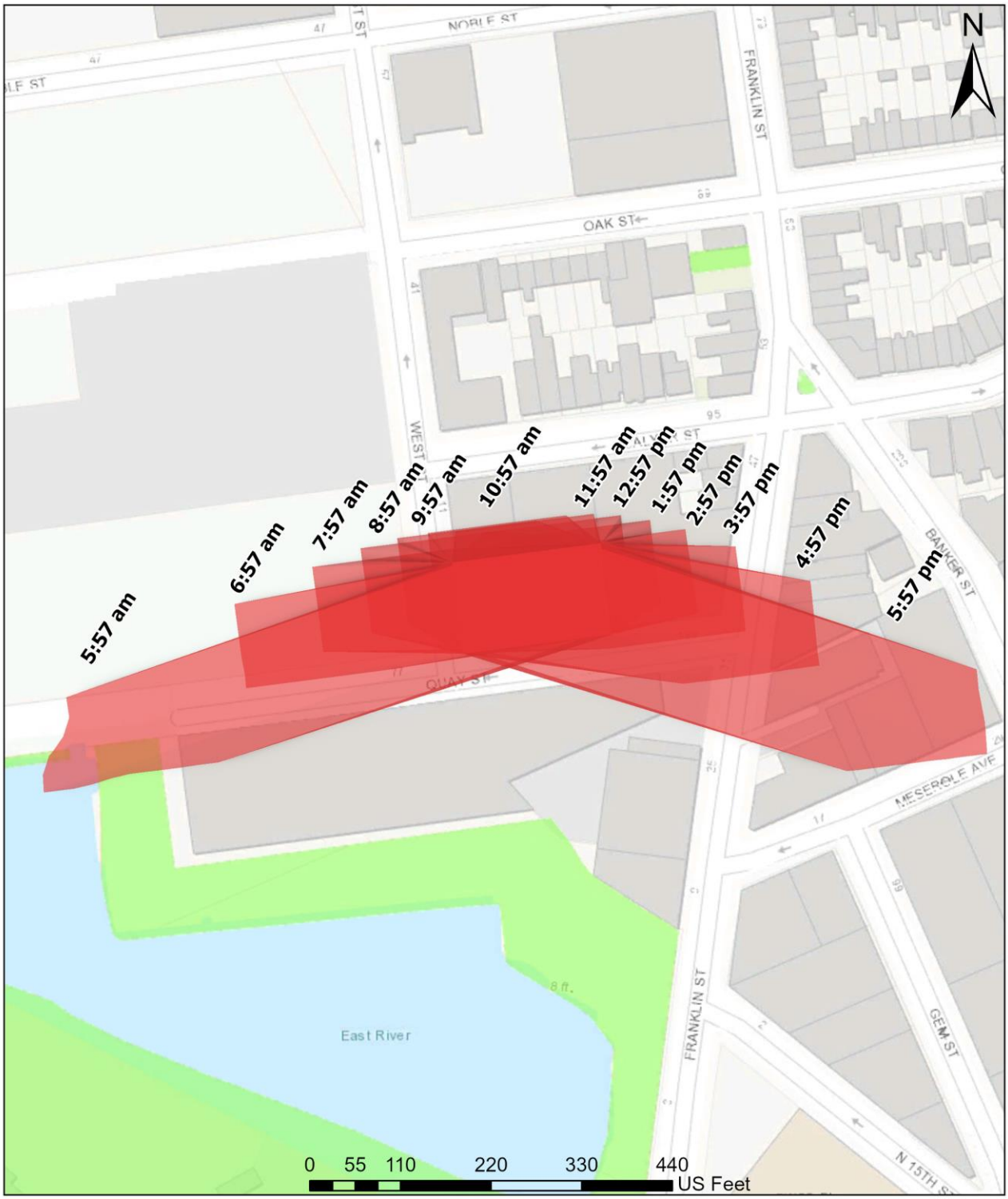


Figure 2.5-6: Tier 3 Screening – June 21st



Detailed Shadow Analysis

The *2020 CEQR Technical Manual* states that a detailed shadow analysis is warranted when the screening analyses do not rule out the possibility that project-generated shadows would reach any sunlight-sensitive resources. The purpose of the detailed analysis is to determine the extent and duration of shadows that fall on a sunlight-sensitive resource as a result of the proposed project. The results of the detailed shadow analyses on the identified resources of concern are summarized in **Table 2.5-1**, and the incremental shadows cast by Projected Development Site 1 are shown in the figures above. The shadows of intervening buildings were including in the detailed shadow analysis in order to identify the incremental shadows cast by the Projected Building.

Based on the Findings of the Detailed Shadow Analysis, the Proposed Actions would cast shadows on the 61 Franklin Street Garden (Sunlight Sensitive Resource 1) and Bushwick Inlet Park (Sunlight Sensitive Resource 3).

Table 2.5-1: Tier 3 Shadows Table

Analysis Day	21-Dec	March 21 / September 21	May 6 / August 6	21-Jun
Timeframe Window	8:51 a.m. - 2:53 p.m.	7:36 a.m. - 4:29 p.m.	6:27 a.m. - 5:18 p.m.	5:57 a.m. - 6:01 p.m.
Sunlight Sensitive Resource 1	61 Franklin Street Garden			
Shadow enter - exit times	1:53 pm - 2:53 pm	-	-	-
Incremental Shadow Duration	1 hour	-	-	-
Sunlight Sensitive Resource 3	Bushwick Inlet Park			
Shadow enter - exit times	-	-	-	5:57a.m.-6:30 a.m.
Incremental Shadow Duration	-	-	-	33 minutes
Note: Daylight savings time not used				

61 Franklin Street Garden (Sunlight Sensitive Resource 1)



61 Franklin Street Garden is a member-run community garden and open space providing a vibrant green space and the opportunity for environmental education to the residents of Greenpoint Brooklyn. It is located on Franklin Street between Calyer Street and Oak Street, to the northeast of Projected Development Site 1.

Bushwick Inlet Park (Sunlight Sensitive Resource 3)



Bushwick Inlet Park is located at the center of Greenpoint-Williamsburg Waterfront, on Kent Avenue between Quay Street and North 9 Street. It includes a multi-purpose field for soccer, football, lacrosse, field hockey, rugby, and ultimate frisbee, a green building with a green roof, a viewing platform, playground and public access to the waterfront.

Determination of Shadow Impact Significance

The *2020 CEQR Technical Manual* states that the determination of significance of shadow on a sunlight-sensitive resource is based on (1) the information resulting from the detailed shadow analysis describing the extent and duration of incremental shadows; and (2) an analysis of the resource's sensitivity to reduced sunlight. The goal of the assessment is to determine whether the effects of incremental shadows on a sunlight-sensitive resource are significant under CEQR. A shadow impact occurs when the incremental shadow from a proposed project falls on a sunlight-sensitive resource or feature and reduces its direct sunlight exposure. Determining whether this impact is significant or not, under CEQR, depends on the extent and duration of the incremental shadow and the specific context in which the impact occurs.

For open space and natural resources, the uses and features of a resource is an indicator of its sensitivity to shadows. Shadows occurring during the cold-weather months generally do not affect the growing season of outdoor vegetation; however, their effects on other uses and activities should be assessed. This sensitivity is assessed for warm-weather-dependent features

(such as wading pools and sandboxes) or vegetation that could be affected by a loss of sunlight during the growing season, and for features (such as benches) that could be affected by a loss of winter sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is often a minimum requirement. Where the incremental shadows from the project fall on sunlight-sensitive features or uses, the analysis assesses the loss of sunlight relative to sunlight that would be available without the project.

As stated in the *2020 CEQR Technical Manual*, to determine impact significance, an incremental shadow is generally not considered significant when its duration is no longer than 10 minutes at any time of year and the resource continues to receive substantial direct sunlight. A significant shadow impact generally occurs when an incremental shadow of 10 minutes or longer falls on a sunlight-sensitive resource and results in one of the following:

- *Vegetation* - A substantial reduction in sunlight available to a sunlight-sensitive feature of the resource to less than the minimum time necessary for its survival (when there was sufficient sunlight in the future without the project). Or, a reduction in direct sunlight exposure where the sunlight-sensitive feature of the resource is already subject to substandard sunlight (i.e., less than minimum time necessary for its survival).
- *Open Space Utilization* - A substantial reduction in the usability of open space as a result of increased shadow.
- *For Any Sunlight-Sensitive Feature of a Resource* - Complete elimination of all direct sunlight on the sunlight-sensitive feature of the resource, when the complete elimination results in substantial effects on the survival, enjoyment, or, in the case of open space or natural resources, the use of the resource.

Conclusion

As indicated above, the Tier 1 analysis showed two sunlight sensitive resources within the study area, Bushwick Inlet Park and 61 Franklin Street Garden, which would be potentially affected by the shadows from Proposed Development. In Tier 2 analysis, given the characteristics of the travel path of the sun in the northern hemisphere, Bushwick Inlet Park is located in the southern area of the building and a small portion of the park would be interrupted by the Proposed Development. 61 Franklin Street Garden has already been largely shaded by the surrounding residential buildings and the Proposed Development would not have significant adverse impacts on it. Tier 3 analysis determined that the proposed buildings would reach 61 Franklin Street Garden in December and Bushwick Inlet Park in June. As a result, a detailed shadow analysis was performed to assess the extent and duration of the shadows on the sunlight sensitive resources. All the sunlight sensitive resources within the Proposed Development's longest action-induced shadow area would either not be impacted or be impacted with limited timespan. Therefore, no further analysis is necessary.

Sunlight Sensitive Resource 1
Based on the findings of the Detailed Shadow Analysis, the Proposed Actions would cast shadows on portions of the 61 Franklin Street Garden on December 21st for a total of 1 hour between 1:53 pm and 2:53 pm.

The community garden is 1,750 square feet. People's activities inside of the garden are mostly passive, including sitting, strolling, relaxation, and planting. The garden features organic New York native plants and pollinators, which need sunlight for growth. Since the winter months are

not part of the growing season, it eliminates any potential impacts on the vegetation in the community garden. Also, the shadows induced by the proposed development would only cast on the garden for one hour, this would allow for a minimum of 6 hours of direct sunlight to reach. As such, the Proposed Actions would not affect the vitality or usage of any sunlight sensitive resources in the 61 Franklin Street Garden, and significant adverse impacts from shadows would not result from the Proposed Actions on resource 1 and no further analysis is required for this resource.

Sunlight Sensitive Resource 3

Based on the findings of the Detailed Shadow Analysis, the Proposed Actions would cast shadows on the northwestern corner of the Bushwick Inlet Park on June 21st between 5:57 am and 6:30 am.

This park is located at the center of Williamsburg-Greenpoint Waterfront, featuring a multi-purpose field for soccer, football, lacrosse, field hockey, rugby, and ultimate frisbee, a green building with a green roof, a viewing platform, playground and public access to the waterfront. Both active and passive activities should be expected in the park. As the shadows induced by the proposed development would only cast on a small sliver on the northwestern corner of the park, which is not actively utilized currently, from 5:57 am to 6:30 am, the majority of users of the Bushwick Inlet Park would not be impacted by the shadows.

The northwestern corner of the park would still receive direct sunlight after 6:30 am under the worst-case scenario. This would allow for 8-10 hours of direct sunlight during the growing season due to the sun setting later during the day, which is longer than the minimum 6-hour requirement.

Therefore, the Proposed Actions would not have any potentially negative impacts on Resource 3 and no further analysis is required for this resource.

2.6 Historic and Cultural Resources

An assessment of historic and cultural resources is usually necessary for projects that are located in close proximity to historic or landmark structures or districts, or for projects that require in-ground disturbance, unless such disturbance occurs in an area that has been formerly excavated, according to the *2020 CEQR Technical Manual*.

The term “historic resources” defines districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, architectural and archaeological importance. In assessing both historic and cultural resources, the findings of the appropriate city, state, and federal agencies are consulted. Historic resources include: the New York City Landmarks Preservation Commission (LPC) designated landmarks, interior landmarks, scenic landmarks, and historic districts; locations being considered for landmark status by the LPC; properties/districts listed on, or formally determined eligible for, inclusion on the State and/or National Register (S/NR) of Historic Places; locations recommended by the New York State Board for Listings on the State and/or National Register of Historic Places and National Historic Landmarks.

2.6.1 Architectural Resources

Per *2020 CEQR Technical Manual* guidelines, impacts on historic resources are considered on those sites affected by the Proposed Actions and in the area surrounding identified development sites. The historic resources study area is therefore defined as the project site plus an approximately 400-foot radius around the Affected Area. To determine whether the Proposed Development has the potential to affect nearby off-site historic or architectural resources, the study area is screened for historic and architectural resources. No architectural resources were found in the study area that were considered historic or significant.

The LPC was contacted for their initial review of the project’s potential to impact nearby historic and cultural resources, and by letter dated 03/12/2020, indicating that the study area does not contain any sites of buildings of known architectural or archeological significance (see Appendix A).

2.6.2 Cultural and Archaeological Resources

Unlike the architectural evaluation of a study area that extends beyond the footprint of a project’s block and lot lines, the analysis of potential and/or projected impacts to archaeological resources is controlled by the actual footprint of the limits of soil disturbance. Archeological resources are physical remains, usually subsurface, of the prehistoric and historic periods such as burials, foundations, artifacts, wells, and privies. The *2020 CEQR Technical Manual* requires a detailed evaluation of a project’s potential effect on the archeological resources if it would potentially result in an in-ground disturbance to an area not previously excavated. The Proposed Actions would result in new in-ground construction on Projected Development Site 1 and the Potential Development Sites.

As noted, the LPC was contacted for their initial review of the project’s potential to impact nearby historic and cultural resources, and a response was received on 03/12/2020 (see Appendix A). The LPC has indicated that no cultural resource, architectural or archaeological significance is associated with the study area. Therefore, significant adverse impacts to archaeological resources are not expected because of the Proposed Actions, and further analysis is not warranted.

2.7 Urban Design and Visual Resources

According to the *2020 CEQR Technical Manual*, urban design is the totality of components that may affect a pedestrian's experience of public space. Elements that play an important role in the pedestrian's experience include streets, buildings, visual resources, open space, and natural features, as well as wind as it relates to channelization and downwash pressure from tall buildings. Pursuant to the *2020 CEQR Technical Manual*, an assessment of Urban Design may be warranted when a proposed action may affect one or more of the elements that contribute to the pedestrian experience of an area, specifically the arrangement, appearance, and functionality of the built environment.

The proposed rezoning of the Affected Area from M1-2/R6A (MX-8) to R7D/M1-4 (MX-8) would alter permitted use, bulk, and height within the Affected Area. Therefore, further analysis is warranted. The differences between existing and proposed zoning, with regards to those aspects of zoning affecting urban design, are presented in the following **Table 2.7-1**.

Table 2.7-1: No-Action and With-Action Zoning Controls

	No-Action	**With-Action**
Zoning	MX-8: R6A/M1-2	MX-8: R7D/M1-4
Permitted Uses	Residential, commercial, community facility, manufacturing	Residential, commercial, community facility, manufacturing
Maximum FAR	3.0 residential (without mandatory inclusionary housing) 3.0 community facility 2.0 commercial 2.0 manufacturing	5.6 residential (with mandatory inclusionary housing) 4.2 community facility 2.0 commercial 2.0 manufacturing
Maximum Height	75 feet maximum height with qualifying ground floor	115 feet maximum height with qualifying ground floor

Methodology

Pursuant to the *CEQR Technical Manual*, an assessment of urban design is appropriate when a project may affect one or more of the elements that contribute to the pedestrian experience of the public realm. The assessment of Urban Design and Visual Resources focuses on those elements of the Proposed Actions that may have the potential to impact the use, arrangement, appearance, and functionality of the built environment. The *CEQR Technical Manual* defines that a preliminary urban design analysis is appropriate when there is potential for a pedestrian observe a material alteration beyond that allowed by existing zoning. This preliminary analysis provides an assessment of the Proposed Actions; to determine when comparing existing and future conditions with and without the Proposed Actions whether the project may result in a significant adverse environmental impact.

The Urban Design analysis examines each of those elements that play an important role in the pedestrian experience, including street hierarchy and streetscape (including the arrangement and orientation of streets); building scale as defined by their height and bulk in relation to adjacent built form and arrangement; as well as natural features, open space, and topography. These components are further considered in relation to changes in use and density of use, in so far as it impacts interaction experience of the pedestrian.

The preliminary analysis also considers the effects of the Proposed Actions on an area's visual resources, or those important public view corridors, vistas, natural or built features. Visual resources can include waterfront views, public parks, landmark structures or districts, or natural features, such as rivers or geologic formations. Based on *CEQR Technical Manual* guidelines, the study area for urban design is the area where the project may influence land use patterns and the built environment. The urban design study area consists of both a primary study area (where urban design effects of the Proposed Actions are direct) and a secondary study area. For the purpose of this assessment, the primary study area is the Affected Area. As with the analysis of land use, zoning, and public policy, the secondary study area for the urban design assessment is defined as the area within approximately 400 feet of the Rezoning Area (see **Figure 2.7-1**). The analysis is based on field visits, aerial views, computerized massing studies and montages, and photographs of the Affected Area and the 400-foot study area.

Analysis

Existing Condition

The study area is located in the Greenpoint neighborhood of Brooklyn. A ground-level photograph map key is provided **at the end of the EAS short form (Figure 1-1)**. Ground-level photographs of Projected Development Site 1 and the immediate Surrounding Area are also provided **along with the photo keys (Figure 1-6.1 to Figure 1-6.6).**

Existing land uses in the Surrounding Area primarily consist of single-family and multi-family residential, industrial and manufacturing, mixed residential and commercial, parking facilities, open space, and vacant land. Built form in the Surrounding Area varies by use, and generally consists of low-rise industrial and commercial buildings and one- to seven-story multi-family residential buildings. The manufacturing buildings are mostly 1 story in height, with a few of 2 or 3 stories. The residential buildings mainly consist of one- and two-family houses and multiple family apartment buildings, the majority of which are walk-up residential buildings ranging from 2 to 4 stories in height. Most buildings within the study area are arranged regular (parallel) with respect to their lot placement. Buildings within the Surrounding Area are generally built out to their lot lines.

The street grid is irregular as a result of the confluence of Banker Street, Calyer Street, and Franklin Street to the east of the Affected Area. Calyer Street is an east to west one-way road with curbside parking. Franklin Street is a north-south two-way road with one moving lane in each direction and curbside parking. Quay Street is an east to west one-way road with a single moving lane of traffic and curbside parking. West Street is a south to north one-way road with one moving lane of traffic and curbside parking.

The street hierarchy of the study area includes two different functional classifications. Franklin Street is classified as a Minor Arterial Roadway under the Surface Transportation Program, while Calyer Street, West Street, Quay Street, and all the other streets are classified as local.

There are a few streetscape elements within the study area. Along Quay Street, there are a few scattered trees on a decayed streetscape with erupted and uneven sidewalks. Piles of messy things (bicycles, wood, and miscellaneous construction materials) are stacked randomly on the walkways, blocking the sidewalks and making it inconvenient and unsafe for pedestrian use. Directly south to Projected Development Site 1 on Quay Street is a one-story, mixed-use, NYC

Transit Authority-owned building of light industrial and manufacturing uses, taking up more than half of the whole block and improved as warehouse for trucks.

West Street is transitioning rapidly from large parcel of vacant lands to residential areas. A 7-story elevator apartment building located on West Street and Calyer Street was just built in 2017. Another 14-story mixed-use building with residential and commercial uses at West Street between Calyer Street and Oak Street has issued its New Building Permit in 2020.

Franklin Street, along the eastern border of the block where Affected Area locates, features multiple rehabilitated and active commercial uses that provide quality architecture and signage to create a sense of place. Along Franklin Street, the quality of the pedestrian environment is even and joint. While the street enjoys quality assemblage of street trees and street lights, there is a 3-story building under repair at Franklin Street between Quay Street and Calyer Street used for a chemical wholesaler.

It appears there are a blend of land uses (residential, industrial, and parking facility) and deteriorated structures on Calyer Street. The disjointed and narrow sidewalks are not suitable for proper pedestrian use. No other notable streetscape elements (e.g., benches), lighting, or any form of pocket parks are located within the study area.

Bushwick Inlet Park, the only visual resource in the area, is located within the 400-foot study area to the south of Projected Development Site 1. Bushwick Inlet Park is not visible from the Affected Area as the view of the park is blocked by the one- to two-story industrial buildings across Quay Street. The Proposed Development within the study area would not block the visual resource or alter the context of the park.

Future No-Action Condition

As shown in **Figures 2.7-2, 2.7-4, 2.7-6, and 2.7-8** below, in the future without the Proposed Actions, it is expected that while tenants within the residential, manufacturing, retail, and office buildings may change, the overall use of these buildings within the study area would remain the same. Any physical changes to buildings in the study area would comply with designated zoning regulations and other surrounding districts. No significant changes to the area's urban character are anticipated. No changes to the area's views to the adjacent parks and open spaces are also expected.

Future With-Action Condition

Pursuant to the Proposed Actions, the Applicant owned property (Block 2589, Lot 1) would be developed under RWCDS with a 115-foot, 11-story mixed-use building totaling 119,005 GSF or 92,157 ZSF with 88,951 GSF or 81,573 ZSF of residential floor area. The building would consist of commercial on the ground floor and residential through floor two to eleven. The one-story commercial portion would face west on West Street while the residential entrance would face south on Quay Street. The building would contain 96 dwelling units and approximately 13,529 GSF (10,584 ZSF) of local retail ground floor commercial space. 16,525 square feet of cellar space would provide parking spaces for 38 cars. Parking for commercial uses would be waived per M1-4 district regulations. One curb cut would be conducted in order to provide accessible entrance for cellar parking.

No changes on the existing buildings on the other affected site (Block 2589, Lot 23) would be anticipated since significant investment was made recently through building alteration in 2017.

There is little possibility that the building would change in the coming few years. **Figures 2.7-3, 2.7-5, 2.7-7, and 2.7-9** show the reasonable worst-case development (as described in **Section 1.9**) building massing and compares these massing to the massing under existing conditions and No-Action condition.

Within the 400-foot study area, there is a 7-story 70-foot-tall elevator apartment building of 96 dwelling units located at 26 West Street to the north of Projected Development Site 1, which is built in 2017 with comparable building height and FAR as the Proposed Development. In addition, an undergoing construction project of a 14-story mixed-use building with residential and commercial uses is located at 29 West Street to the west of Projected Development Site 1, which is featured with a much taller building height and a much higher FAR compared to the Proposed Development. Therefore, the building massing induced by the Proposed Actions is compatible with the study area where multiple medium- to high-density residential and mixed-use developments were developed or is being developed.

Figure 2.7-1 below shows an aerial view of the Affected Area and the study area (400-foot buffer around the Affected Area).

Figure 2.7-1: Urban Design Study Area – Photomontage Locations



Figure 2.7-2: Aerial View of Existing Condition and No-Action Condition



Figure 2.7-3: Aerial View of With-Action Condition



Figure 2.7-4: Existing Condition and No-Action Condition 1
Looking Northeast at West Street and Quay Street



Figure 2.7-5: With-Action Condition 1
Looking Northeast at West Street and Quay Street

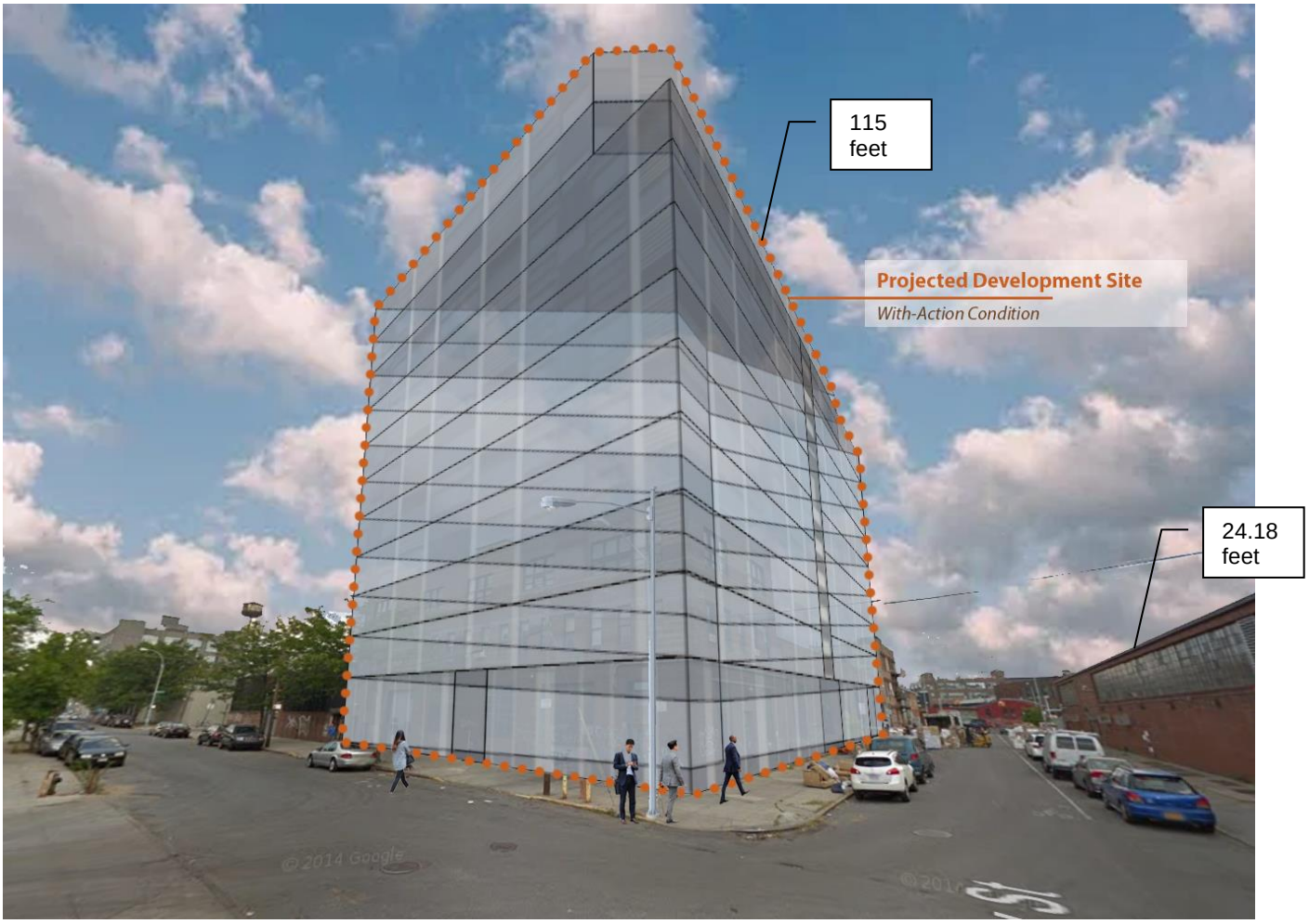


Figure 2.7-6: Existing Condition and No-Action Condition 2
Looking Northwest at Quay Street and Franklin Street



Figure 2.7-7: With-Action Condition 2
Looking Northwest at Quay Street and Franklin Street



Figure 2.7-8: Existing Condition and No-Action Condition 3
Looking Southeast at West Street and Calyer Street

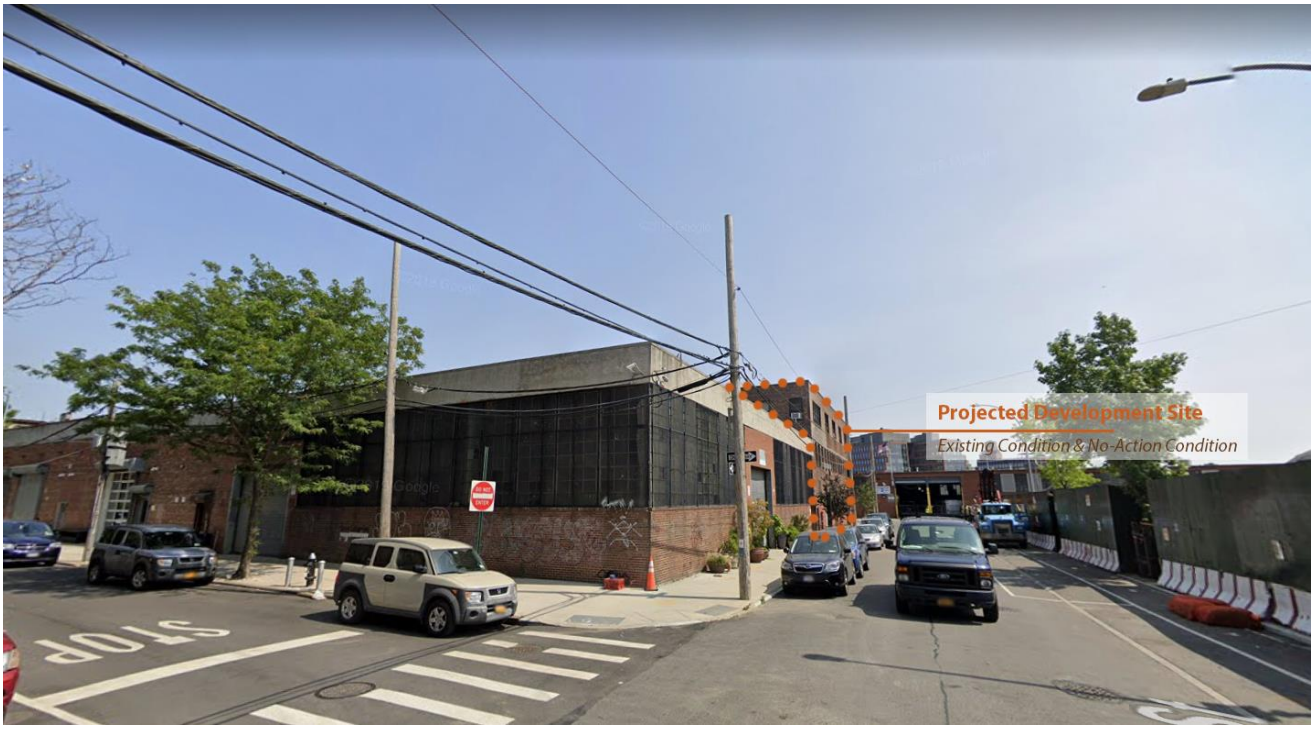
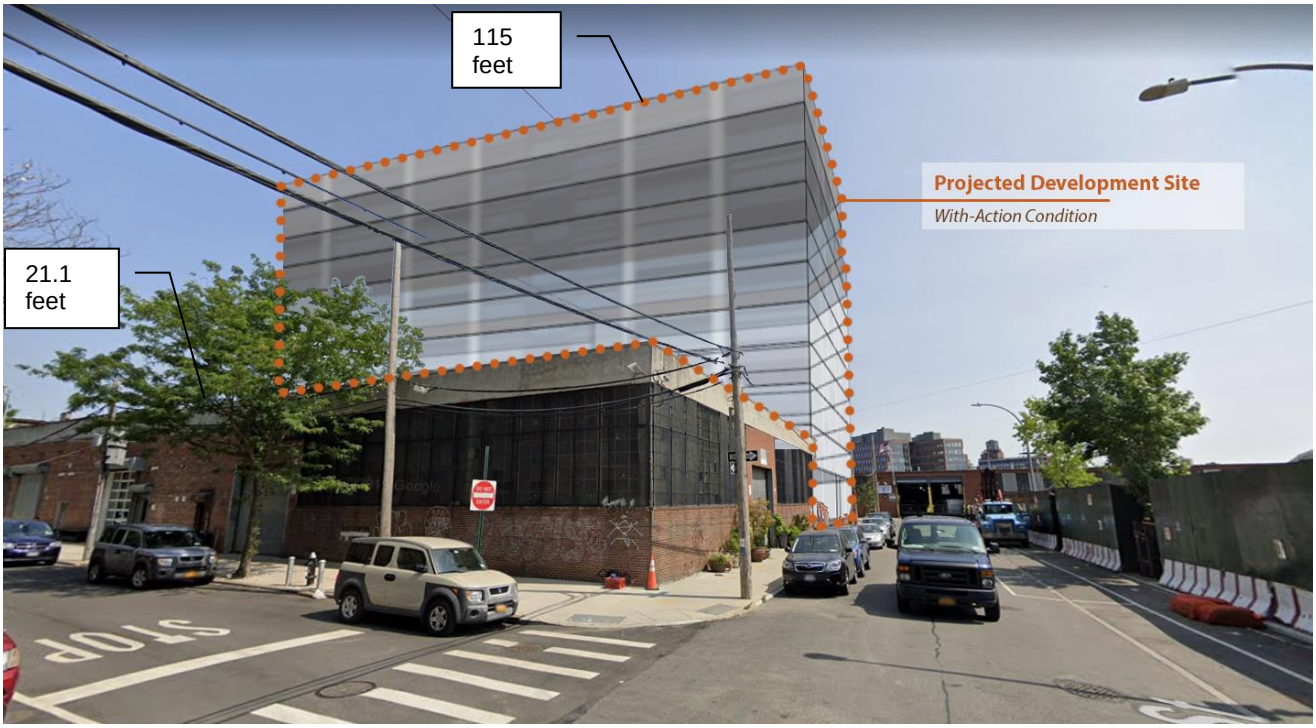


Figure 2.7-9: With-Action Condition 3
Looking Southeast at West Street and Calyer Street



Conclusion

The development facilitated by the Proposed Actions would not adversely impact any of the constituent urban design elements or impact the overall character of the neighborhood. It would not significantly change the pedestrian experience, nor would it disturb the vitality, walkability, or the visual character of the area. The development with ground floor commercial uses would improve walkability and the visual character of the area, and would also provide locally serving retail uses. Therefore, the Proposed Actions would not result in any significant adverse impact to the constituent elements of Urban Design, and a detailed analysis is not warranted.

2.9 Hazardous Materials

According to the *2020 CEQR Technical Manual*, the potential for significant impacts from hazardous materials can occur when: (a) hazardous material exists on a site, and (b) an action would increase pathways to their exposure, or (c) an action would introduce new activities or processes using hazardous materials.

Methodology

The hazardous materials assessment begins with a Phase 1 ESA, which is a qualitative evaluation of the environmental conditions present at a site, based on a review of available information, site observations, and interviews. Pursuant to the *2020 CEQR Technical Manual*, the Phase 1 ESA is conducted in accordance with the standards established by the current ASTM Phase 1 ESA Standard and includes research and field observations to determine whether the site may contain contamination from either past or present activities on the site or as a result of activities on adjacent or nearby properties. If a potential REC is identified during this assessment, then building any subsurface investigations are usually conducted as part of a Phase II ESA to confirm the presence and extent of the contamination.

Analysis

Phase I ESA (Block 2589, Lot 1)
Projected Development Site 1, Block 2589 Lot 1, is owned by the Applicant and currently inhabited by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units. The proposed rezoning would allow for residential, commercial, community facility, and light industrial uses to be built with a higher FAR in the Special Purpose District (MX). Accordingly, a Phase I Environmental Site Assessment (ESA) was conducted for Projected Development Site 1 by Equity Environmental Engineering (EEE) on November 15, 2019. A copy of this report is included as an Attachment. This Phase I ESA was also reviewed by the Department of Environmental Protection.

The purpose of a Phase I ESA is to determine whether any type of environmental hazard exists within or adjacent to the project site. Environmental hazards may include, but are not be limited to, hazardous/toxic wastes or raw chemicals stored, dumped, or spilled on the site, underground and above ground storage of petroleum or hazardous materials; asbestos within the building materials/structures; and identification of potential off-site sources of hazardous waste contamination, such as industrial facilities adjacent to the subject property.

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release, or a material threat of a release into structures on the property or into the ground, groundwater or surface waters of the property. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. All RECs, excluding de minimis RECs, were considered in the Phase I.

EEE has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13. The following conditions were observed:

- The Subject Property - It is comprised of 16,500 square feet of land and is currently developed with a 3-story, 230,500 GSF warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units.
- RECs - There is one REC associated with the Subject Property. The vent pipe along the western portion of the Subject Property indicating the presence of an underground storage tank (UST) is considered a REC.
- HRECs - Equity found no HRECs associated with the property.
- CRECs - Equity found no CRECs associated with this property.
- VECs - The EDR Vapor Encroachment database identified numerous VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related to two historical auto garages, two leaking USTs, and numerous reported spills. Based on these findings, a possible vapor encroachment cannot be ruled out.

Based on the findings of the Phase I ESA, RECs and VECs were identified related to the Subject Property. Therefore, the development of Projected Development Site 1 under the Proposed Actions may have the potential for adverse impacts related to hazardous materials and a Phase II ESA should be undertaken, collecting original samples of soil, groundwater or building materials to analyze for quantitative values of various contaminants. However, a Phase II ESA cannot be performed currently as the intrusive investigation through the Phase II process is not practical on the site where the existing building is still in use.

Department of Environmental Protection (DEP) was contacted for their review of the Phase I Environmental Site Assessment. By letter dated 06/16/2020, DEP concurs with the EAS recommendation that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property (see **Appendix A**).

Brownfield Site Cleanup Plan (Block 2589, Lot 13)
The brownfield site, Block 2589 Lot 13, is located at 33 Franklin Street, which is approximately 60 feet to the east of Projected Development Site 1 (Block 2589, Lot 1). The brownfield site is an irregular shaped lot located on the west side of Franklin Street, south side of Calyer Street and north side of Quay Street for a total of approximately 18,537 sf. The brownfield site details, including environmental and health assessment summaries, are available on NYSDEC's Environmental Site Remediation Database (Site ID: C224303).

Currently, a 1-story warehouse building is built on the brownfield site with a partial mezzanine level. The building is vacant now but was most recently utilized by Marlborough Gallery, Inc. as an art gallery and storage facility. The site is located within an MX-8 Special Mixed-Use District (M1-2/R6A). The Special Mixed-Use District (MX) was established in 1997 to encourage investment in, and enhance the vitality of, existing neighborhoods with mixed residential and industrial uses in close proximity and create expanded opportunities for new mixed-use communities. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Nearly all industrial uses are allowed in M1 districts if they meet the stringent M1 performance standards.

The environmental history of the subject property on the brownfield site was previously investigated through the review of Federal and State Environmental databases, Environmental Sanborn Fire Insurance maps, NYC Department of Building records and the NYC Department of Finance databases. According to the review of these sources, the site was developed with three 3-story dwellings with rear yards and one 2-story stable fronting to the north along Calyer Street

from at least 1887, with a carpenter and an iron foundry occupying the rear of the site. By 1905, one of the dwellings was identified as an office and foundry. By 1951, the 2- to 3 1/2-story dwellings had been converted to White Metal Foundry, with two additional 1-story foundry structures in the rear yard. The remainder of the site was unchanged. By 1965, the majority of the site was undeveloped, with portions of a factory remaining on the southern border along Quay Street. By 1978, the site was redeveloped with the existing 1-story manufacturing/ warehouse building with a mezzanine, which covered the entirety of the lot. The Sanborn maps identified the building with a new construction date of 1968. The site remained unchanged from 1978 through 2007.

Subsurface soils at the brownfield site consist of historic fill materials to a depth of approximately 4 feet below grade followed by native fine to medium sand. According to the USGS topographic map for the area (Brooklyn Quadrangle), the elevation of the property is approximately 13 feet above mean sea level. The topography within the immediate area slopes gradually to the west. Groundwater occurs beneath the site at a depth of approximately 7 feet below grade under water table conditions. Based on regional groundwater flow maps, groundwater flow is generally west. However, the groundwater flow direction would be expected to be influenced by building foundations and subsurface utility lines. The northwestern half of the site is located within a designated 0.2% (500-year) flood zone area while the southeast half is in a designated 1% (100-year) flood zone area.

New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. Previous investigations on the brownfield site have detected volatile and semi-volatile organic compounds (VOCs and SVOCs) and metals in soil, SVOCs, metals, and pesticides in ground water, and VOCs in soil vapor on site. Further investigation work includes installing and sampling soil borings to identify possible on-site sources of contamination, including emerging contaminants; installing and sampling ground water wells to monitor impacts from areas of concern both on-site and off-site, including the presence of emerging contaminants, and to supplement ground water quality data previously collected at the site.

As per NYSDEC's Environmental Site Remediation Database, the information submitted with the BCP application regarding the environmental condition and health assessment at the site are currently under review. The brownfield cleanup plan details are not finalized and will be revised with public comments. Given the proximity of the brownfield to Projected Development Site 1, there is potential of the adverse impact of the contamination from the brownfield site on Projected Development Site 1.

Conclusion

Based on the Phase I ESA on Block 2589, Lot 1 and the brownfield site cleanup program for Block 2589, Lot 13, an E-Designation is proposed to be mapped on Projected Development Site 1. The proposed E-Designation language related to Hazardous Materials is as follows:

E-Designation (E-622)

Block 2589, Lot 1
An E-Designation should be placed on the site to assure that testing and mitigation will be performed, as necessary, before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation (OER).

Task 1-Sampling Protocol
The Applicant submits to OER, for review and approval, a Phase I of the site along with a soil, groundwater and soil vapor testing protocol, including a description of methods and a site map with all sampling locations clearly and precisely represented. If site sampling is necessary, no sampling should begin until written approval of a protocol is received from OER. The number and location of samples should be selected to adequately characterize the site, specific sources of suspected contamination (i.e., petroleum-based contamination and non-petroleum-based contamination), and the remainder of the site's condition. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of sampling data. Guidelines and criteria for selecting sampling locations and collecting samples are provided by OER upon request.

Task 2-Remediation Determination and Protocol
A written report with findings and a summary of the data must be submitted to OER after completion of the testing phase and laboratory analysis for review and approval. After receiving such results, a determination is made by OER if the results indicate that remediation is necessary. If OER determines that no remediation is necessary, written notice shall be given by OER.

If remediation is indicated from 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. The Applicant should then provide proper documentation that the work has been satisfactorily completed.

A construction-related health and safety plan should be submitted to OER and would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil, groundwater and/or soil vapor. This plan would be submitted to OER prior to implementation.

With this (E) designation in place, no significant adverse impacts related to hazardous materials are expected, and no further analysis is warranted.

2.13 Transportation

Pursuant to *2020 CEQR Technical Manual* methodology, a transportation assessment may be necessary when a proposed action would alter the transportation network by closing, opening, or realigning an element of the transportation system such as a roadway, pedestrian way, or transit route, or if it would generate new trips on the transportation network. The objective of the transportation analyses is to determine whether a proposed project may have a potential significant impact on traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, bicyclists and vehicles), on- and off-street parking, or goods movement.

Methodology

The *2020 CEQR Technical Manual* states that a preliminary trip generation assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the proposed development would result in fewer than the following increments:

- *50 peak hour vehicle trips;*
- *200 peak hour subway/rail or bus transit riders (or 50 bus trips in a single direction on a single route during a peak hour); or*
- *200 peak hour pedestrian trips.*

The *2020 CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted. This chapter assesses the potential for project-generated vehicle, transit, and pedestrian trips to affect the local transportation network, as well as an assessment of transportation safety in the study area.

Analysis

Future No-Action Condition

Block 2589 Lot 1, Projected Development Site 1, would remain unchanged under the No-Action Condition with a combined 23,500 GSF, consisting of 2,000 GSF residential use and 21,500 GSF manufacturing use. It doesn't provide parking spaces on site as required in a R6A/M1-2 district.

Future With-Action Scenario

Pursuant to the Proposed Actions, the Applicant owned property (Block 2589, Lot 1) would be developed under RWCDS with a 115-foot, 11-story mixed-use building totaling 119,005 GSF or 92,157 ZSF with 88,951 GSF or 81,573 ZSF of residential floor area. The building would consist of commercial on the ground floor and residential through floor two to eleven. The building would contain 96 dwelling units and approximately 13,529 GSF (10,584 ZSF) of local retail ground floor commercial space. Twenty (20) percent of the residential floor area, or 19 of the proposed 96 units, would be designated for inclusionary housing units. 16,525 square feet of cellar space would provide residents with parking spaces for 38 cars. Parking for commercial uses would be waived per M1-4 district regulations.

In total, under the Proposed Actions, the net induced development of Projected Development Site 1 would consist of 86,951 GSF or 79,573 ZSF of residential floor area (94 dwelling units), 13,529 GSF or 10,584 ZSF of commercial floor area, and 16,525 GSF of cellar parking (38 parking spaces). Meanwhile, a reduction of 21,500-square-foot manufacturing floor area would occur.

Preliminary Assessment

Based on the Affected Area's location, it is within Traffic Zone 2. According to Table 16-1 of the *2020 CEQR Technical Manual*, a residential development of fewer than 200 residential units, 15,000 square feet of local retail, or 25,000 square feet of community facility space, or a weighted average below 1.00 of any of the above, typically does not warrant further assessment of the potential for adverse effects on Transportation. Incremental development under the Proposed Actions, compared to No-Action conditions, would consist of 94 more residential dwelling units (.48 weighted average) and an increase of 13,529 GSF of local retail space (.9 weighted average), which results in a weighted average of 1.38 for the Proposed Actions. Therefore, a Tier 1 trip generation is required.

Tier 1 Trip Generation

For Tier 1 trip generation, data from CEQR TM, East New York FEIS, ACS 2014-2018, and local retail data provided by NYCDOT was integrated for the traffic generation model. As **Table 2.13-1** shows, the assumption of the travel factors is determined based on the listed data sources. **Table 2.13-2** and **Table 2.13-3** show the person trips, vehicular trips, and pedestrian trips generated from the trip factors in **Table 2.13-1**.

Projected Development Site 1 is improved with a 23,500 GSF, 3-story industrial building currently inhabited by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units. Since there are no on-site parking spaces, all the vehicular trip ends are dispersed in the area for available on-street parking. In addition, the existing uses on the site are not expected to have more than five regular pedestrian trips daily. Therefore, the existing trip ends are very limited and are not included in the trip generation.

Table 2.13-1 Travel Factors for Quay Street Project

	Local Retail		Residential	
Trip Generation	(1)		(1)	
Weekday	205		8.075	
Saturday	240		9.6	
	per 1,000 sf		per 1 DU	
Linked-trip	25%			
Temporal Distribution	(1)		(1)	
AM	3.00%		10.00%	
MD	19.00%		5.00%	
PM	10.00%		11.00%	
Sat MD	10.00%		8.00%	
Modal Splits	(4)		(3)	
Auto	11.00%		14.80%	
Taxi	0.00%		1.60%	
Bus	2.00%		0.70%	
Subway	3.00%		72.60%	
Walk/Other	84.00%		10.30%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)
AM	50%	50%	15%	85%
MD	50%	50%	50%	50%
PM	50%	50%	70%	30%
Sat MD	55%	45%	50%	50%
Vehicle Occupancy	(4)		Weekday (2)(3)	Sat (2)(3)
Auto	1.20		1.08	
Taxi	1.20		1.30	
Truck Trip Generation	(1)		(1)	
Weekday	0.35		0.06	
Saturday	0.04		0.02	
Temporal Distribution	(1)		(1)	
AM	8.00%		12.00%	
MD	11.00%		9.00%	
PM	2.00%		2.00%	
Saturday	11.00%		9%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)
AM/MD/PM/Sat	50.00%	50.00%	50.00%	50.00%

1 = CEQR TM; 2 = East New York FEIS; 3 = ACS 2014-2018 Journey to Work for Census Tracts 561 565 569 573 575 557; 4 = Local Retail data provided by NYCDOT

Table 2.13-2 Estimated Person/Vehicular Trips

	Local Retail		Residential	
Size/Units	13,529	gsf	94	DU
Peak Hour Trips				
AM	62		76	
MD	395		38	
PM	208		83	
Sat MD	244		72	
Person Trips				
AM	In	Out	In	Out
Auto	3	3	2	10
Taxi	0	0	0	1
Bus	1	1	0	0
Subway	1	1	8	47
Walk/Other	26	26	1	7
Total	31	31	11	65
MD	In	Out	In	Out
Auto	22	22	3	3
Taxi	0	0	0	0
Bus	4	4	0	0
Subway	6	6	14	14
Walk/Other	166	166	2	2
Total	198	198	19	19
PM	In	Out	In	Out
Auto	11	11	9	4
Taxi	0	0	1	0
Bus	2	2	0	0
Subway	3	3	42	18
Walk/Other	87	87	6	3
Total	104	104	58	25
Saturday	In	Out	In	Out
Auto	15	12	5	5
Taxi	0	0	1	1
Bus	3	2	0	0
Subway	4	3	26	26
Walk/Other	113	92	4	4
Total	134	110	36	36
Vehicle Trips				
AM	In	Out	In	Out
Auto	3	3	2	9
Taxi	0	0	0	0
Taxi Balanced	0	0	0	0

Truck	0	0	0	0
Total	3	3	2	10
MD	In	Out	In	Out
Auto	18	18	3	3
Taxi	0	0	0	0
Taxi Balanced	0	0	0	0
Truck	0	0	0	0
Total	18	18	3	3
PM	In	Out	In	Out
Auto	10	10	8	3
Taxi	0	0	1	0
Taxi Balanced	0	0	1	1
Truck	0	0	0	0
Total	10	10	9	4
Saturday	In	Out	In	Out
Auto	12	10	5	5
Taxi	0	0	0	0
Taxi Balanced	0	0	1	1
Truck	0	0	0	0
Total	12	10	6	6

Table 2.13-3 Estimated Pedestrian Trips

	Local Retail		Residential		Total		
Pedestrian Trips							
AM	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	1	1	0	0	1	1	2
Subway	1	1	8	47	9	48	57
Walk/Other	26	26	1	7	27	33	60
Total	28	28	10	54	37	82	119
MD	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	4	4	0	0	4	4	8
Subway	6	6	14	14	20	20	39
Walk/Other	166	166	2	2	168	168	336
Total	176	176	16	16	192	192	383
PM	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	2	2	0	0	2	2	5
Subway	3	3	42	18	46	21	67
Walk/Other	87	87	6	3	93	90	183
Total	93	93	49	21	141	114	255
Saturday	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	3	2	0	0	3	2	5
Subway	4	3	26	26	30	29	60
Walk/Other	113	92	4	4	116	96	212
Total	119	98	30	30	149	128	277

The increments induced by the Proposed Development are calculated through the traffic generation model. As **Table 2.13-4** shows, the number of trips increased wouldn't exceed the threshold for subway, MTA bus, and vehicular trips. However, the number of pedestrian trips, including not only "walk" trips, but also trips of other modes that usually have a pedestrian component, is expected to be 384, 255, and 278 during weekday midday and PM peak hour, and Saturday peak hour respectively, which is much more than the 200-pedestrian threshold. Therefore, a Tier 2 trip assignment is warranted for the Proposed Development.

Table 2.13-4 Traffic Increments of Proposed Development Compared with CEQR Thresholds

Peak Hour	AM Peak Hour	Midday Peak Hour	PM Peak Hour	Saturday Peak Hour
Total Walk Only Trip-Ends	60	336	183	212
Total Subway Trip-Ends	57	39	67	60
Subway Threshold	**200**	**200**	**200**	**200**
Total MTA Bus Trip-Ends	2	8	5	5

MTA Bus Threshold	**200**	**200**	**200**	**200**
Total Pedestrian Trip-Ends	119	**383**	**255**	**277**
Pedestrian Threshold	**200**	**200**	**200**	**200**
Vehicular Trip-Ends	18	43	33	34
Vehicular Threshold	**50**	**50**	**50**	**50**

Tier 2 Trip Assignment

Pursuant to Section 320 of the *2020 CEQR Technical Manual*, when a proposed project exceeds 200 peak hour pedestrian trips as determined by the Level 1 Trip Generation Screening Assessment, a Level 2 Project Generated Trip Assignment should be prepared to determine whether a detailed assessment of any technical areas is warranted. Accordingly, based on the Level 1 Trip Generation Screening Assessment, project generated pedestrian trips-ends were assigned to the traffic network for all peak hours in which exceedances to the above thresholds are projected.

Level 2: Project Generated Trip Assignment Assumptions

The Level 2 Assignment assumptions are based on the transit access points identified in **Figure 2.13-2** below and population distribution based on the 2013-2017 5-year American Community Survey Data for the subject census tracts and all bounding census tracts shown in **Figure 2.13-1** below.

Figure 2.13-1: Transportation Census Tract Study Area - Population Distribution

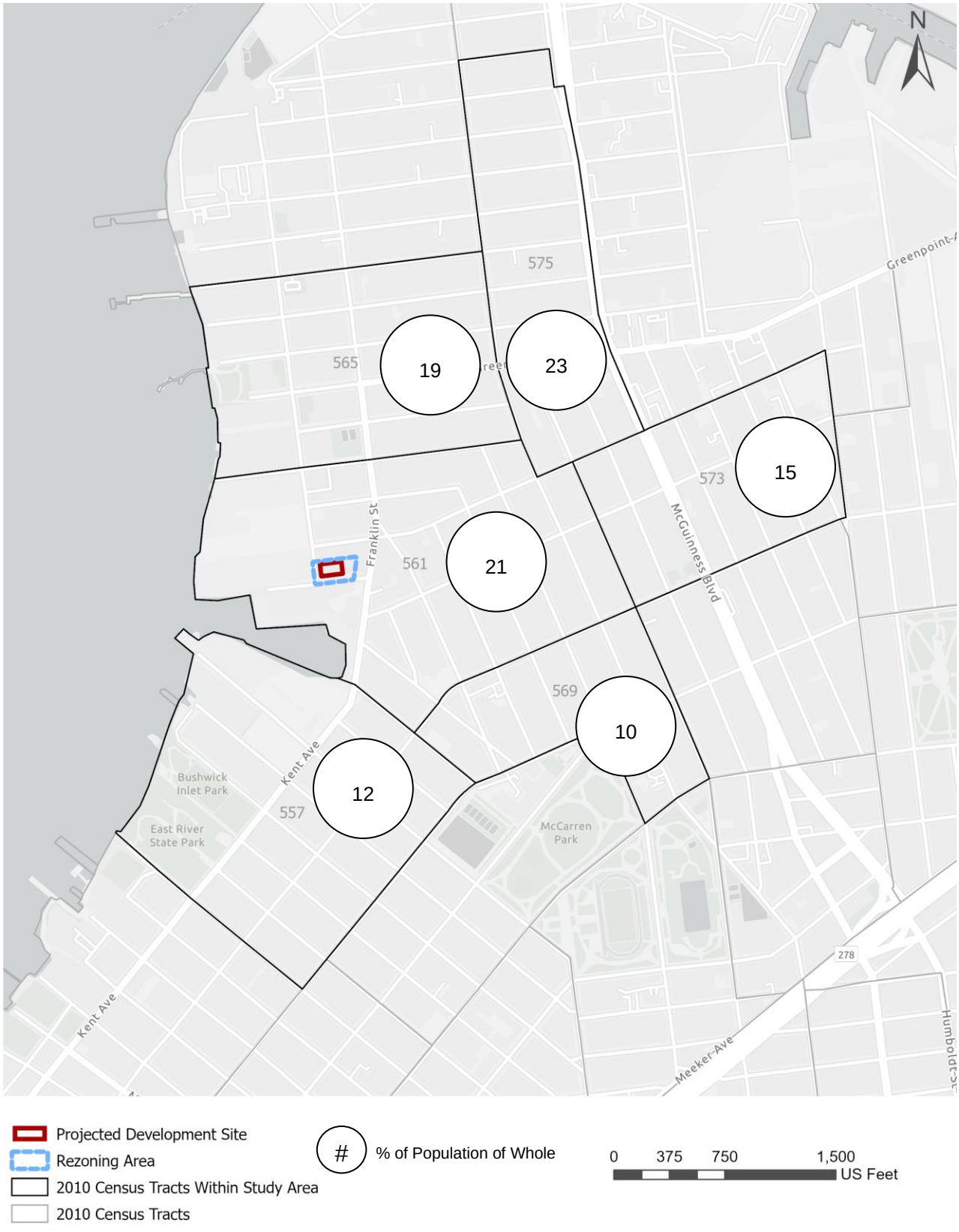


Figure 2.13-2: Transportation Study Area

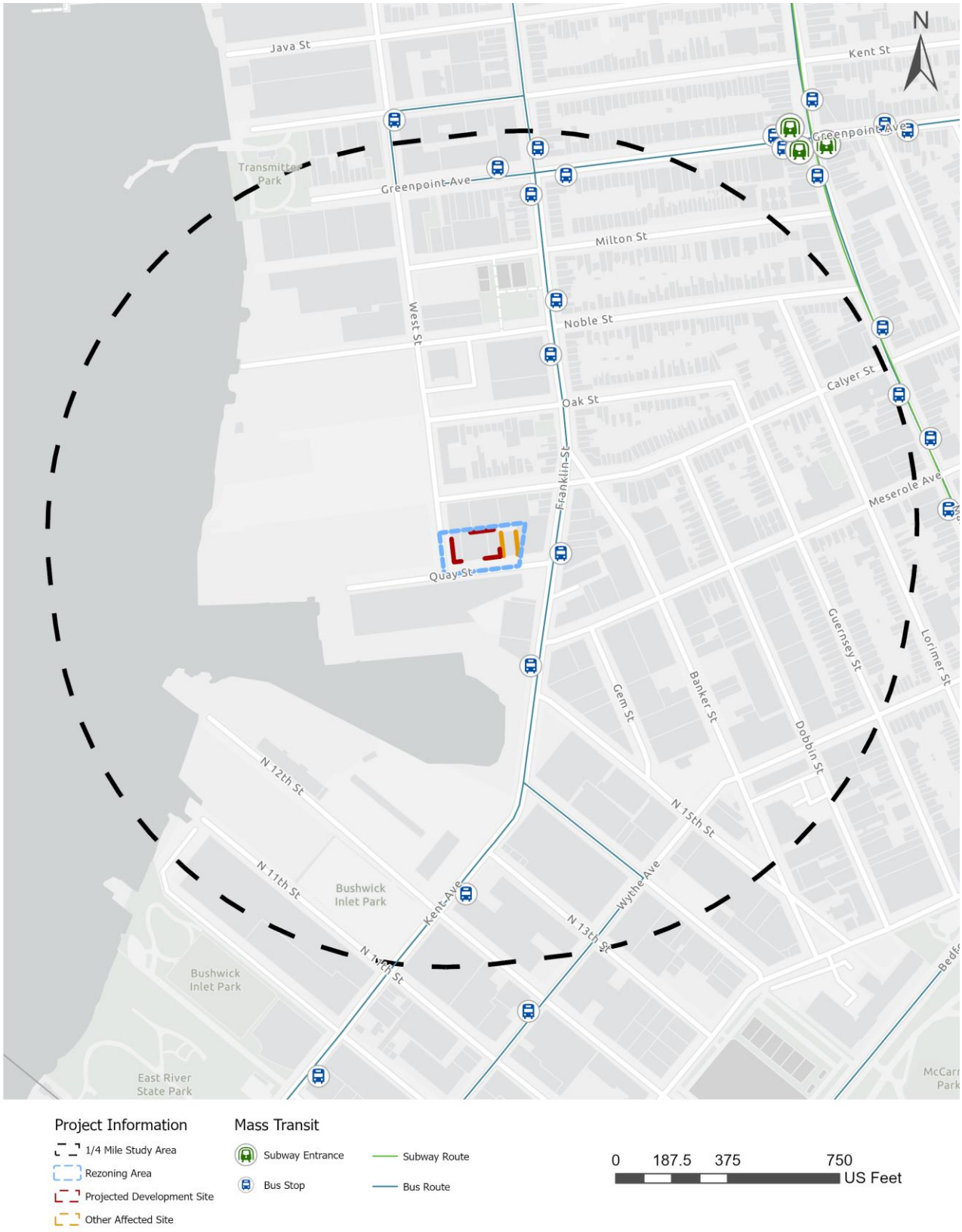
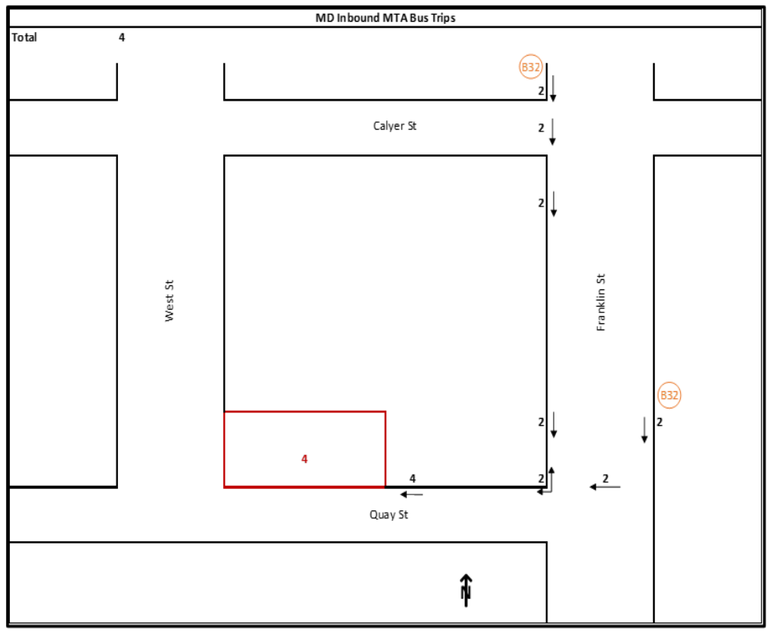
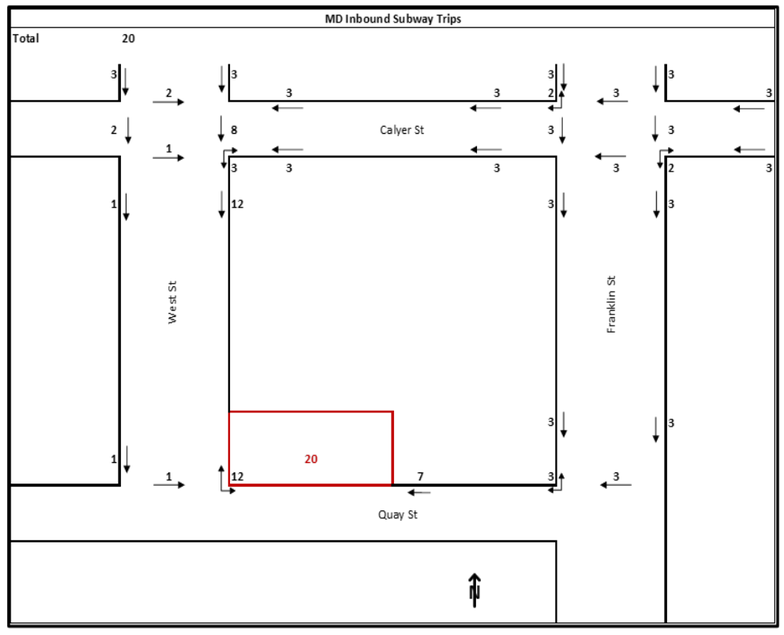
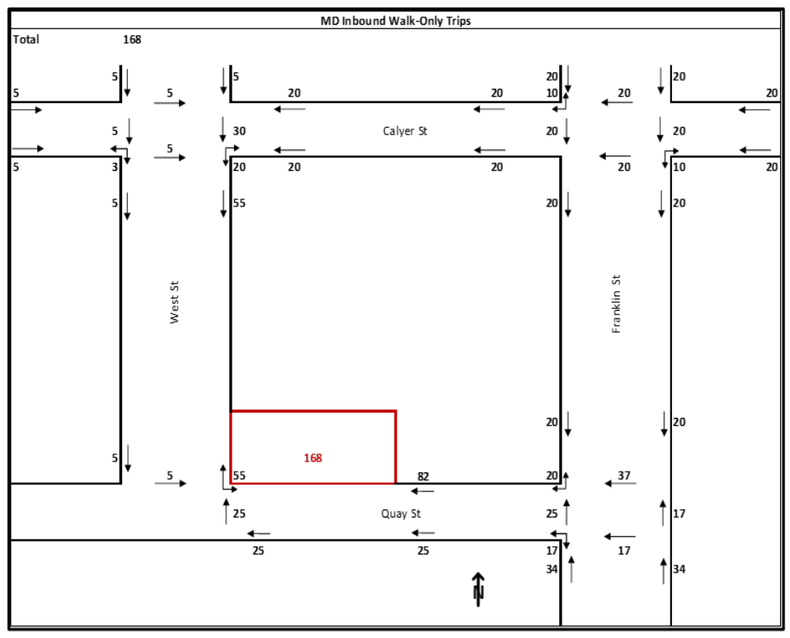
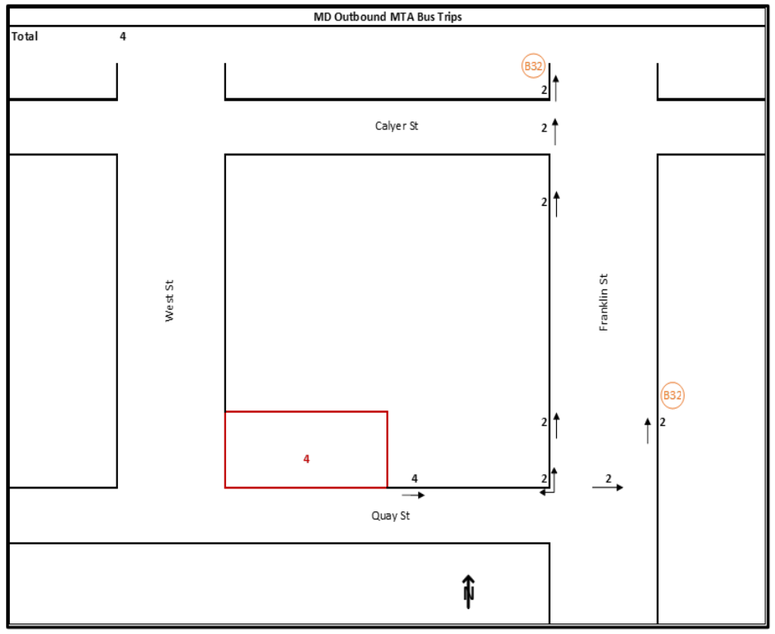


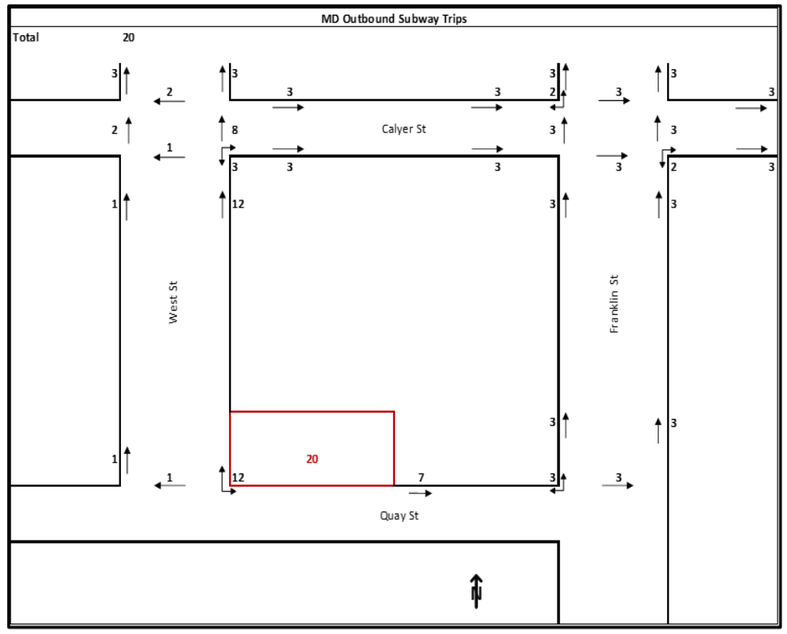
Figure 2.13-3: MD Pedestrian Assignment (1 of 2)











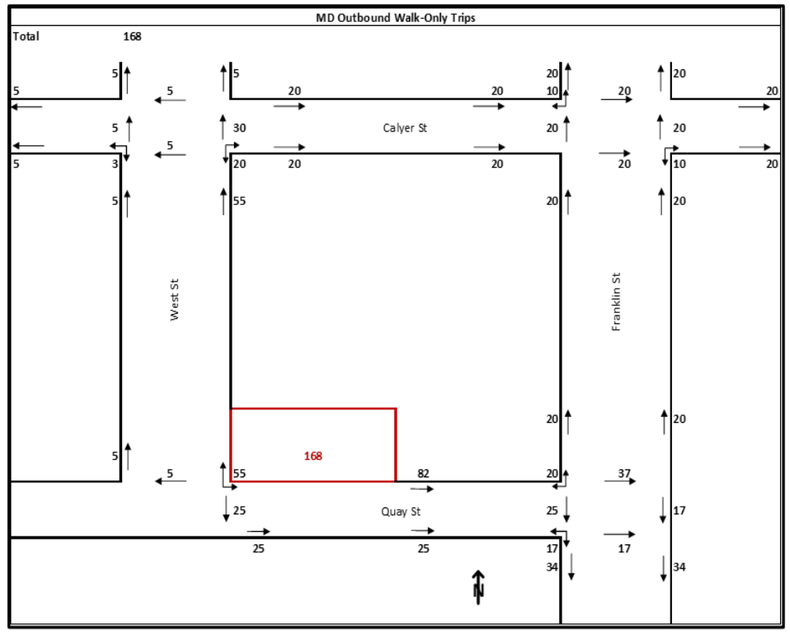


Figure 2.13-4: MD Pedestrian Assignment (2 of 2)

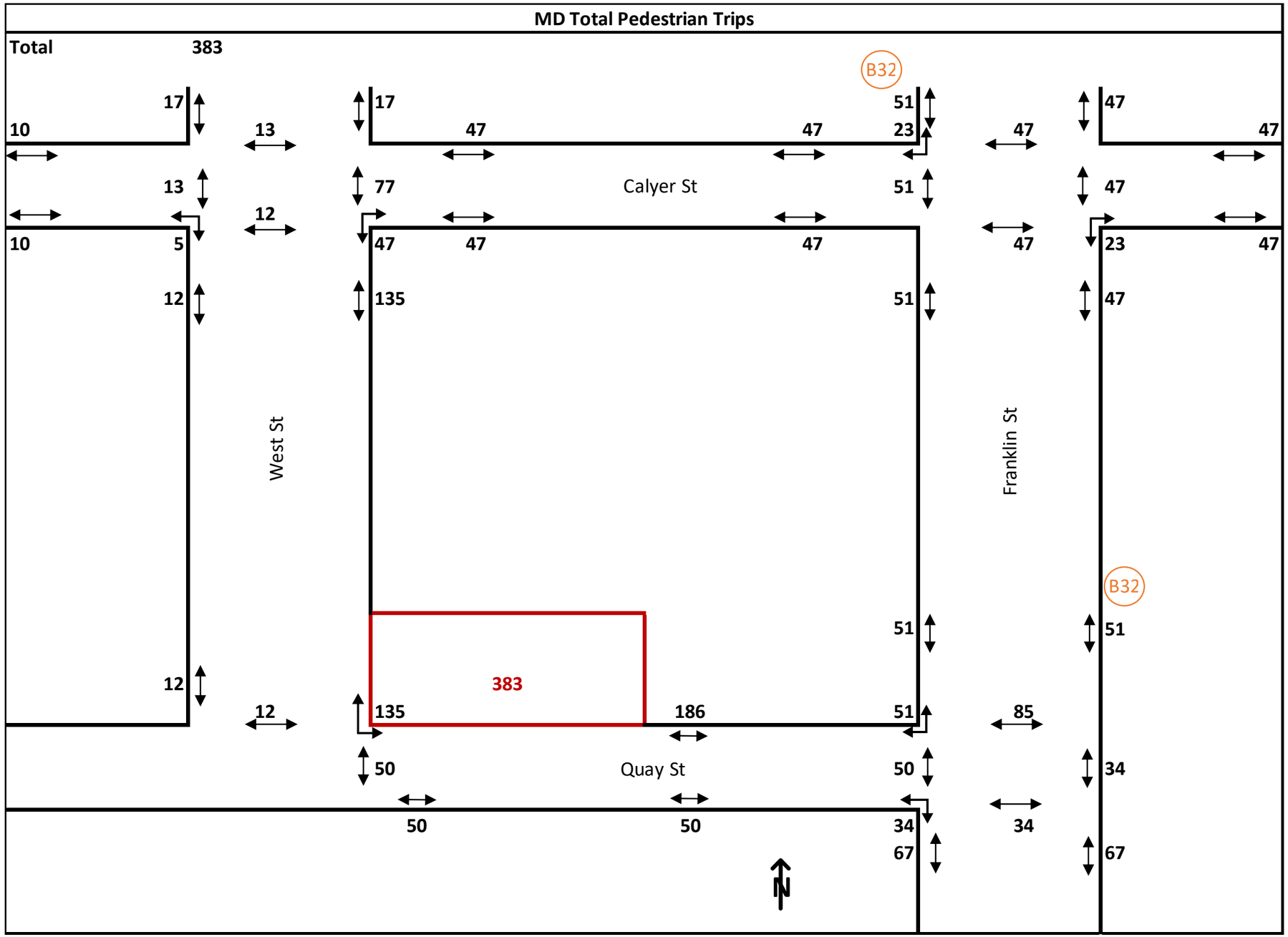
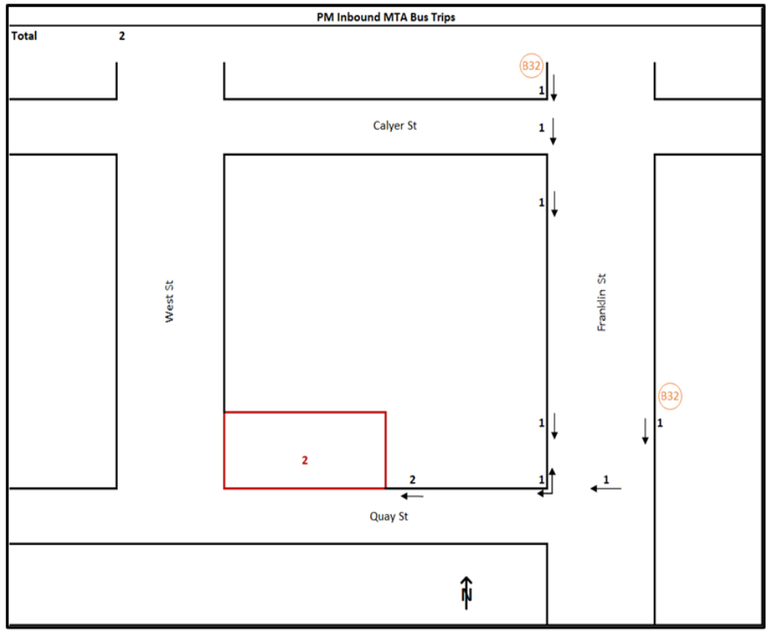
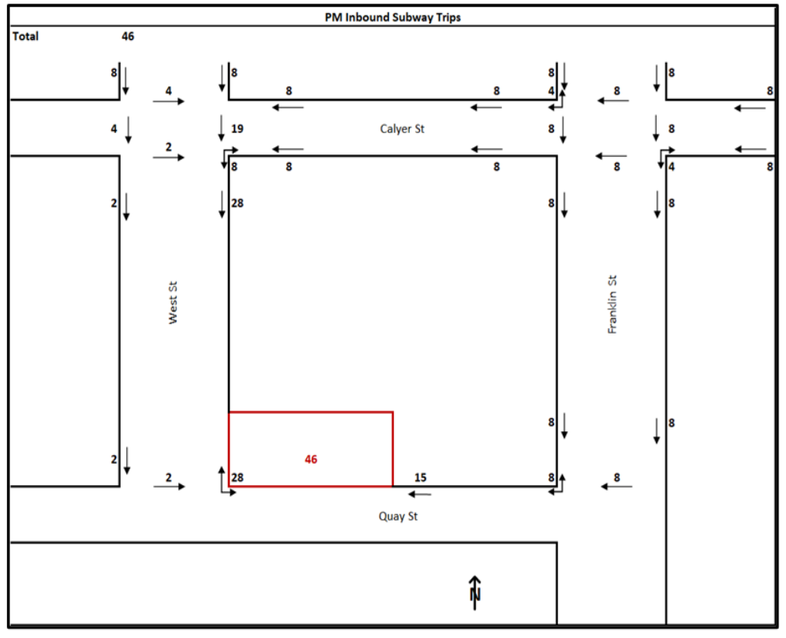
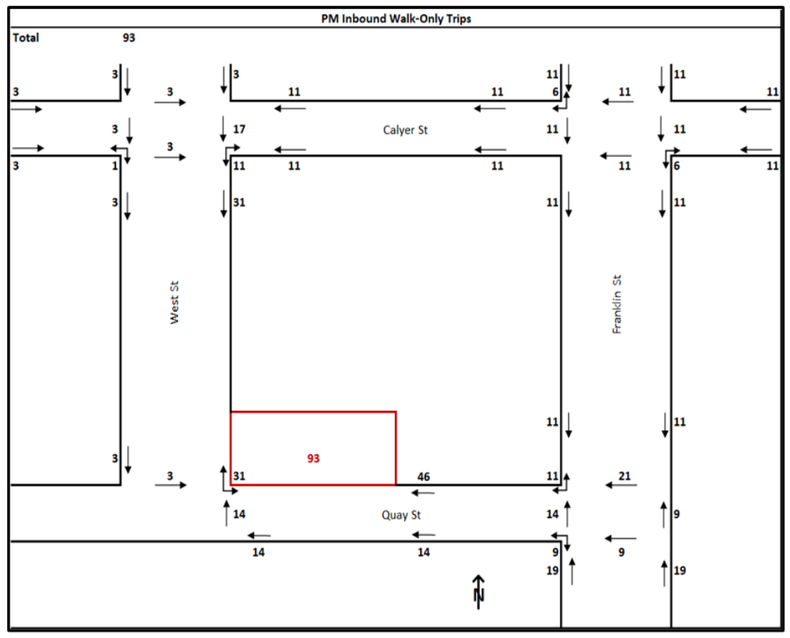
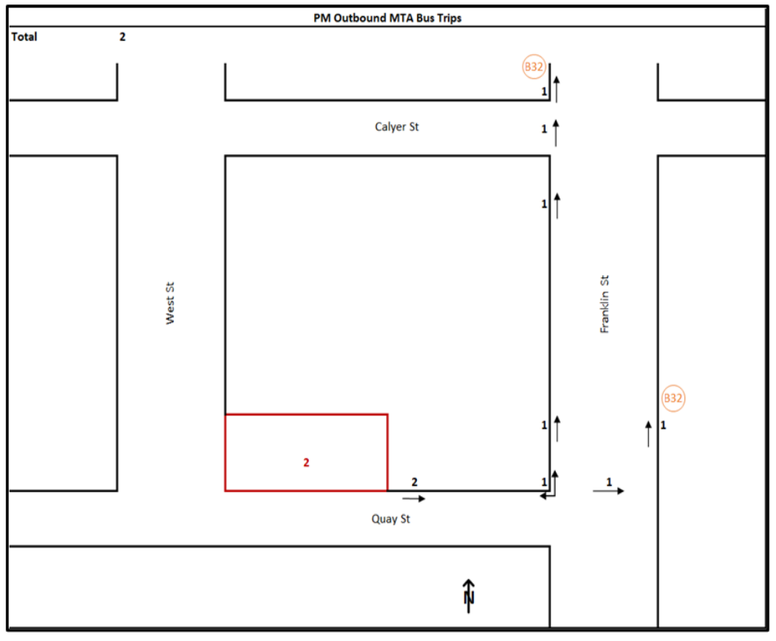


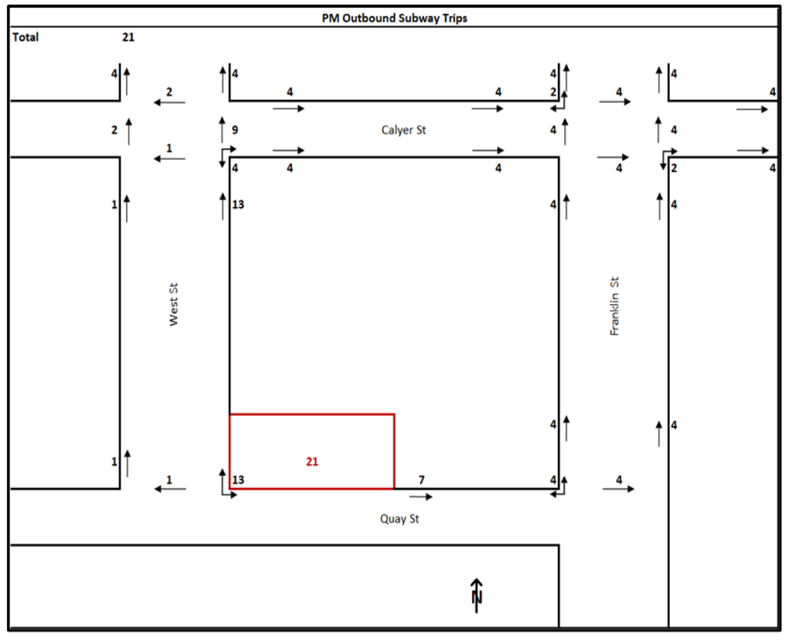
Figure 2.13-5: PM Pedestrian Assignment (1 of 2)











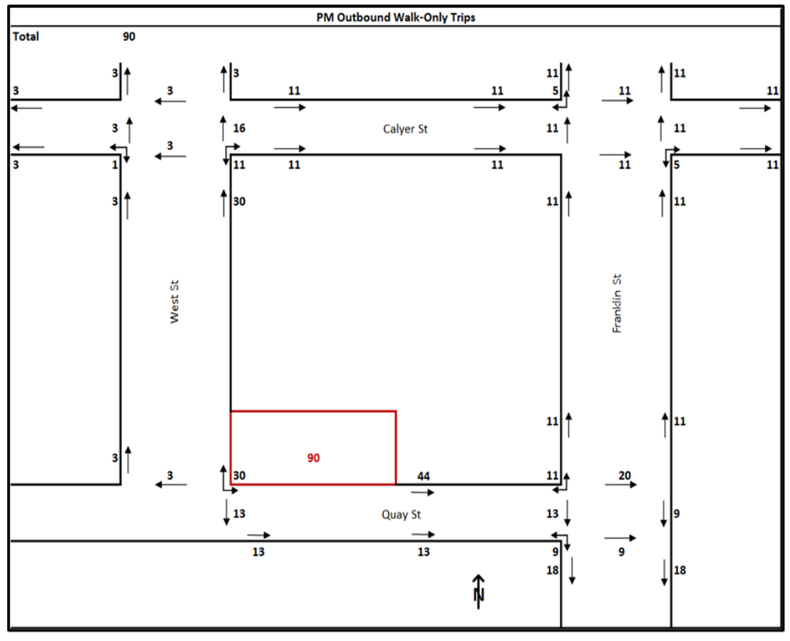


Figure 2.13-6: PM Pedestrian Assignment (2 of 2)

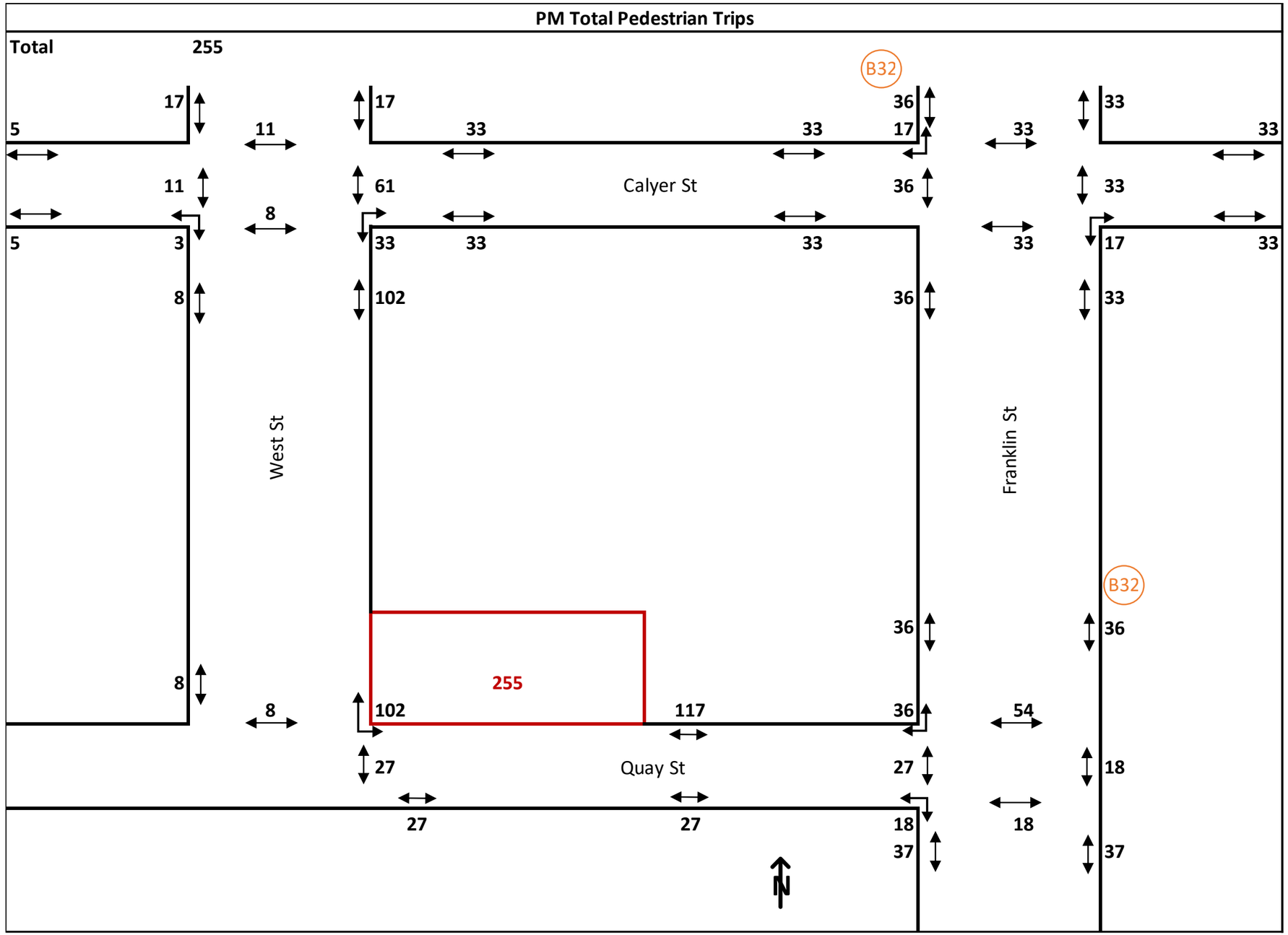
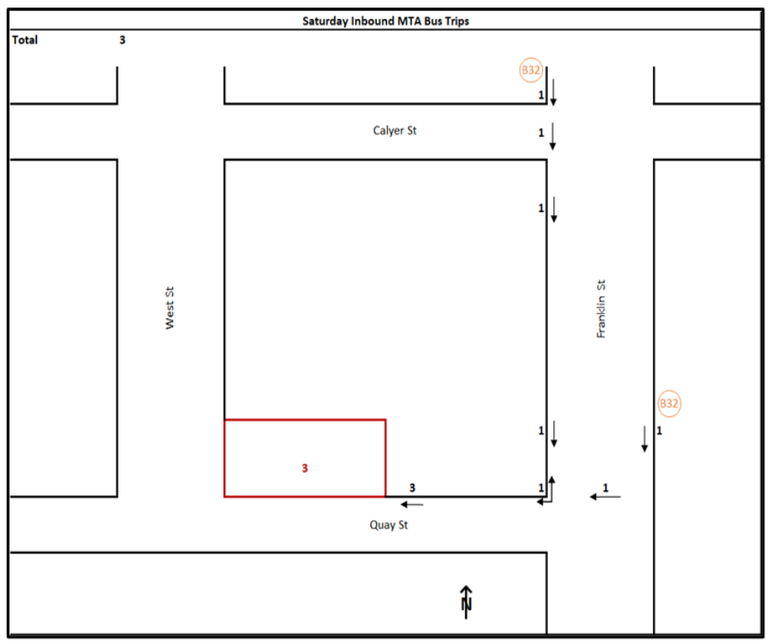
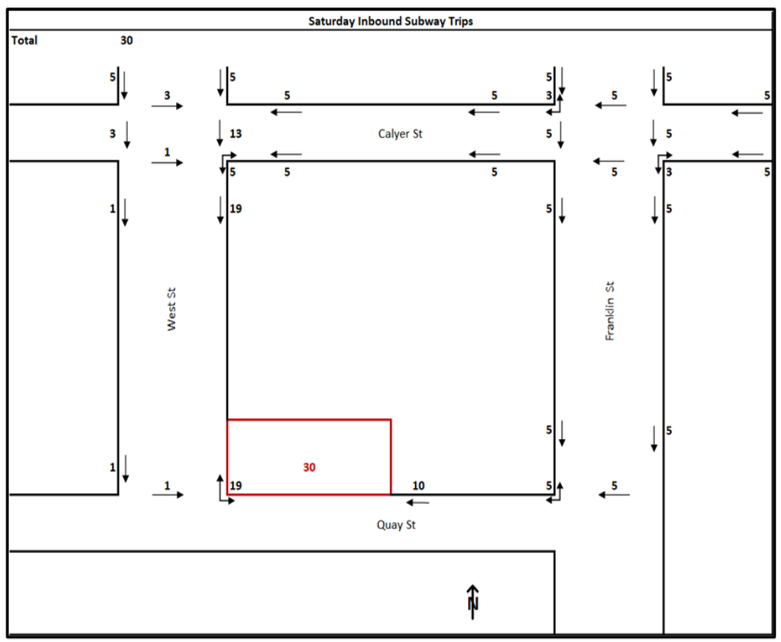
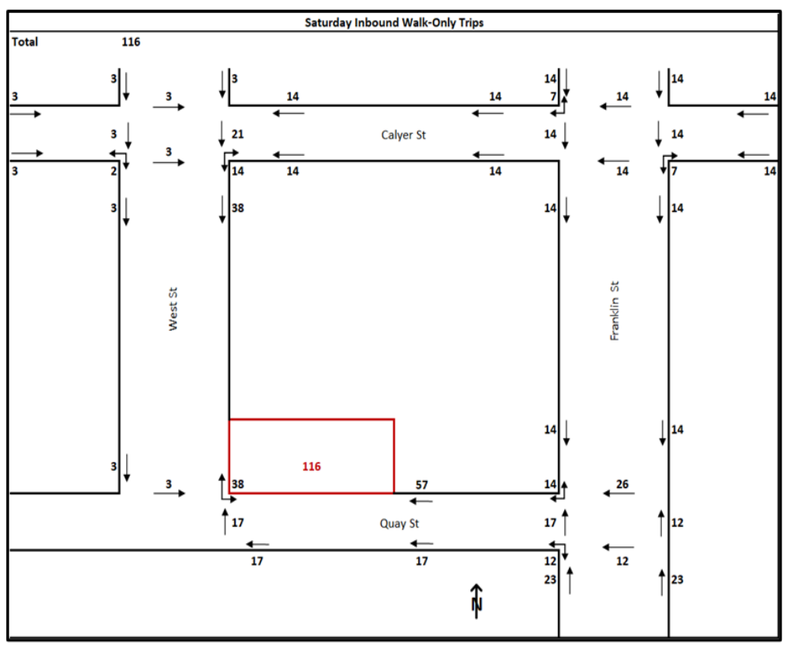
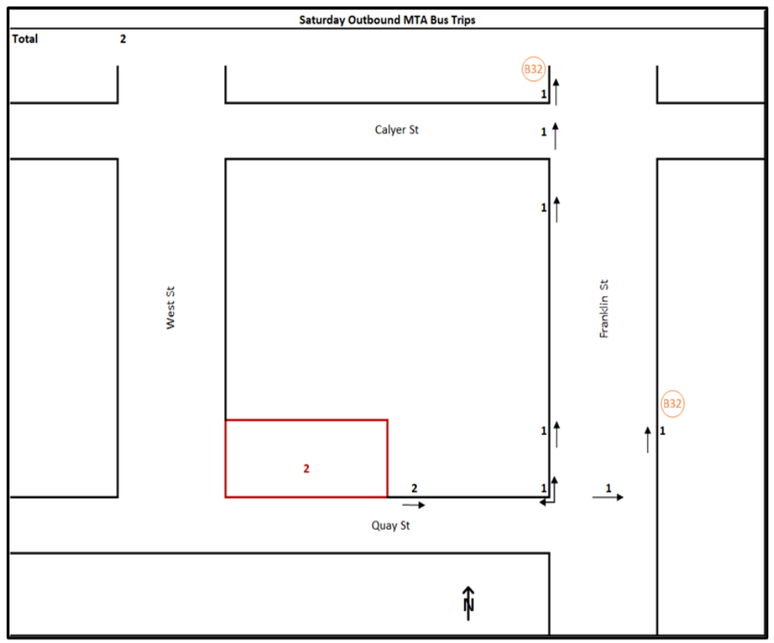


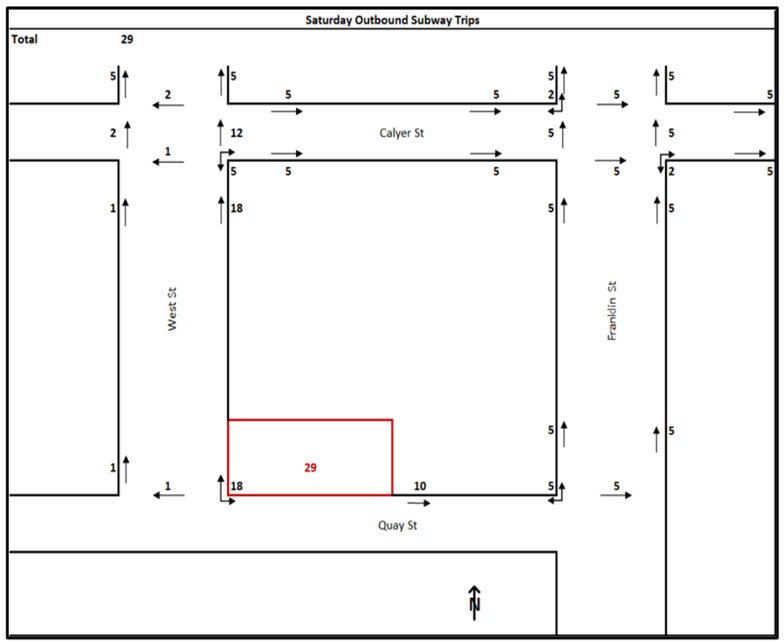
Figure 2.13-7: Saturday Pedestrian Assignment (1 of 2)











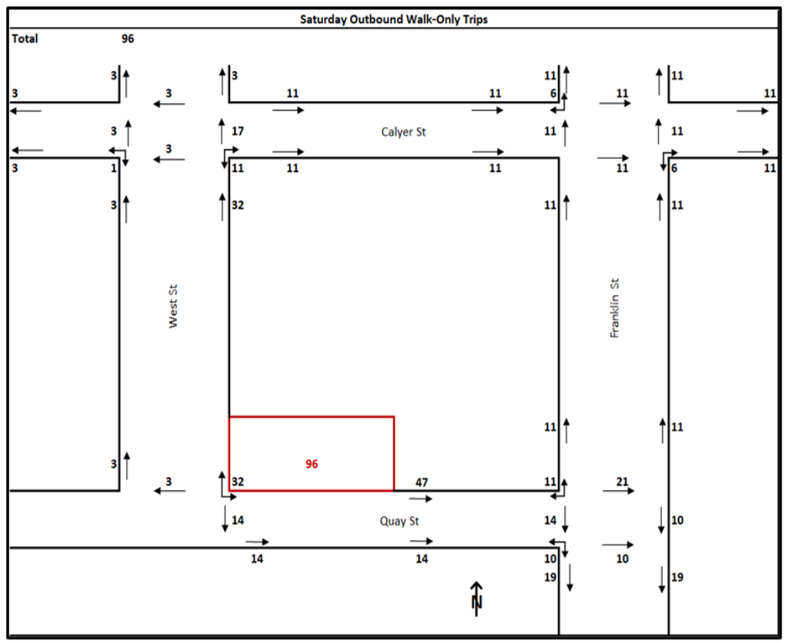
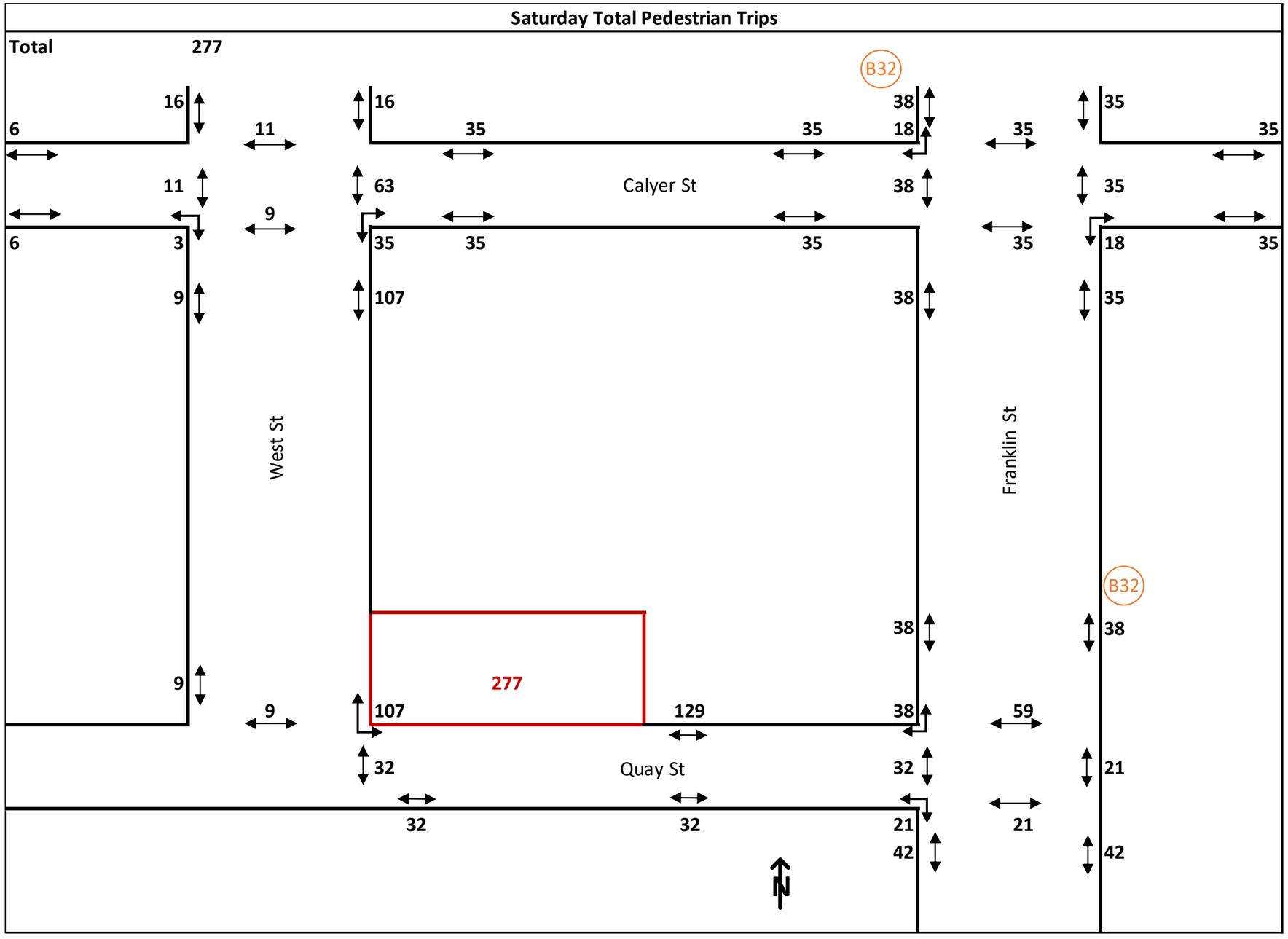


Figure 2.13-8: Saturday Pedestrian Assignment (2 of 2)



Based on the *Level 2 Project Generated Trip Assignment,* this section identifies where exceedances to the applicable *Level 2 CEQR thresholds* occur and concludes where further assessment or mitigation is warranted.

Level 2: Pedestrian Trip Assignment Findings

The 2020 CEQR Technical Manual indicates that a detailed pedestrian analysis be performed for projects that are likely to generate 200 or more incremental pedestrian trips during any peak hour on any singular pedestrian element (i.e., a crosswalk, street corner, or sidewalk).

Based on the Pedestrian Trip Assignments shown above, no Pedestrian Level of Service Analysis is warranted for any pedestrian elements as not a singular pedestrian element is likely to generate more than 200 incremental pedestrian trips.

Conclusion

The Proposed Actions would facilitate a new mixed-use development that would generate more than 200 pedestrian trips during midday, PM, and Saturday peak hours. Assigning the project-induced pedestrian trips for the three peak hours based on the population distribution in the bounding census tracts and the location of the public transits, it is determined that no Pedestrian Level of Service Analysis is warranted for any pedestrian elements as not a singular pedestrian element is likely to generate more than 200 incremental pedestrian trips. Therefore, no further analysis is necessary for Transportation.

In addition, the proposed building on Projected Development Site 1 would be constructed along two local driveways of approximately 60 feet in width each, including Quay Street to the south and West Street to the west. The construction of the proposed development may require the temporary closing of the sidewalks adjacent to Projected Development Site 1 along Quay Street and West Street. The sidewalks adjacent to the site are likely to be reconstructed, which may temporarily impact pedestrian flow and the availability of parking spaces along these streets. However, changes to moving traffic lanes are not likely. Though the construction activity on Projected Development Site 1 would impact the pedestrian flows during construction, the construction activity is expected to last for 18 months, the impact of which on transportation would be considered short term (less than two years). Therefore, the construction of the proposed project would not be expected to result in significant adverse impacts on transportation.

2.14 Air Quality

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. The impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed to assess potential health hazards due to ambient air quality, where the effects of both the proposed project on ambient air quality and the ambient air quality effect on the proposed project are considered. The analysis framework, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2020 Technical Manual (CEQR TM)*. The potential air quality impacts of the resulting emissions are estimated following the procedures and methodologies prescribed in the *CEQR TM*:

- *The potential for changes in vehicular travel associated with proposed development activities to result in significant mobile source (vehicular related) air quality impacts.*
- *The potential for an atypical (e.g., not at-grade) source of vehicular pollutants to significantly impact the proposed development.*
- *The potential for emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development to significantly impact nearby planned and/or existing land uses.*
- *The potential for air toxic emissions released from existing industrial facilities to significantly impact the proposed development.*
- *The potential for significant air quality impacts from the emissions of facilities that require Prevention of Significant Deterioration permits (Title V), and facilities which require a state facility permit to significantly impact the proposed development.*
- *The potential for facilities' malodorous emissions to unreasonably interfere with the proposed project's occupant's comfortable enjoyment of life or their property.*

Project Description

The Affected Area, located in the Greenpoint neighborhood of Brooklyn, Community District 1, is comprised of 3 lots on Block 2589. Projected Development Site 1 is the Applicant owned property. The rest are the Other Affected Sites.

Given that the building is located within a coastal zone boundary, Zoning for Coastal Flood Resiliency, adopted by the City Council on May 12, 2021, would allow building owners to measure building height from the base flood elevations. Therefore, the air quality analysis would adopt a building height of 101 feet in pursuit of a more conservative result.

The building would contain a total of 119,005 GSF, including 87,390 GSF of residential floor area, 10,911 GSF of retail commercial space, 17,594 GSF of parking spaces, and 3,110 GSF of building mechanical spaces. The building's HVAC equipment would operate on Fuel Oil #2 under the RWCDS.

The Other Affected Sites under Reasonable Worst-Case Development Scenarios (RWCDS) would remain the same as the existing condition. The buildings' HVAC systems operate on Fuel Oil #2. **Table 2.14-1** summarizes the Affected Area.

Table 2.14-1: The RWCDS of the Affected Area on Block 2589.

Site ID	Lot	Building Height (feet)	Gross Floor Area	No. of Parking Spaces
Projected Development Site 1	1	101	119,005	38
Other Affected Site 1	13	21	18,537	0
Other Affected Site 2	23	38	12,750	0

For the purpose of the air quality analysis, Projected Development Site 1 (mixed-use building, predominantly residential with commercial retail space on the ground floor) boilers' heat inputs assumed residential uses as a conservative measure (residential use consumes more fuel per floor area than other uses). In addition, each building's HVAC system would operate on Fuel Oil #2.

Methodology & Standards

Air Pollutants and Applicable Standards/Guidelines

National Air Quality Standards

The U.S. Environmental Protection Agency (EPA) has identified six pollutants, known as criteria pollutants which are being of concern nationwide, and established threshold concentration based upon adverse effect on human health. The six pollutants and their characteristics are:

Carbon Monoxide (CO) is mainly produced by motor vehicles from the incomplete combustion of gasoline. The impact of CO on the ambient air is analyzed next to roadways, intersections, parking lots, and parking garages vents as these locations are the most affected.

Nitrogen Dioxide (NO_2) is a main concern related to the burning of natural gas. Emitted NOx from the burning of fossil fuel gradually convert to NO_2 in a chemical reaction that is affected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO_2 impact.

Ozone (O_3) is formed by chemical reaction between hydrocarbons and nitrogen oxides and its impact is analyzed on a regional scale by monitoring stations.

Lead (Pb) in the ambient air is monitored on a regional level. In a project scale analysis, impact due to Lead concentration levels are analyzed if a new source, such as lead smelters, is introduced into the environment or if a project is located next to a lead emitter.

Particulate Matter emissions are associated with both stationary sources and mobile sources. Two sizes of particulate matters are analyzed: Inhalable Particles (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$), where the subscript number refers to the diameter of the particulate matter in micrometers.

Sulfur Dioxide (SO_2) emission is principally associated with stationary sources that use oil or coal as the fossil fuel for the equipment. These fuels contain sulfur that bond to oxygen atoms in the burning process.

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The NO_2, SO_2, and $PM_{2.5}$ standards— the criteria pollutants of main concern for HVAC systems fueled by Fuel Oil #2—together with their health-related averaging periods are presented in **Table 2.14-2**.

NO_2 NAAQS

Nitrogen oxide (NO_x) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO_x in these emissions are then gradually converted to NO_2, which is the pollutant of concern, in the atmosphere (in the presence of ozone and sunlight as these emissions travel downwind of a source).

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 µg/m^3) is the 3-year average of the 98th percentile of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of three tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NOx/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

Per the *CEQR TM*, a Tier 1 approach is initially applied, followed by a Tier 2 application of NO_x/NO_2 ratio of 80% to the NO_x modeled concentration to determine whether a violation of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO_2 NAAQS were estimated.

The annual NO_2 standard is 0.053 ppm (100 µg/m^3). In order to conservatively estimate annual NO_2 impacts, a NO_2 to NO_x ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO_2 analysis, was applied.

New York State Standards

As mentioned, New York State has adopted the national standard, NAAQS. In addition, the New York State Department of Environmental Conservation (NYSDEC) has established guidelines for maximum allowable concentration of "noncriteria pollutants," which are potentially toxic or carcinogenic pollutants. The maximum allowable guidelines set a maximum 1-hour and annual averaging time concentrations and are published in the DAR-1 AGC/SGC Table, where AGC/SGC refers to Annual and Short-term Guideline Concentrations. The most recent DAR-1 guidelines were created on July 14, 2016.

NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic or duration.

NYC Interim Guidelines

In addition to the NAAQS, the *CEQR TM* requires that projects subject to CEQR apply a $PM_{2.5}$ and CO 8-hour averaging time significant impact criteria (based on concentration increments). These criteria are named *de minimis* and they are more stringent than the NAAQS, and the state standards as the *de minimis* concentrations set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project

are less than the *de minimis* criteria, the impacts are not considered to be significant. As outlined in the *CEQR TM,* $PM_{2.5}$ significant impacts are evaluated as follow:

- *Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or*
- *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 µg/m^3 at any receptor location for stationary sources.*

Background Concentrations
Determination of significant impact criteria is evaluated by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the existing and planned land uses.

Background concentrations of NO_2, SO_2, and $PM_{2.5}$—the criteria pollutants of main concern for HVAC systems fueled by Fuel Oil #2—were obtained from the NYSDEC's annual report for 2018 at the nearest monitoring stations (JHS 126 and Queens College 2). **Table 2.14-2** shows the background concentrations and the NAAQS.

Table 2.14-2: Background Concentrations at the Nearest Monitoring Stations

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	98th Percentile of Daily Maximum 1-hour averaged over last 3 years	188 µg/m^3	56.2 ppb (105.68 µg/m^3)	Queens College 2
	Annual Arithmetic Mean	100 µg/m^3	14.44 ppb (27.15 µg/m^3)	
SO_2	99th Percentile of Daily Maximum 1-hour averaged over last 3 years	196 µg/m^3	5.67 ppb (14.83µg/m^3)	Queens College 2
	Annual Arithmetic Mean	80 µg/m^3	0.41 ppb (1.07 µg/m^3)	
$PM_{2.5}$	24-Hour average of 98th percentile for last 3 years	35 µg/m^3	17.2 µg/m^3	JHS 126
	Average of last 3 years annual means	12 µg/m^3	7.7 µg/m^3	

The *de minimis* criteria for $PM_{2.5}$ was evaluated as described in the NYC Interim Guidelines. The concentrations increments are presented below:

- 24-hour $PM_{2.5}$ 8.90 µg/m^3
- Annual $PM_{2.5}$ 0.3 µg/m^3

Analysis

Mobile Sources

Projects may result in significant mobile source impacts when they create mobile sources of pollutants, change traffic patterns, or add new uses near mobile sources of pollutants. Per

CEQR guidelines, a detailed analysis is conducted to predict whether the Proposed Actions could potentially have a significant adverse air quality impact if certain threshold criteria are met or exceeded, while proposed projects that do not meet or exceed the threshold criteria (screen out) are not expected to have a mobile source impact. Projects that require a detailed analysis model the ambient air CO and PM_{10}/$PM_{2.5}$ concentrations—the mobile source pollutants of concern—and compare the modeled concentrations with the applicable air quality standard.

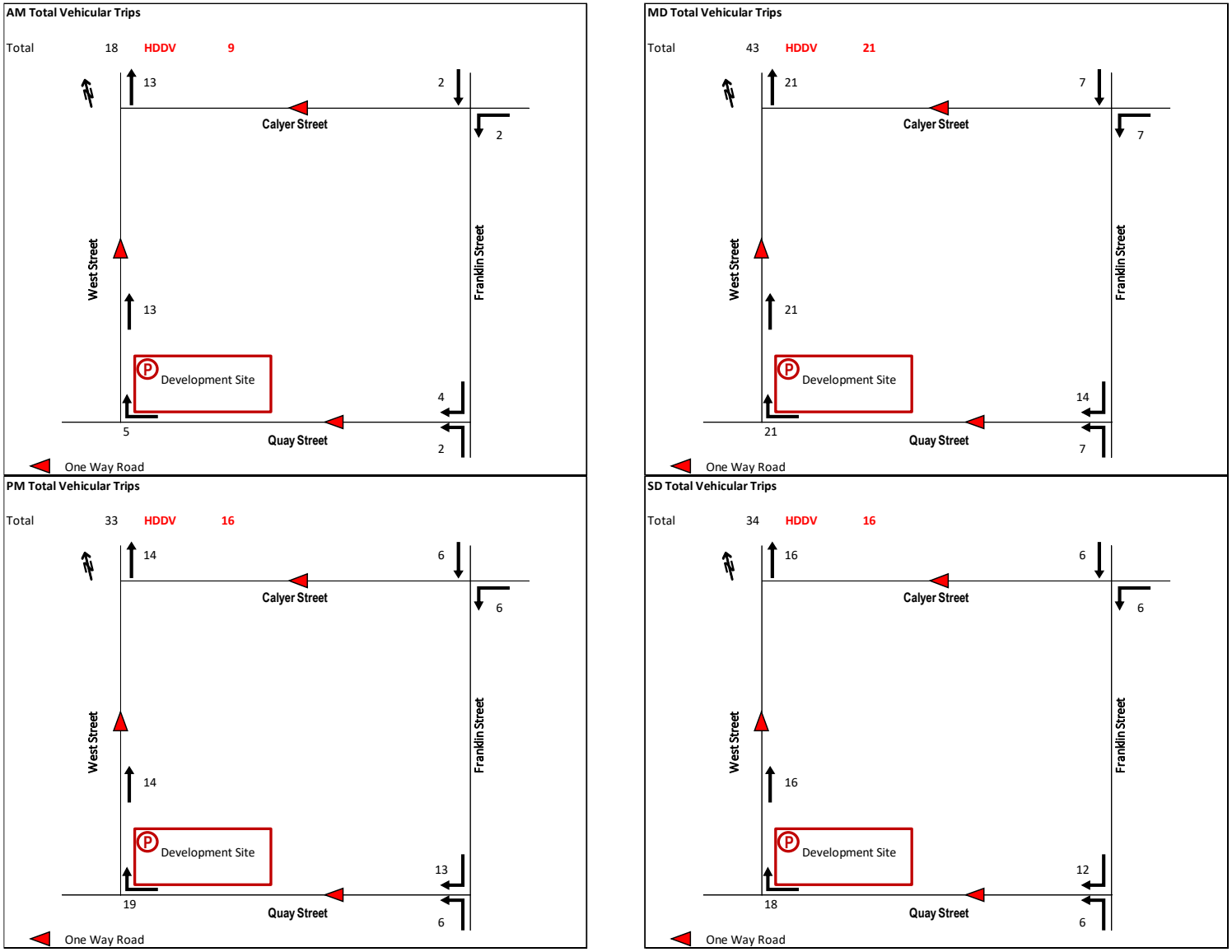
Mobile Source Screen

Project-Generated Traffic
Per the *CEQR TM*, localized increases in CO and $PM_{2.5}$ levels may result from increased vehicular traffic volumes and changed traffic patterns in the study area as a consequence of the Proposed Development. As such, screening analyses for CO and $PM_{2.5}$ were carried out to determine whether the project-generated traffic has the potential to cause significant impact.

Per the *CEQR TM*, mobile source impact analysis for air quality does not rely on the pedestrian trips but the incremental vehicle trip-ends generated by the project. According to the Transportation chapter **Table 2.13-4**, the incremental vehicle trip-ends during the AM, midday, PM, and Saturday peak hours are 18, 43, 33, and 34 respectively. Using the worksheet provided in the *CEQR TM Section 210*, the vehicle trip-ends during the peak hours are equivalent to 9, 21, 16, and 16 HDDV. As Quay Street and West Street are both classified as paved roads per NYS DOT Functional Classification, which have a threshold of 12 HDDV for $PM_{2.5}$ analysis, the vehicular trips fail the screening for $PM_{2.5}$. Therefore, a Level 2 screening that includes trip assignments per intersection is warranted to determine whether a detailed mobile source impact analysis is needed for $PM_{2.5}$.

As shown in **Figure 2.14-1**, the vehicular trip-ends were assigned to the road network, and no intersection would exceed the HDDV threshold. Therefore, a detailed $PM_{2.5}$ mobile source impact analysis is not warranted for any intersection.

Figure 2.14-1 Vehicular Trip Assignment



Parking Garage
Based on CEQR recommendations, the maximum capacities of parking garages are evaluated with a threshold criterion to predict whether the potential impacts associated with mobile source emissions are significant. The threshold criteria level, per CEQR guidelines, is 85 off-street parking spaces. If the threshold is met or exceeded, a detailed analysis is warranted. As seen in **Table 2.14-1**, the Proposed Actions would facilitate 38 parking spaces on Projected Development Site 1. The number of parking spaces do not exceed the parking spaces threshold criterion. Therefore, no detailed air quality analysis is required, and no significant mobile source air quality impacts are expected as a result of the parking facilities.

Existing Mobile Sources of Pollutant
According to *2020 CEQR Technical Manual*, projects that would result in new sensitive uses within 200 feet of an atypical roadways or near an existing parking facility may result in significant mobile source air quality impacts. These impacts are estimated at sensitive receptors located at air intakes, operable windows, and terraces of the receptor building. There is no atypical roadway within 200 feet of the proposed project, and there are no large parking facilities located near the proposed project. Therefore, no analysis was required, and no mobile source significant adverse air quality impacts are expected to the proposed project from vehicular emission generated at an existing nearby mobile source of pollutant.

Stationary Sources

According to CEQR, an action can result in stationary source air quality impacts when it creates new stationary sources of pollutants such as emission stacks for industrial plants, hospitals, or other large institutional uses, or even building boilers- that can affect surrounding uses, or when they introduce sensitive uses near existing (or planned future) emissions stacks, and the new uses might be affected by the emissions from the stack.

Project HVAC Systems Analysis

Since the proposed development is a single building, the HVAC analysis only considers the potential for emissions from the HVAC systems of the proposed development to significantly impact existing land uses (project-on-existing) within 400 feet.

As outlined in the *CEQR TM*, the analysis of buildings' HVAC systems follows stationary sources methodology and based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot water system boiler emissions can be significant. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

The anticipated development within the Affected Area would consist of one single building, which would be equipped with its own separate Fuel Oil #2-fueled heat and hot water system. Therefore, screening analyses were performed for fuel use only.

As previously mentioned, the screening analysis is only applicable to a single smokestack, and this CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. As the proposed development is a single building, the CEQR screening analysis is only applicable for the project-on-existing scenario. The project-

on-existing screening analysis considered two scenarios separately to provide a comprehensive analysis:

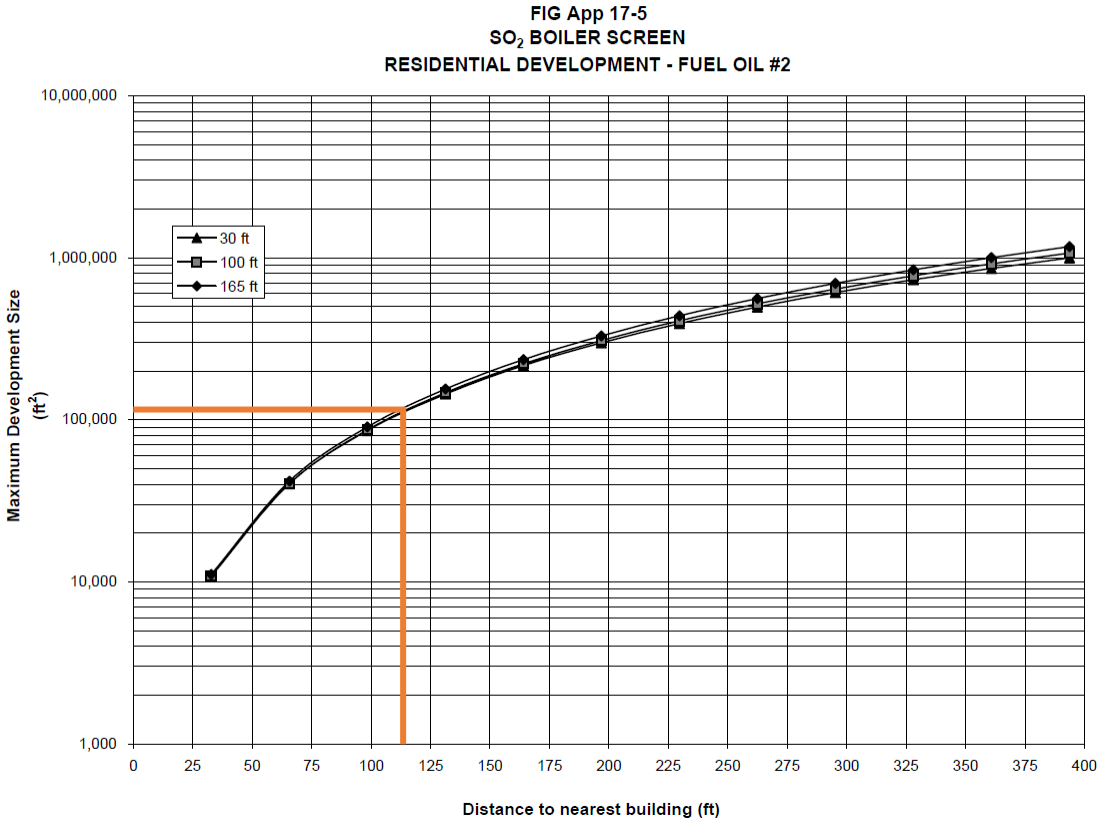
- Projected Development Site 1 actual height of 101 feet and 119,005 GSF of total floor area. The stack height of the proposed building is assumed to be 3 feet above the building's roof height, which is 104 (101+3) feet accordingly.

- Projected Development Site 1 height of 115 feet and 119,005 GSF of total floor area. The stack height of the proposed building would be 118 (115+3) feet.

101-foot Proposed Development

Per the *2020 CEQR Technical Manual*, the CEQR nomographs depicted on Figure 17-5 of the *CEQR Technical Manual* Appendix for a 100-foot stack height was applied as the 100 feet curve height is closest to but not higher than the proposed stack height of the proposed building. The Stationary Source Screen Figure 17-5 referenced in the *Appendices* of the *CEQR Technical manual* is a generic screen assuming the HVAC system is fueled by Fuel Oil #2. In addition, per *CEQR Technical Manual*, the distance to nearest building of similar or greater height was assumed to be 400 feet if the actual distance is greater. **Figure 2.14-2** (*CEQR Figure 17-5*) shows the 101-foot building screening analysis on Projected Development Site 1.

Figure 2.14-2: Projected Development Site 1 Minimum Distance HVAC Screen Nomograph (101-foot Proposed Development)



The screening analysis **Figure 2.14-2** nomograph shows that a detailed analysis would be required for any existing land uses that are 101 feet or taller and at a distance of less than 115 feet from Projected Development Site 1.

A review of existing land uses around Projected Development Site 1 shows that the nearest building of similar or greater height is the 10-story, 153 feet tall building, located at 19 Kent Avenue (Block 2282, Lot 1), which is 1,062 feet southeast of Projected Development Site 1. The building footprint data geo metadata, used to assess buildings' roof heights, was obtained from the NYC Open Data Building Footprints Shapefile[9]. In addition, note that another 22-story commercial and office building located on 55 Wythe Avenue (Block 2283, Lot 1), just east to 19 Kent Avenue, is 1,350 feet from Projected Development Site 1.

A review of planned land use applications shows that the nearest building of similar or greater height is the planned developments of Acme Smoked Fish/ Gem Street Rezoning application. Acme Smoked Fish Rezoning requests a zoning map amendment and other land use actions to facilitate a new mixed-use commercial/industrial building with a building height of 74 feet at 30 Gem Street on Block 2615, Lots 1, 6, 19, 21, 25, 50, and 125. The rezoning is 581 feet southeast of Projected Development Site 1.

115-foot Proposed Development

Per the *2020 CEQR Technical Manual*, the CEQR nomographs depicted on Figure 17-5 of the *CEQR Technical Manual* Appendix for a 100-foot stack height were applied for the second scenario as the 100 feet curve height is closest to but not higher than the proposed stack height of the proposed building. **Figure 2.14-3** (*CEQR Figure 17-5*) shows the 115-foot building screening analysis on Projected Development Site 1.

[9] https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

Figure 2.14-3: Projected Development Site 1 Minimum Distance HVAC Screen Nomograph (115-foot Proposed Development)

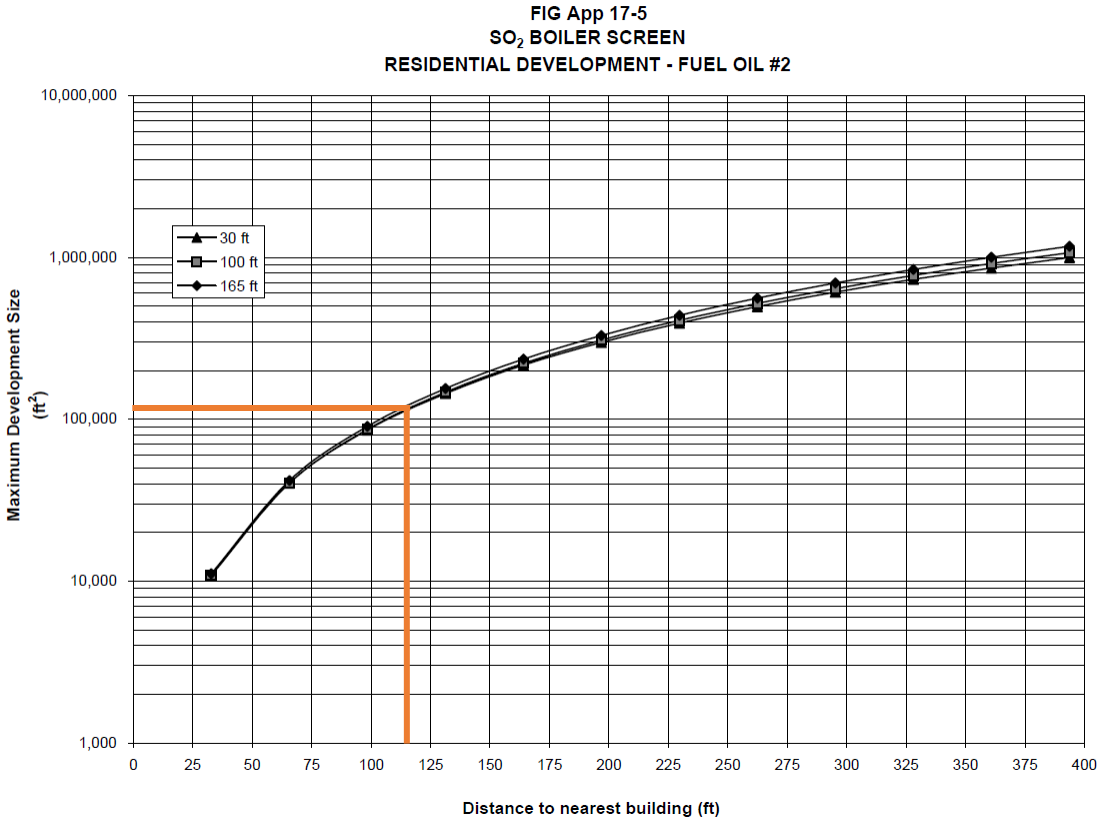


Figure 2.14-3 nomograph shows that a detailed analysis would be required for any existing land uses that are 115 feet or taller and at a distance of less than 115 feet from Projected Development Site 1.

As analyzed in the 101-foot proposed development scenario, the nearest building of similar or greater height is the 10-story, 153 feet tall building located at 19 Kent Avenue (Block 2282, Lot 1), which is 1,062 feet southeast of Projected Development Site 1. Also, there is no planned land use application proposing construction of buildings with similar or greater height within 400-foot study area.

Table **2.14-3** shows the screening analysis framework and result for the two scenarios. Given the long distance between Projected Development Site 1 and the nearest existing and planned building of similar or greater height, a potential significant impact due to boiler stack emissions is unlikely and no further analysis is needed.

Table 2.14-3: Screening Analysis Results

Source Building Site ID	Heated Area (sq. ft.)	Screen Distance (ft.)	Receiving Building (Site ID or Block/Lot)	Receiving Building Distance (ft.)	Pass/ Fail
Project-on-Existing and/or Planned Land Uses (101-foot Proposed Development)					
Projected Development Site 1	119,005	115	Existing Land use (2282/1)	> 400	Pass
Projected Development Site 1	119,005	115	Acme Smoked Fish Rezoning (2615/1, 6, 19, 21, 25, 50 & 125)	> 400	Pass
Project-on-Existing and/or Planned Land Uses (115-foot Proposed Development)					
Projected Development Site	119,005	115	Existing Land use (2282/1)	> 400	Pass

Though the HVAC source impact on the existing land use is screened out, upon the comments from DCP dated September 28, 2020, an (E) designation on the minimum stack height is recommended on Projected Development Site 1. Therefore, an E-Designation is proposed to be mapped on the Affected Area. The proposed E-Designation language related to HVAC source is as follows:

E-Designation (E-622)

Block 2589, Lot 1
Any new residential and/or commercial development on the above-referenced property must ensure the heating, ventilating and air conditioning (HVAC) systems and hot water equipment stack is located at the highest tier and at least 104 feet above grade to avoid any potential significant air quality impacts.

With this (E) designation in place, no significant adverse impacts related to HVAC source impact on air quality are expected, and no further analysis is warranted.

Industrial Emissions Sources

A search of potential industrial sites was performed to identify any NYC DEP, and USEPA1 Air Quality Permits issued within 400 feet of the Affected Area. This Study Area and uses, preliminarily identified as manufacturing or industrial based on NYCDCP MAPPLUTO database, are identified in **Figure 2.14-4**. This search was performed to determine if hazardous air toxics would have the potential to impact the proposed development.

Nineteen (19) sites were originally identified as potentially manufacturing or industrial in nature as identified as ID Number 1-19 in **Figure 2.14-4**. These uses were screened further using Google and in field assessment on multiple occasions. **Table 2.14-7** shows the nineteen (19) properties within approximately 400 feet of the Affected Area that were screened as potentially industrial or manufacturing sites. These sites were further reviewed for permit activity.

As shown in **Table 2.14-7**, 4 sites (those highlighted under ID Number 1-19) were determined to have industrial or manufacturing type uses and two of these have an active DEP industrial permit. The sites are highlighted in orange, which have active or expired permits, or which were determined to be potentially unpermitted industrial sources of process emissions requiring further investigation. These sites were analyzed based on the permit information and in-field findings.

Table 2.14-7: Industrial Sites within 400 feet of Affected Area

SITE KEY #	BLOCK	LOT	ADDRESS	PERMIT NUMBER
1	2615	1	14 MESEROLE AVENUE	NA
2	2592	3	18 FRANKLIN STREET	NA
3	2592	1	14 FRANKLIN STREET	NA
4	2590	215	11 FRANKLIN STREET	Expired industrial permit – autobody spray booth (6/24/2002)
5	2592	26	266 BANKER STREET	NA
6	2592	11	30 FRANKLIN STREET	NA
7	2592	16	40 FRANKLIN STREET	NA
8	2592	40	15 MESEROLE AVENUE	NA
9	2590	1	40 QUAY STREET	NA
10	2592	37	23 MESEROLE AVENUE	NA
11	2592	15	38 FRANKLIN STREET	Industrial permit PA114788 - metal processing (4/18/2022) Industrial permit PB016407 - industrial miscellaneous (4/18/2022)
12	2592	20	54 FRANKLIN STREET	Industrial permit PA025190 - industrial spray booth & wood working (5/22/2020) - under review Industrial permit PB002302 - wood working (5/22/2020) - under review
13	2592	30	29 MESEROLE AVENUE	Expired industrial permit (1/30/1984)
14	2571	16	78 OAK STREET	NA
15	2592	14	36 FRANKLIN STREET	NA
16	2592	6	24 FRANKLIN STREET	NA
17	2589	5	64 CALYER STREET	NA
18	2589	1	79 QUAY STREET	NA
19	2592	5	22 FRANKLIN STREET	Industrial permit PA000977- other (10/25/2022) Industrial permit PB033501 - industrial miscellaneous (10/25/2022)

Figure 2.14-4: Potential Industrial and Manufacturing Uses within 400-Foot Study Area



Per DEP, three (3) sites (#11, 12, and 19) above were identified as having relevant industrial permitting activity within the Study Area, while Site 4 has recently expired industrial permits. All the sites were reviewed as below.

Site 11: 38 Franklin Street

38 Franklin Street (Block 2592 Lot 15) is occupied by Scheel Corporation, which is located 230 feet to the east of the Affected Area. The specialty product of Scheel Corporation is customed formulations of wax blends. DEP and CATS database indicate that two current DEP permits (PA114788 and PB016407) are identified for metal processing and industrial miscellaneous in this facility, which will expire in April, 2022. Therefore, this site would possibly pose a risk of potential significant impact to the Affected Area and detailed industrial analyses for DEP permits PA114788 and PB016407 are warranted.

Site 12: 54 Franklin Street

Site 12, occupied by Budd Woodwork Inc. at 54 Franklin Street (Block 2592, Lot 20), is located approximately 250 feet to the northeast of the Affected Area. This business specializes in millwork and cabinetry, furniture repair and refinishing. This site has two active industrial permits for woodworking operations, which are PA025190 and PB002302. As per Google Map, there are possible exhaust stacks identified on the rooftop of the facility. Therefore, this location would possibly pose a potential impact to development within the Affected Area. Accordingly, detailed industrial analyses for DEP permits PA025190 and PB002302 are required for this facility.

Site 19: 22 Franklin Street

There are two current DEP permits, PA000977 and PB033501, identified for W.H. Christian and Sons. Inc., located at Site 19, 22 Franklin Ave (Block 2592 Lot 5), which it is approximately 220 feet away from the Affected Area. Therefore, this location would be likely to pose a potential impact to the air quality of the proposed development within the Affected Area. Accordingly, detailed industrial analyses for DEP permits PA000977 and PB033501 are required for this facility.

Site 4: 11 Franklin Street

Site 4, 11 Franklin Street, locates approximately 125 feet to the south of the Affected Area. Though the industrial air quality permits at this location have expired on 6/24/2002, this site is currently not occupied by any industrial or business uses. Therefore, no toxic or potentially toxic chemicals or effluent that would require an emissions permit are produced or used at the site. This site does not pose a risk of potentially significant impact on the Affected Area.

Detailed Analysis

Per the *2020 CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities, may result in potentially significant adverse impacts related to stationary sources. A detailed analysis was required for three facilities located in the 400 feet study area.

The Scheel Corporation, located at 38 Franklin Street (Block 2592, Lot 15), is situated 220 feet east of Projected Development Site 1. The facility has two DEP permit applications. Both PA114788 and PB016407 permits are for laundry drying. A Freedom of Information Law (FOIL) request was filed with the DEP to obtain information about permits PA114788 and PB016407.

The woodworking facility Budd Woodworking Inc., located at 54 franklin Street (Block 2592, Lot 20), is situated 245 feet east of Projected Development Site 1. The facility has two New York City Department of Environmental Protection (DEP) permit applications. PA025190 for an industrial spray booth and PB002302 for woodworking equipment. In addition, the Budd Woodworking Inc. facility has an Air Facility registration certificate 2-6101-00119/00003 with the New York State Department of Environmental Conservation (NYSDEC). According to 2-6101-00119/00003, the facility is required to use a spray booth equipped with a PM2.5 control measure with at least 98 percent filter efficiency, based on the certificate list of regulations in application. Pertinent information about permits PA025190 and PB002302 was received from the DEP through a Freedom of Information Law (FOIL) request.

The W.H. Christian & Sons, Inc., located at 22-28 Franklin Street (Block 2592, Lots 5 and 6), is situated 204 feet east south-east of Projected Development Site 1. The facility has two DEP permit applications. Both PA000977 and PB033501 permits are for laundry drying. A Freedom of Information Law (FOIL) request was filed with the DEP to obtain information about permits PA000977 and PB033501.

Air Pollutants and Applicable Standards and Guidelines

Criteria Pollutants

The EPA has identified six pollutants, known as criteria pollutants, which are of concern nationwide. As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. To determine compliance with the NAAQS, the predicted concentrations from the analyzed source(s) are added to the background concentrations. Based on the *2020 CEQR Technical Manual*, the nearest federally-mandated background concentration monitoring site, for each pollutant independently, is considered a representative site. The NAAQS and background concentrations of the criteria pollutants that detailed analyses were conducted for are presented in **Table 2.14-8**.

Table 2.14-8: NAAQS and Background Concentration Published in the NYSDEC 2019 Report

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
$PM_{2.5}$	24-Hour	35 µg/m^3	17.8 µg/m^3	JHS 126
	Annual	12 µg/m^3	7.6 µg/m^3	
PM_{10}	24-Hour	150 µg/m^3	43 µg/m^3	Division Street
NO_2	1-Hour	188 µg/m^3	110.5 µg/m^3	IS 52
	Annual	100 µg/m^3	31.8 µg/m^3	
SO_2	1-Hour	196 µg/m^3	14.9 µg/m^3	
	Annual	80 µg/m^3	1.1 µg/m^3	
Source: Background concentrations New York State Department of Environmental Conservation (NYSDEC) Ambient Air Quality Report for 2019				

NYC Guidelines

The City's de minimis criteria are used to determine the significance of the incremental increase in CO from mobile source and $PM_{2.5}$ (stationary or mobile sources) concentrations that would result as a consequence of the proposed project. Mobile source detailed analysis

was not required; therefore, CO and mobile source $PM_{2.5}$ de minimis are not presented here. $PM_{2.5}$ de minimis criteria relevant to stationary sources are shown below:

- Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 $\mu g/m^3$ at any receptor location for stationary sources.

Noncriteria Pollutants

The NYSDEC Department of Air Resources established short-term (one-hour) and annual concentrations standards for certain noncriteria pollutants. The standards are acceptable ambient levels for these pollutants, which are based on human exposure. The New York State standards for noncriteria pollutants are published in the DAR-1 guidance document (latest version dated August 10, 2016). DAR-1 presents Annual and Short-Term Guideline Concentrations (AGCs and SGCs, respectively) for contaminants that range in toxicity from high to low. The AGCs and SGCs are annual and 1-hour guideline concentrations, respectively, for potentially toxic or carcinogenic air contaminants. In addition, NYSDEC also regulates pollutants that produce discomfort due to odors, where significant discomfort is evaluated on quantity, characteristic, or duration.

Emission Profiles

Budd Woodworking Inc. PB002302: The DEP permit application PB002302 is for the processing operation of woodworking equipment, and emissions are controlled by a bag house filter with 99.9 percent control efficiency. The processing operation is conducted 8 hours per day, 200 day per year. Wood particles (York Identification Number NY075-00-0) are emitted at a rate of 0.01 pounds per hour (0.08 pounds per day for an 8-hour day activity rate) and 16 pounds per year. NY075-00-0 is PM_{10} and $PM_{2.5}$ combined. The particle size distribution of woodworking equipment equipped with a fabric filter was obtained from the EPA AP-42, Appendix B1-48. The PM_{10} and $PM_{2.5}$ emission rates are shown in **Table 2.14-9**.

Budd Woodworking Inc. PA025190: The DEP permit application PA025190 is for the paint spraying of woodworking articles. The processing operation is conducted 4 hours per day, 200 day per year. Pigments NY075-00-0, which is particulate matter, and volatile organic compounds (VOCs) are emitted to the outside air. Particulates matter emissions are controlled by a filter with a 95 percent control efficiency. Particulates matter are emitted at a rate of 0.01 pounds per hour (0.04 pounds per day for a 4-hour day activity rate). The particle size distribution corresponding to spray painting was obtained from the EPA AP-42, Appendix B1, Table 4.2.2.8. This particle size distribution corresponds to automobile surface coating, which is a reasonable assumption. **Table 2.14-9** shows the Budd Woodworking Inc. spray painting and woodworking equipment processing operations' PM_{10} and $PM_{2.5}$ emission rates.

Table 2.14-9: Budd Woodworking Inc. PM_{10}/ $PM_{2.5}$ Emission Rates
PB002302 and PA025190

Contaminant	Emission Rate		Activity Rate	Fraction of Particle Size	Emission Rates			
					Short-term		Annual	
	lb/hr	lb/yr	hr/day	Percent	lb/day	g/s	lb/yr	g/s
Budd Woodworking Inc. DEP Permit PB002302								
$PM_{2.5}$	0.01	16	8	28.6	0.023	1.20E-04	4.6	6.58E-05
PM_{10}				46.7	0.037	1.96E-04	7.5	1.07E-04
Budd Woodworking Inc. DEP Permit PA025190								
$PM_{2.5}$	0.01	8	4	14.3	0.01	3.00E-05	1.1	1.65E-05
PM_{10}				32.1	0.01	6.74E-05	2.6	3.69E-05

The maximum 1-hour and annual emission rates of the coating compound(s) chemicals, along with their Chemical Abstract Service (CAS) number, are presented in **Table 2.14-10**.

Table 2.14-10: Budd Woodworking Inc. VOCs Emission Rates from Spray Painting
PA025190

Contaminant Name	CAS No.	1-Hour	Annual
		lb/hr	lb/yr
Methyl Isobutyl Ketone	108-10-1	0.070	56.0
Ethanol	64-17-5	0.060	48.0
Butyl Alcohol, N-	71-36-3	0.150	120.0
Xylene, M, O&P Mixt.	1330-20-7	0.580	464.0
1-Methoxy 2-Propyl Acetate	108-65-6	0.020	16.0

W.H. Christian & Sons, Inc. PA000977: The DEP permit application PA000977 is for gas fired laundry drying processing. The laundry drying equipment is fitted with integral filter lint traps. The processing operation is conducted 8 hours per day, 200 day per year. The contaminants emission rates are listed here:

- Particulates NY075-00-0 as $PM_{2.5}$: 0.002 pounds per hour (0.016 pounds per day for an 8-hour day activity rate), 4.05 pounds per year.
- Sulfur Oxides CAS No. 7446-09-5 as SO_2: 0.0007 pounds per hour, 1.77 pounds per year.
- Nitrogen Oxides NY210-00-0 as NO_2: 0.17 pounds per hour, 414 pounds per year.

W.H. Christian & Sons, Inc. PB033501: The DEP permit application PB033501 is for laundry drying processing. The laundry drying equipment is fitted with an internal filter lint trap with 98 percent control efficiency. The processing operation is conducted 6 hours per day, 200 day per year. Lint NY075-00-0 is emitted at a rate of 0.002 pounds per hour (0.012 pounds per day for a 6-hour day activity rate) and 3.2 pounds per year. Lint emission NY075-00-0 was categorized as PM_{10}. The contaminants emission rates are shown here:

- Lint NY075-00-0 as PM_{10}: 0.002 pounds per hour (0.012 pounds per day for a 6-hour day activity rate), 3.2 pounds per year.

Scheel Corporation PB016407: The DEP permit application PB016407 is for the material processing (pulverizing) of wax blocks. Emissions are listed for each chemical and as PM_{10}, and emission are controlled with a bag house filter control equipment. None of the chemicals emitted to the outside air are listed in the AGC/SGC table. The processing operation is conducted 6 hours per day, 250 day per year. PM_{10} is emitted at a rate of 0.0002 pounds per hour (0.0012 pounds per day for a 6-hour day activity rate) and 831 pounds per year. The contaminants emission rates are listed here:

- PM_{10}: 0.0002 pounds per hour (0.0012 pounds per day for a 6-hour day activity rate), 831 pounds per year.
- Kemamide CAS No. 110-30-5: 0.00004 pounds per hour, 179.3 pounds per year.
- Sasolwax H-1 CAS No. 8002-74-2: 0.0001 pounds per hour, 310.5 pounds per year.
- AC-325 Polyethylene CAS No. 68441-17-8: 0.00002 pounds per hour, 94 pounds per year.
- AC-8 Polyethylene CAS No. 9002-88-4: 0.00002 pounds per hour, 96.7 pounds per year.
- Hi wax 200P CAS No. 9002-88-4: 0.00004 pounds per hour, 150.1 pounds per year.

Scheel Corporation PA114788: The DEP permit application PA114788 is for natural gas-fired wax melting vats. Per PA114788, the processing operation burns 382 cubic foot per hour of natural gas. The contaminants emitted are particulates (NY075-00-0), sulfur dioxide (CAS No. 7446-09-5), and oxides of nitrogen (NY210-00-0), which are all combustion products. The DEP permit application PA114788 indicates that emissions were calculated based on published emission factors (from AP-42). The oxide of nitrogen (NOx) annual emission rate listed in the permit exceed that of a major source (25 tons per year in severe non-attainment area for NOx & VOC)[10]. Therefore, emissions were calculated based on the amount of natural gas fired, the facility's activity rate, and natural gas emission factors for external combustion sources published in the EPA AP-42 manual. **Table 2.14-11** shows the calculated Scheel Corporation emission rates from the natural gas-fired wax melting vats.

Table 2.14-11: Scheel Corporation PA114788
Calculated Natural Gas-Fired Wax Melting Vats Emission Rates

Natural Gas Fuel Input (CFH)	Activity Rate (hr/day)	Pollutant	Emission Factor (2)	1-Hour	24-Hour	Annual
			(lb/10^6 scf)	lb/hr	lb/day	lb/yr
382	6	NO_2 (1)	100	0.0382	N.A.	46
		$PM_{2.5}$	7.6	N.A.	0.0174	3.5
		SO_2	0.6	0.0002	N.A.	0.3

Note:
1. NOx emissions analyzed as 100 percent NO_2.
2. Emission factor from EPA AP42 manual Tables 1.4-1 and 1.4-2.

[10] New York State Department of Environmental Conservation, Air Pollution Control Permit Program: Is This Project Major or Minor, https://www.dec.ny.gov/permits/6244.html (Dec. 2020)

Air Dispersion Analysis CEQR Screening Analysis

The *2020 CEQR Technical Manual* industrial source screen was used to predict the pollutants concentrations. The *2020 CEQR Technical Manual* industrial source screen can be used to estimate maximum short-terms and annual average concentrations values at various distances (from 30 to 400 feet) from a single emission source. Using the *2020 CEQR Technical Manual* industrial source screen, the concentrations of pollutants emitted from each facility were calculated. Concentrations of pollutants emitted from multiple sources were added to predicted the cumulative concentration(s).

The *2020 CEQR Technical Manual* industrial source screen pre-tabulated concentrations corresponding to distances less than or equal to the actual distances (lot-to-lot distances) were utilized. The pre-tabulated concentrations are displayed in **Table 2.14-12**.

Table 2.14-12: The CEQR Technical Manual Table 17-3
Industrial Source Screen Pre-Tabulated Concentrations

Facility Name	Distance from Source (ft) Actual/ CEQR Distance	1-Hour ($\mu g/m^3$)	8-Hour ($\mu g/m^3$)	24-Hour ($\mu g/m^3$)	Annual ($\mu g/m^3$)
Scheel Corporation	220 / 200	3,335	2,153	1,174	167
Budd Woodworking Inc.	245 / 230	2,657	1,720	924	131
W.H. Christian & Sons, Inc.	204 / 200	3,335	2,153	1,174	167

The criteria pollutants concentrations were added to the background concentrations and total concentrations evaluated with the NAAQS design value. The $PM_{2.5}$ modeled concentrations (24-hour and annual) were also evaluated with the NYC de minimis design value for stationary sources. The criteria pollutants dispersions analysis results are presented in **Table 2.14-13**.

Table 2.14-13: Criteria Pollutants - Industrial Source Dispersion Analysis Results

Pollutant and Averaging Time	Increment (Modeled) Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Ambient Air Total Concentration ($\mu g/m^3$)	NAAQS ($\mu g/m^3$)	*de minimis* ($\mu g/m^3$)
24-hour PM_{10}	0.43	43	43	150	N.A.
24-hour $PM_{2.5}$	0.34	17.8	18.1	35	8.6
Annual $PM_{2.5}$	0.03	7.6	7.6	12	0.3
1-Hour NO_2 (1)	69.99	110.5	181	188	N.A.
Annual NO_2	1.1046	31.8	33	100	N.A.
1-Hour SO_2	0.39	14.9	15	196	N.A.
Annual SO_2	0.005	1.1	1	80	N.A.

Note:
1. 1-Hour NO2 evaluated with a Tier 2 approach.

As seen in **Table 2.14-13**, all the pollutants concentrations are within the NAAQS and the $PM_{2.5}$ concentrations do not exceed the de minimis design value.

The predicted concentrations of each chemical were evaluated with the NYSDEC SGC/AGC guidelines. The results of the noncriteria pollutants air dispersion analysis is displayed in **Table 2.14-14**.

Table 2.14-14: Noncriteria Pollutants Dispersion Analysis Results

Contaminant name	CAS No.	1-Hour ($\mu g/m^3$)	SGC ($\mu g/m^3$)	Annual ($\mu g/m^3$)	AGC ($\mu g/m^3$)
Methyl Isobutyl Ketone	108-10-1	23.4	31000.0	0.1	3000.0
Ethanol	64-17-5	20.1	---	0.1	45000.0
Butyl Alcohol, N-	71-36-3	50.2	---	0.2	1500.0
Xylene, M, O&P Mixt.	1330-20-7	194.2	22000.0	0.9	100.0
1-Methoxy 2-Propyl Acetate	108-65-6	6.7	55000.0	0.03	2000.0
Kemamide	110-30-5	0.02	---	0.4	---
Sasolwax H-1	8002-74-2	0.03	---	0.7	---
AC-8 Polyethylene & Hi wax 200P	9002-88-4	0.03	---	0.6	---
AC-325 Polyethylene	68441-17-8	0.01	---	0.2	---

As seen in **Table 2.14-14**, the pollutants concentrations are within the SGC/AGC guidelines.

Conclusion
No exceedance of air quality standards related to emissions from the industrial sources located in the study area were predicted in the analysis. Therefore, there is no reason to believe that emission related to industrial sources in the study area would result in any significant adverse air quality impacts.

Therefore, the air quality analyses addressed mobile sources, stationary HVAC systems, and air toxics. The results of the analyses are summarized below.

- Emissions from project-related vehicle trips would not cause significant air quality impacts to receptors at the local or neighborhood scale;
- Emissions from project-related heating, ventilation, and air conditioning systems (HVACs) would not cause significant air quality impacts to receptors at the local scale;
- No significant air quality impacts to the proposed project are anticipated from air toxics; and
- As no existing large or major sources are located within 1,000 feet of the Development Sites, emissions from existing stationary sources would not cause a significant air quality impact to the proposed project.

2.16 Noise

According to the *2020 CEQR Technical Manual,* a Noise Analysis may be required if the project would (1) generate any mobile or stationary sources of noise; and/or (2) be located in an area with existing high ambient noise levels. If the proposed project is located in areas with high ambient noise levels, which typically include those near highly-trafficked thoroughfares, airports, rail, or other loud activities, further noise analysis may be warranted to determine the attenuation measures that are appropriate for the proposed project.

Methodology

Noise is defined as any unwanted sound, and sound is defined as any air pressure variation that the human ear can detect. Human beings can detect a large range of sound pressures ranging from 20 to 20 million micropascals, but only those air-pressure variations occurring within a set of frequencies are experienced as sound. Air-pressure changes that occur between 20 and 20,000 times a second, stated as units of Hertz (Hz), are registered as sound.

In terms of hearing, humans are less sensitive to low frequencies (<250 Hz) than mid-frequencies (500-1,000 Hz). Humans are most sensitive to frequencies in the 1,000 to 5,000 Hz range. Since ambient noise contains many different frequencies all mixed together, measures of human response to noise assign more weight to frequencies in this range. This is known as the A-weighted sound level.

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed “dB(A).” The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB(A), and the threshold of pain is about 140 dB(A). **Table 2.16-1** shows the range of noise levels for a variety of indoor and outdoor noise levels.

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans do not perceive a 10 dB(A) increase as 10 times louder; they perceive it as twice as loud. The following are typical human perceptions of dB(A) relative to changes in noise level:

- *3 dB(A) change is the threshold of change detectable by the human ear;*
- *5 dB(A) change is readily noticeable; and*
- *10 dB(A) increase is perceived as a doubling of the noise level.*

The *2020 CEQR Technical Manual* recommends an analysis of two principal types of noise sources, mobile sources and stationary sources. Both types of noise sources are examined in the following sections.

Analysis

Mobile Sources

Mobile noise sources are those which move in relation to receptors. The mobile source screening analysis addresses potential noise impacts associated with vehicular traffic generated by the Proposed Actions.

Per the *2020 CEQR Technical Manual*, if existing passenger car equivalent (PCE) values are increased by 100 percent or more due to a Proposed Actions, a detailed analysis is generally performed. No significant adverse mobile source noise impacts due to vehicular traffic are anticipated because of the Proposed Actions as it does not increase existing passenger equivalent values by more than 100 percent.

As discussed in the *2020 CEQR Technical Manual*, if the proposed project is located in areas with high ambient noise levels, which typically include those near heavily-traveled thoroughfares, airports, exposed rail, or other loud activities. Accordingly, ambient noise levels were measured at the proposed development site to provide an assessment of the potential for ambient noise to have a significant adverse effect on future residents of the proposed development.

The *2020 CEQR Technical Manual* provides noise exposure guidelines in terms of Leq and L10 for the maximum amount of allowable noise under existing regulations. Leq is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a measurement period will have greater effect on the Leq than low noise levels. The Leq has an advantage over other descriptors because Leq values from different noise sources can be added and subtracted to determine cumulative noise levels. In comparison, L10 is the SPL exceeded 10 percent of the time. Similar descriptors include the L50, L01, and L90 values.

Table 2.16-1: SPL & Loudness of Typical Noises in Indoor & Outdoor Environments

Noise Level dB(A)	**Subjective Impression**	**Typical Sources**		**Relative Loudness** (Human Response)
		Outdoor	**Indoor**	
120-130	Uncomfortably Loud	Air raid siren at 50 feet (threshold of pain)	Oxygen torch	32 times as loud
110-120	Uncomfortably Loud	Turbo-fan aircraft at take-off power at 200 feet	Riveting machine Rock band	16 times as loud
100-110	Uncomfortably Loud	Jackhammer at 3 feet		8 times as loud
90-100	Very Loud	Gas lawn mower at 3 feet Subway train at 30 feet Train whistle at crossing Wood chipper shredding trees Chain saw cutting trees at 10 feet	Newspaper press	4 times as loud
80-90	Very Loud	Passing freight train at 30 feet Steamroller at 30 feet Leaf blower at 5 feet Power lawn mower at 5 feet	Food blender Milling machine Garbage disposal Crowd noise at sports event	2 times as loud
70-80	Moderately Loud	NJ Turnpike at 50 feet Truck idling at 30 feet Traffic in downtown urban area	Loud stereo Vacuum cleaner Food blender	Reference loudness (70 dB(A))
60-70	Moderately Loud	Residential air conditioner at 100 feet	Cash register Dishwasher	2 times as loud

		Gas lawn mower at 100 feet Waves breaking on beach at 65 feet	Theater lobby Normal speech at 3 feet	
50-60	Quiet	Large transformers at 100 feet Traffic in suburban area	Living room with TV on Classroom Business office Dehumidifier Normal speech at 10 feet	1/4 as loud
40-50	Quiet	Bird calls Trees rustling Crickets Water flowing in brook	Folding clothes Using computer	1/8 as loud
30-40	Very quiet		Walking on carpet Clock ticking in adjacent room	1/16 as loud
20-30	Very quiet		Bedroom at night	1/32 as loud
10-20	Extremely quiet		Broadcast and recording studio	
0-10	Threshold of Hearing			

Sources: Noise Assessment Guidelines Technical Background, by Theodore J. Schultz, Bolt Beranek and Newman, Inc., prepared for the US Department of Housing and Urban Development, Office of Research and Technology, Washington, D.C., undated; Sandstone Environmental Associates, Inc.; Highway Noise Fundamentals, prepared by the Federal Highway Administration, US Department of Transportation, September 1980; Handbook of Environmental Acoustics, by James P. Cowan, Van Nostrand Reinhold, 1994.

Assessment Basis

Though the proposed uses of the proposed development are not significant stationary noise generation sources, the development would generate or reroute existing vehicular traffic. Though as per the analysis in *2.13: Transportation* and with the relatively moderate to high numbers of vehicles in the immediate area, the Proposed Actions would not result in a doubling of noise PCEs (which would be necessary to cause a 3-dBA increase in noise levels) and, therefore, would not cause significantly adverse mobile source noise impact at existing receptors. As proposed project is located near heavily-traveled thoroughfares, ambient noise levels were measured at Projected Development Site 1 to provide an assessment of the potential for ambient noise to have a significant adverse effect on future residents of the proposed development.

Affected Area

The Proposed Actions would allow for redevelopment of Projected Development Site 1 for a mixed residential and commercial use building. Projected Development Site 1 is a corner-lot currently used by Avram Rusu Studio, a furniture maker, GP81, a rock-climbing gym, and 2 residential dwelling units. It has western frontage on West Street, southern frontage on Quay Street, on a block bounded by Calyer Street to the north and by Franklin Street to the east. Calyer Street is an east to west one-way road with curbside parking. Franklin Street is a north-south two-way road with one moving lane in each direction and curbside parking. Quay Street is an east to west one-way road with a single moving lane of traffic and curbside parking. West Street is a south to north one-way road with one moving lane of traffic and curbside parking.

Vehicular traffic is the predominant sources of noise in the Affected Area, and therefore the proposed development warrants an assessment of the potential for adverse effects on project occupants from ambient noise. This noise assessment is limited to an assessment of ambient

noise that could adversely affect occupants of the development

Measurement Location and Equipment

Because the predominant noise source in the area of the proposed project is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods, 07:30 am - 09:00 am, 12:00 pm - 1:30 pm, and 4:30 pm - 6:00 pm. Noise monitoring was conducted using a Type 1 Casella CEL-63X sound meter, with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other surfaces. The monitor was calibrated prior to and following each monitoring session. Heavy vehicular traffic during peak hours constitutes a worst-case condition for noise at Projected Development Site 1.

Noise monitoring was performed to document ambient noise levels at Project Development Site 1. Measurements for the project noise at two different locations were performed at the same monitoring date. The field work occurred at locations 1 and 2 on October 10th, 2019. The weather was dry and wind speed was low on the monitoring day. There were no significant impacts to noise from vehicular traffic observed. Idling moving trucks and/or buses on Quay Street and light construction activity across West Street were a significant source of ambient noise. Traffic volumes and vehicle classification were documented during the noise monitoring. The sound meter was calibrated before and after each monitoring session.

The monitor readings were conducted three times on monitoring day at the following two locations:

- West Street adjacent to Projected Development Site 1 (“*Location 1”*);
- Quay Street adjacent to Projected Development Site 1 (*“Location 2”*).

Figure 2.16-1 maps the noise monitoring locations above and **Figures 2.16-2** and **2.16-3** show pictures of the monitoring locations.

Figure 2.16-1: Noise Monitoring Locations



Figure 2.16-2: West Street (noise monitoring location #1); Direction facing west



Figure 2.16-3: Quay Street (noise monitoring location #2); Direction facing South



Existing Conditions

Based on the noise measurements taken at Projected Development Site 1, the predominant sources of noise in the area are idling vehicular traffic and current light construction adjacent to Projected Development Site 1. The volume of vehicular traffic, and its corresponding level of noise, is moderate to heavy on both West and Quay Streets. **Tables 2.16-2** through **2.16-4** contain the results of the noise measurements and traffic volume counts taken at the monitoring locations.

Table 2.16-2: Noise Levels at Monitoring Location 1 (20-Minute Periods)

	Thursday, October 10, 2019		
	8:22 – 8:44 am	12:31 – 12:52 pm	4:52 – 5:12 pm
Lmax (dB)	83.9 dB	88.8 dB	78.6 dB
L10 (dB)	67.5 dB	67.5 dB	63.5 dB
Leq (dB)	66.4 dB	66.5 dB	60.1 dB
L50 (dB)	60.5 dB	64.5 dB	54.0 dB
L90 (dB)	58.5 dB	60.5 dB	51.0 dB
Lmin (dB)	56.9 dB	58.9 dB	48.7 dB

Table 2.16-3: Noise Levels at Monitoring Location 2 (20-Minute Periods)

	Thursday, October 10, 2019		
	7:59 – 8:19 am	12:09 – 12:29 pm	4:29 – 4:50 pm
Lmax (dB)	85.9 dB	81.9 dB	96.4 dB
L10 (dB)	66.5 dB	69.0 dB	71.0 dB
Leq (dB)	65.8 dB	66.9 dB	69.9 dB
L50 (dB)	59.0 dB	65.5 dB	58.5 dB
L90 (dB)	56.5 dB	58.0 dB	54.0 dB
Lmin (dB)	55.1 dB	55.8 dB	51.1 dB

Table 2.16-4: Traffic Volumes and Vehicle Classifications on 10/10/19

10/10/2019	**AM**		**MD**		**PM**	
Monitoring Location	Loc. 1 (20-min)	Loc. 2 (20-min)	Loc. 1 (20-min)	Loc. 2 (20-min)	Loc. 1 (20-min)	Loc. 2 (20-min)
Car /Taxi	3	5	3	5	9	10
Van/ Light Truck/ SUV	6	7	9	7	13	12
Medium Truck	5	2	6	3	0	1
Heavy Truck	0	0	0	0	0	1
Bus	0	0	0	0	0	0
Train	0	0	0	0	0	0

Conclusion

The *2020 CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a proposed residential and commercial mixed-use development, an L10 of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. The highest recorded L_{10} at Location 2 was **71.0** dB during the afternoon 20-minute period.

As the Proposed Actions would rezone the Affected Area to M1-4/R7D (MX-8), ZR 123-32 requires that minimum of 35 dBA of attenuation is provided for all new dwelling units. Therefore, as proposed commercial retail use is not considered a noise-sensitive receptor, there is no need to place noise E-Designation as ZR 123-32 would provide 35 dBA of attenuation requirement to all new dwelling units to ensure no significant adverse noise impact.

2.17 Public Health

According to the *2020 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.

Pursuant to *2020 CEQR Technical Manual* methodology, for most proposed projects, a public health analysis is not necessary. Where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, no public health analysis is warranted. If, however, an unmitigated significant adverse impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, the lead agency may determine that a public health assessment is warranted for that specific technical area.

Conclusion

Based on the hazardous materials, air quality, and noise analyses presented above in this report, the Proposed Actions does not have the potential for significant unmitigated impacts to any of the constituent elements of public health. Therefore, no further analysis of public health is warranted.

2.18 Neighborhood Character

According to the *2020 CEQR Technical Manual*, in a neighborhood character assessment under CEQR, one considers how elements of the environment combine to create the context and feeling of a neighborhood and how a project may affect that context and feeling. An assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in any technical area presented below, or when the project may have moderate effects on several of the elements that define a neighborhood's character.

A Neighborhood Character assessment is appropriate when a project has the potential to result in any significant impacts in the following areas:

Land Use, Zoning, and Public Policy;

Socioeconomic Conditions;

Open Space;

Historic and Cultural Resources;

Urban Design and Visual Resources;

Shadows;

Transportation; or

Noise.

Conclusion

Based on the analyses conducted previously, the Proposed Actions would not result in significant impacts to any of the constituent elements of neighborhood character. Therefore, no further analysis is warranted and no impacts related to neighborhood character are anticipated.

Appendix A: Agency Correspondence

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 79 QUAY STREET
Date Received: 3/5/2020

Properties with no Architectural or Archaeological significance:

1) 79 QUAY STREET, BBL: 3025890001
2) 93 QUAY STREET, BBL: 3025890013
3) 85 QUAY STREET, BBL: 3025890023



3/12/2020

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 34863_FSO_DNP_03122020.docx

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
Deputy Commissioner of Sustainability

59-17 Junction Blvd.
Flushing, NY 11373

Tel. (718) 595-4398
Fax (718) 595-4422
alicata@dep.nyc.gov

June 16, 2020

Laura Kenny
Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 79 Quay Street Rezoning
Block 2589, Lots 1, p/o 23, and p/o 13
CEQR # 77DCP721K

Dear Ms. Kenny:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the April 2020 Environmental Assessment Statement (EAS) and the November 2019 Phase I Environmental Site Assessment (Phase I) prepared by Equity Environmental Engineering on behalf of Quay Plaza LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment and a zoning text amendment from the New York City Department of City Planning (DCP) to facilitate the development of Block 2589, Lot 1; 79 Quay Street (Projected Development Site) with a 119,005 gross square feet (gsf), 9-story, mixed-use building. The zoning map amendment would rezone Block 2589, Lots 1, p/o 23, and p/o 13 from M1-2/R6A (MX-8) zoning district to an M1-4/R7D (MX) zoning district. The zoning text amendment would affect Zoning Resolution section 123-63 by adding R7D to designated residence districts in MX-8 and Appendix F by adding Inclusionary Housing Designated Areas and Mandatory Inclusionary Housing Areas to Brooklyn Community District 1. It should be noted that Block 2589, Lot 1 is currently developed with a 3-story, 230,500 gsf warehouse and is still in use. It is not anticipated that redevelopment would occur on Block 2589, Lots 13 and 23 as a result of the proposed actions.

Block 2589, Lot 1

The November 2019 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including store fronts, machine shops, a wagon trimmings facility, residential dwellings, grain storage, lumber storage, an oil company, a woodworking shop, copper and iron construction, a smelting shop, a chemical manufacturer, a roofing material shop, a magnesium casting facility, auto storage, a welding facility, metal finishing facilities, a wax resin storage facility, a filling station, a paper storage facility, machine and steam boiler works, iron works, blower and pipe works, etc. Regulatory databases identified 28 spills

within 1/8 mile; 15 underground storage tank sites and 13 aboveground storage tank sites within 1/4 mile; 22 leaking storage tank sites, 20 voluntary cleanup program sites, and 13 brownfield sites within 1/2 mile; and 3 manufactured gas plant sites within 1 mile of the project site.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

Projected Development Site: Block 2589, Lot 1 (Site under the control or ownership of the applicant)

- Based on prior on-site and/or surrounding area land uses which could result in environmental contamination and testing is not physically possible during the CEQR process, DEP concurs with the EAS recommendation that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution for the subject property. The (E) Designation will ensure that testing and mitigation will be provided as necessary before any future development and/or soil disturbance. Further hazardous materials assessments should be coordinated through the Mayor's Office of Environmental Remediation.

Future correspondence and submittals related to this project should include the following CEQR # **77DCP721K**. If you have any questions, you may contact Mohammad Khaja-Moinuddin at (718) 595-4445.

Sincerely,

Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
M. Khaja-Moinuddin
T. Estesen
R. Lucas
M. Wimbish
O. Abinader – DCP
M. Bertini – OER

Appendix B: Illustrative Architectural Drawings

swa architecture
11 PARK PLACE SUITE 816
NEW YORK , NY 10007
PHONE: 212-932-7566

190 EAST MAIN STREET
HUNTINGTON, NY 11743
PHONE: 631-424-8480 FAX: 631-547-4193

IT IS A VIOLATION OF N.Y. STATE LAWS
FOR AY PERSON, UNLESS DIRECTED BY A
REGISTERED ARCHITECT OR PROF. ENGINEER
TO ALTER ANY ITEM IN ANY WAY.

79 QUAY STREET, BROOKLYN NY 11222
M1-4 / R7D



VIEW FROM QUAY STREET LOOKING NORTH

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

RENDERING

M1-4 / R7D

DRAWING NO.

01

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ZONING CALCULATIONS (M1-4 / R7D)

LOCATION:	79 QUAY ST				
ZONE:	M1-4 / R7D (MANDATORY INCLUSIONARY HOUSING)				
LOT AREA:	16,500 SQ. FT.				
ITEM			PERMITTED	PROPOSED	AS PER ZONING SECTION
F.A.R. (RESIDENTIAL)			5.6	4.94	ZR23-154
FLOOR AREA:			92,400 SQ.FT.	**81,573 SQ.FT.**	
F.A.R. (MANUFACTURING/COMMERCIAL)			2.0	0.64	ZR43-12
FLOOR AREA:			33,000 SQ.FT.	10,584 SQ.FT.	
F.A.R. (COMBINED)			5.6	5.58	
COMBINED FLOOR AREA:			92,400 SQ.FT.	**92,157 SQ.FT.**	
FLOOR AREA BREAKDOWN:	1ST FLR	RESIDENTIAL		1,869 SQ.FT.	
		COMMERCIAL		10,584 SQ.FT.	
		PARKING		***1,068 SQ.FT.	
	2ND FLR	RESIDENTIAL		11,932 SQ.FT.	
	3RD FLR			11,932 SQ.FT.	
	4TH FLR			11,932 SQ.FT.	
	5TH FLR			11,932 SQ.FT.	
	6TH FLR			11,932 SQ.FT.	
	7TH FLR			7,691 SQ.FT.	
	8TH FLR			7,715 SQ.FT.	
	9TH FLR			4,638 SQ.FT.	
LOT COVERAGE:					ZR23-153
*CORNER LOT			*100%	83%	
INTERIOR LOT			65%	59%	
DENSITY REGULATIONS: (FACTOR = 680)			120 DWELL UNITS	86 DWELL UNITS	ZR23-22
YARD REGULATIONS:					ZR23-40
FRONT YARD:(FRONT WALL)			NONE REQUIRED	NONE	ZR23-661
SIDE YARD:			NONE REQUIRED	NONE	ZR23-462(c)
REAR YARD:			30'-0" (BEYOND 100' OF CORNER)	41'-5"	ZR23-47
HEIGHT REGULATIONS:					ZR23-664(3)
MAXIMUM HEIGHT:			115'-0"	****101'-1"	
MAXIMUM BASE HEIGHT:			95'-0"	67'-1"	
MINIMUM BASE HEIGHT:			60'-0"	67'-1"	
PARKING:					
RESIDENTIAL			30 SPACES	**32 SPACES	ZR25-23, **ZR25-251
COMMERCIAL			NONE REQUIRED	0	ZR44-21
BICYCLE PARKING:			43 SPACES	43 SPACES	ZR25-811

NOTES:

* (ZR23-153) THE MAXIMUM #RESIDENTIAL LOT COVERAGE# FOR A #CORNER LOT# SHALL BE 100 PERCENT.
(ZR12-10) THE PORTION OF SUCH #ZONING LOT# SUBJECT TO THE REGULATIONS FOR #CORNER LOTS# IS THAT PORTION BOUNDED BY THE INTERSECTING #STREET LINE# AND LINES PARALLEL TO AND 100 FEET FROM EACH INTERSECTING #STREET LINE#.

**(ZR25-251) TRANSIT ZONE: (30% OF UNITS SHALL BE LOW INCOME) 26 UNITS DO NOT REQUIRE PARKING. 60 UNITS REQUIRE 50% PARKING (30 SPACES)

***(ZR10-12) EXCLUDED FROM THE DEFINITION OF FLOOR AREA (NOT TO BE INCLUDED IN THE ZONING FLOOR AREA CALCULATIONS)

****(ZR64-335) WHERE #FLOOD-RESISTANT CONSTRUCTION ELEVATION# IS BETWEEN FIVE AND 10 FEET ABOVE #CURB LEVEL#, #BUILDING# HEIGHT MAY BE MEASURED FROM A REFERENCE PLANE 10 FEET ABOVE #CURB LEVEL#

*****(ZR23-621 (c)(1) THE AGGREGATE WIDTH OF ALL DORMERS AT THE MAXIMUM BASE HEIGHT DOES NOT EXCEED 60 PERCENT OF THE WIDTH OF THE STREET WALL OF THE HIGHEST STORY ENTIRELY BELOW THE MAXIMUM BASE HEIGHT. FOR EACH FOOT ABOVE THE MAXIMUM BASE HEIGHT, THE AGGREGATE WIDTH OF ALL DORMERS SHALL BE DECREASED BY ONE PERCENT OF THE STREET WALL WIDTH OF THE HIGHEST STORY ENTIRELY BELOW THE MAXIMUM BASE HEIGHT.

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GROSS FLOOR AREA BREAKDOWN:		
CELLAR	***PARKING	16,525 SQ.FT.
1ST FLR	RESIDENTIAL (LOBBY)	1,927 SQ.FT.
	COMMERCIAL	10,911 SQ.FT.
	***PARKING	1,069 SQ.FT.
	***MECHANICAL	2,618 SQ.FT.
2ND FLR	RESIDENTIAL	12,313 SQ.FT.
3RD FLR		12,313 SQ.FT.
4TH FLR		12,313 SQ.FT.
5TH FLR		12,313 SQ.FT.
6TH FLR		12,313 SQ.FT.
7TH FLR		8,988 SQ.FT.
8TH FLR		9,046 SQ.FT.
9TH FLR		5,864 SQ.FT.
ROOF	***BULKHEAD	492 SQ.FT.
TOTAL GROSS FLOOR AREA:		119,005 SQ.FT.

QH DEDUCTIONS BREAKDOWN:		
	CORRIDOR	REFUSE ROOM
CELLAR		
1ST FLR		
2ND FLR		12 SQ.FT.
3RD FLR		12 SQ.FT.
4TH FLR		12 SQ.FT.
5TH FLR		12 SQ.FT.
6TH FLR		12 SQ.FT.
7TH FLR	1,015 SQ.FT.	12 SQ.FT.
8TH FLR	1,048 SQ.FT.	12 SQ.FT.
9TH FLR	1,038 SQ.FT.	12 SQ.FT.
TOTAL :	3,101 SQ.FT.	96 SQ.FT.
TOTAL QH DEDUCTIONS :		3,197 SQ.FT.

MECHANICAL DEDUCTIONS BREAKDOWN:		
CELLAR		
1ST FLR	3%	385 SQ.FT.
2ND FLR	3%	369 SQ.FT.
3RD FLR	3%	369 SQ.FT.
4TH FLR	3%	369 SQ.FT.
5TH FLR	3%	369 SQ.FT.
6TH FLR	3%	369 SQ.FT.
7TH FLR	3%	269 SQ.FT.
8TH FLR	3%	271 SQ.FT.
9TH FLR	3%	178 SQ.FT.
TOTAL MECH DEDUCTIONS:		2,948 SQ.FT.

ZONING FLOOR AREA CALCULATIONS

GROSS FLOOR AREA =	119,005 SQFT
NON-ZONING FLOOR AREA :	
CELLAR =	-16,525 SQFT
BULKHEADS =	- 492 SQFT
PARKING =	- 1,068 SQFT
MECHANICAL ROOMS =	- 2,618 SQFT
DEDUCTIONS:	
MECHANICAL DEDUCTIONS =	- 2,948 SQFT
QH DEDUCTIONS =	- 3,197 SQFT
NET (ZONING) FLOOR AREA =	**92,156 SQFT**

APT MIX CHART				
FLOOR	STU	1 BD	2 BD	3 BD
1ST				
2ND	2	5	4	2
3RD	2	5	4	2
4TH	2	5	4	2
5TH	2	5	4	2
6TH	2	5	4	2
7TH	1	2	4	1
8TH	1	2	4	1
9TH	1	2	1	1
ROOF				
TOTAL	13	31	29	13
TOTAL	86 APT			

swa architecture
11 PARK PLACE SUITE 816
NEW YORK , NY 10007
PHONE: 212-932-7566

190 EAST MAIN STREET
HUNTINGTON, NY 11743
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PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

ZONING CHART

M1-4 / R7D

DRAWING NO.

02

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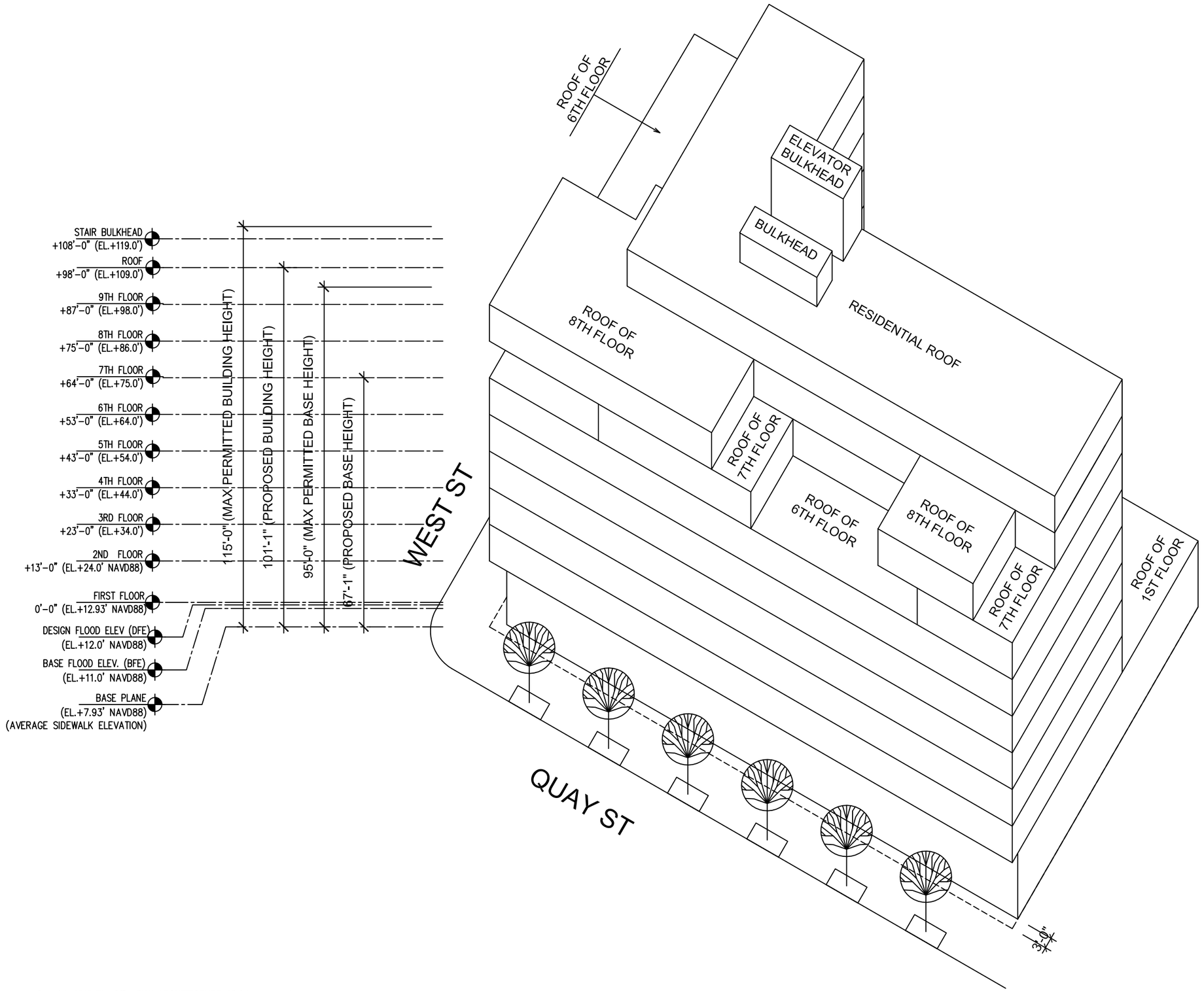

DATE: 2021-06-17

PROJECT

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BROOKLYN, NY

DRAWING TITLE

ZONING
MASSING
DIAGRAM
M1-4 / R7D

DRAWING NO.

03

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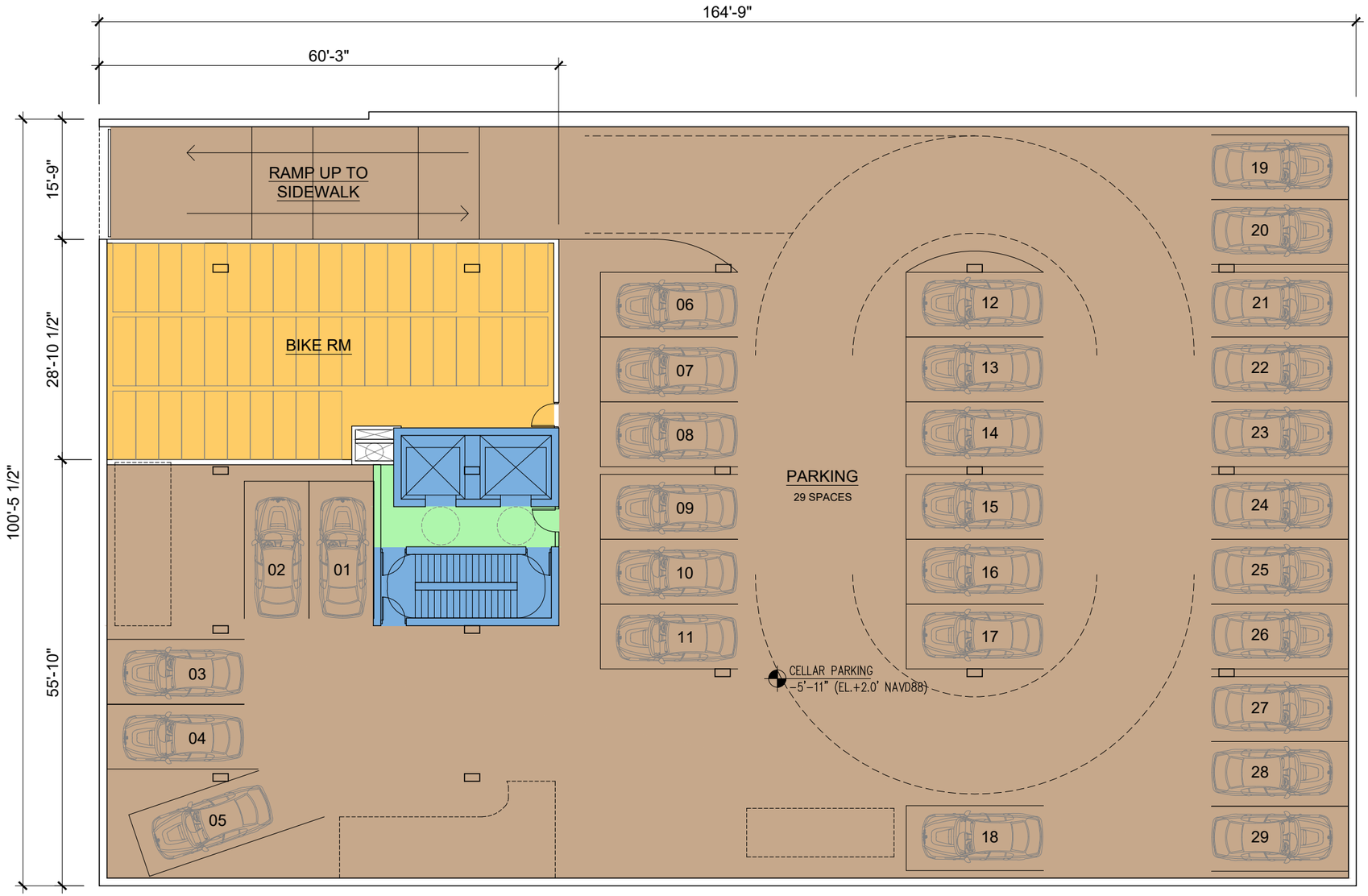

1/04 CELLAR FLOOR PLAN

SCALE; 1/16"=1"-0"

FLOOD PROOFING NOTES:
- WALLS SHALL CONSTRUCTED WITH PERMEABLE MEMBRANE, REINFORCED AS NEEDED AND STRENGTHENED TO RESIST FLOOD LOADS.
- ALL EQUIPMENT SHALL BE LOCATED 18 INCHES ABOVE FIRST FLOOR LEVEL (+12.93') ON CONCRETE PADS.
- FLOOR DRAINS SHALL BE LOCATED THROUGHOUT CELLAR WITH SUMP PIT.

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- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

CELLAR
FLOOR PLAN

M1-4 / R7D

DRAWING NO.

04



1/05 GROUND FLOOR PLAN

SCALE; 1/16"=1'-0"

FLOOD ELEVATION NOTES:

- BASE FLOOD ELEVATION = EL: +11' NAVD88
- DESIGN FLOOD ELEVATION = EL: +12' NAVD88
- FIRST FLOOR = EL: +12.93' NAVD88
- SIDEWALK BASE PLANE: (7.92' + 7.59' + 8.29') = 23.8' (23.8' / 3) = +7.93' NAVD88

FLOOD PROOFING NOTES:

- FIRST FLOOR RESIDENTIAL ENTRANCE BELOW DESIGN FLOOD ELEVATION (DFE) SHALL BE WET FLOOD PROOFED WITH PERMEABLE MEMBRANE, REINFORCED AS NEEDED AND STRENGTHENED TO RESIST FLOOD LOADS.
- FIRST FLOOR COMMERCIAL ENTRANCES BELOW DFE SHALL BE DRY FLOOD PROOFED
- ALL MECHANICAL EQUIPMENT SHALL BE LOCATED 18 INCHES ABOVE FIRST FLOOR LEVEL (+12.93') ON CONCRETE PADS.

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- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

GROUND FLOOR PLAN

M1-4 / R7D

DRAWING NO.

05

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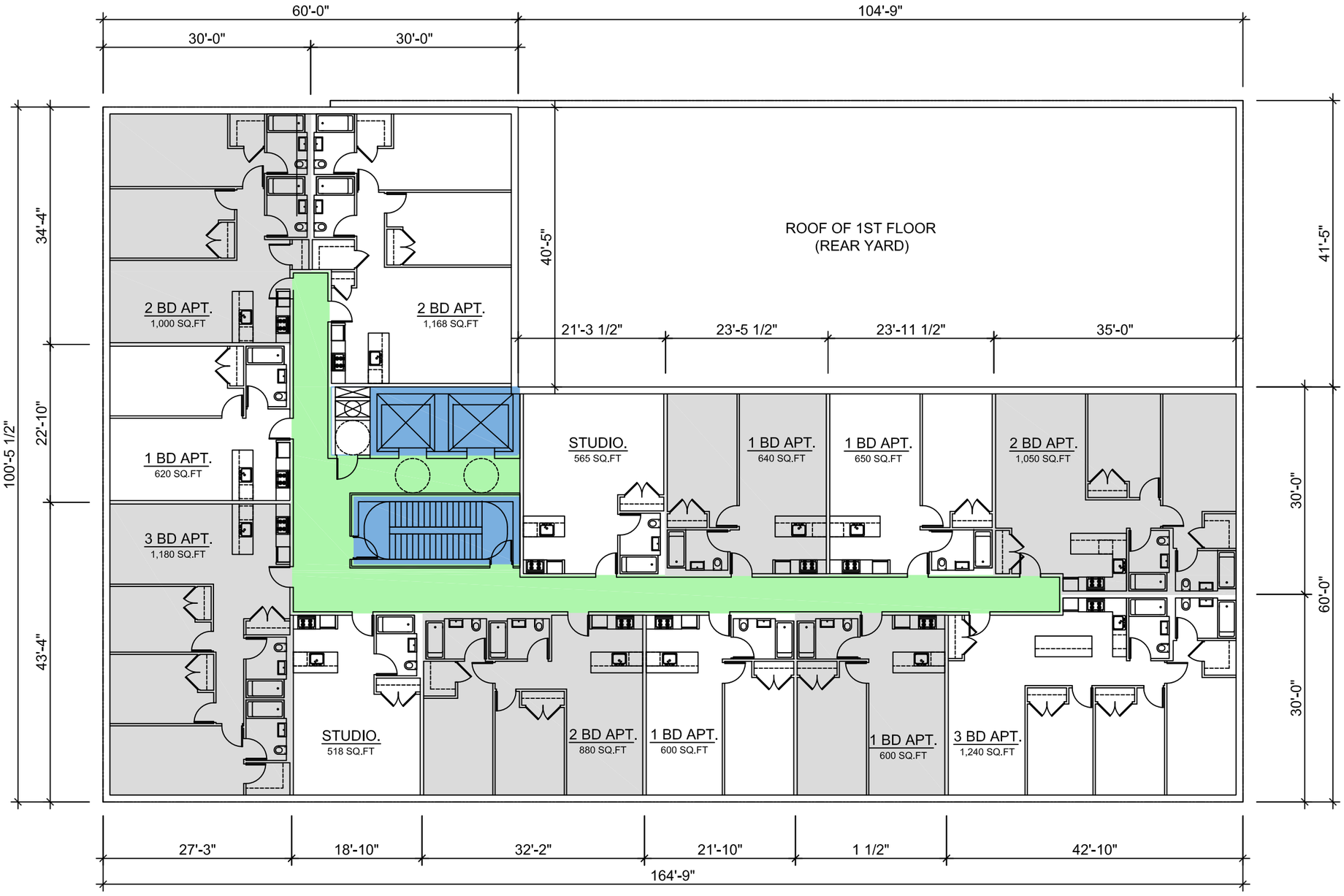

1/06 2ND-6TH FLOOR PLAN
SCALE; 1/16"=1'-0"

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- CORRIDOR
- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

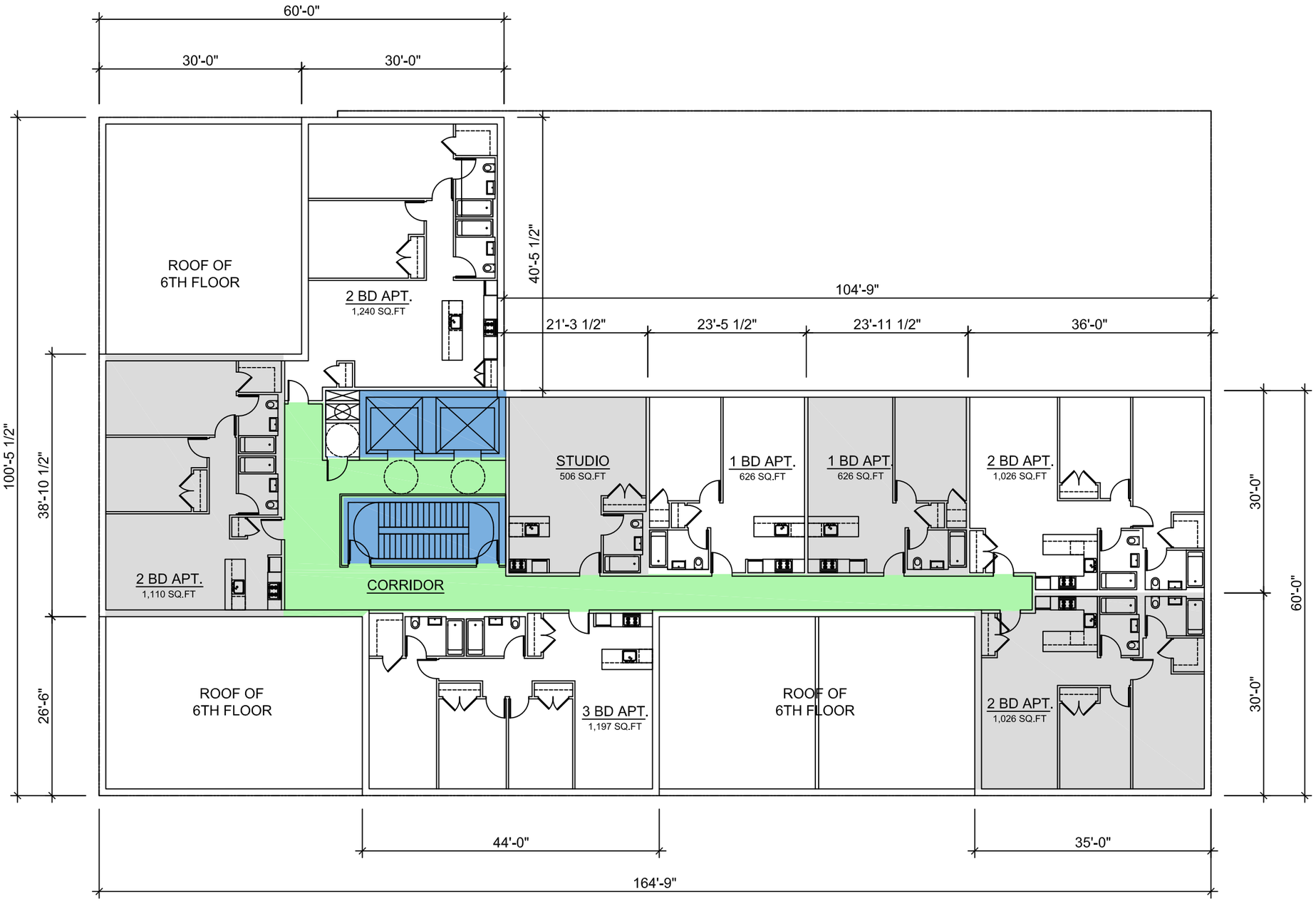
DRAWING TITLE

2ND-6TH
FLOOR PLAN

M1-4 / R7D

DRAWING NO.

06



1/07 7TH FLOOR PLAN
SCALE; 1/16"=1'-0"

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- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

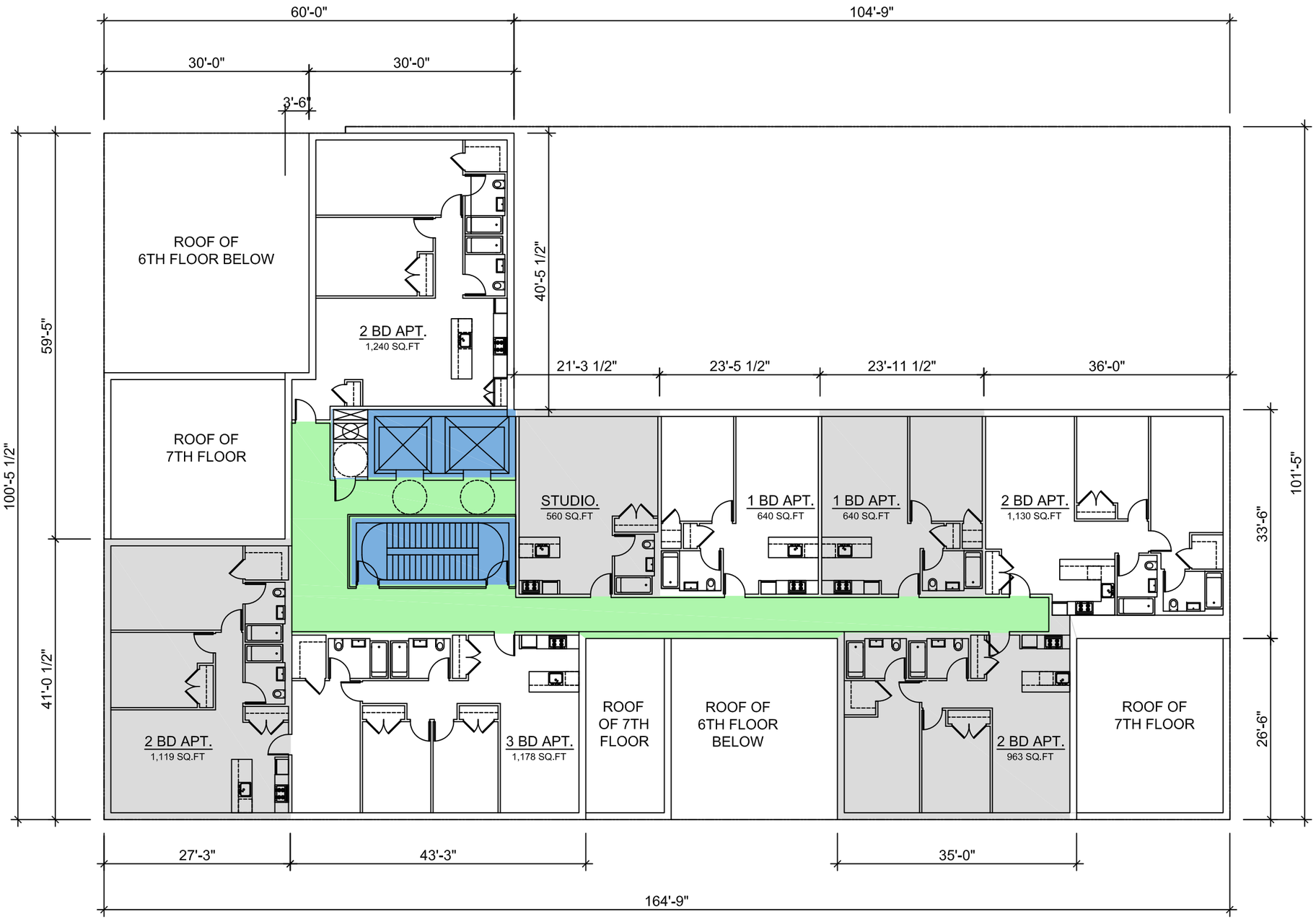
DRAWING TITLE

7TH
FLOOR PLAN

M1-4 / R7D

DRAWING NO.

07



1/08 8TH FLOOR PLAN

SCALE; 1/16"=1'-0"

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- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

8TH
FLOOR PLAN

M1-4 / R7D

DRAWING NO.

08

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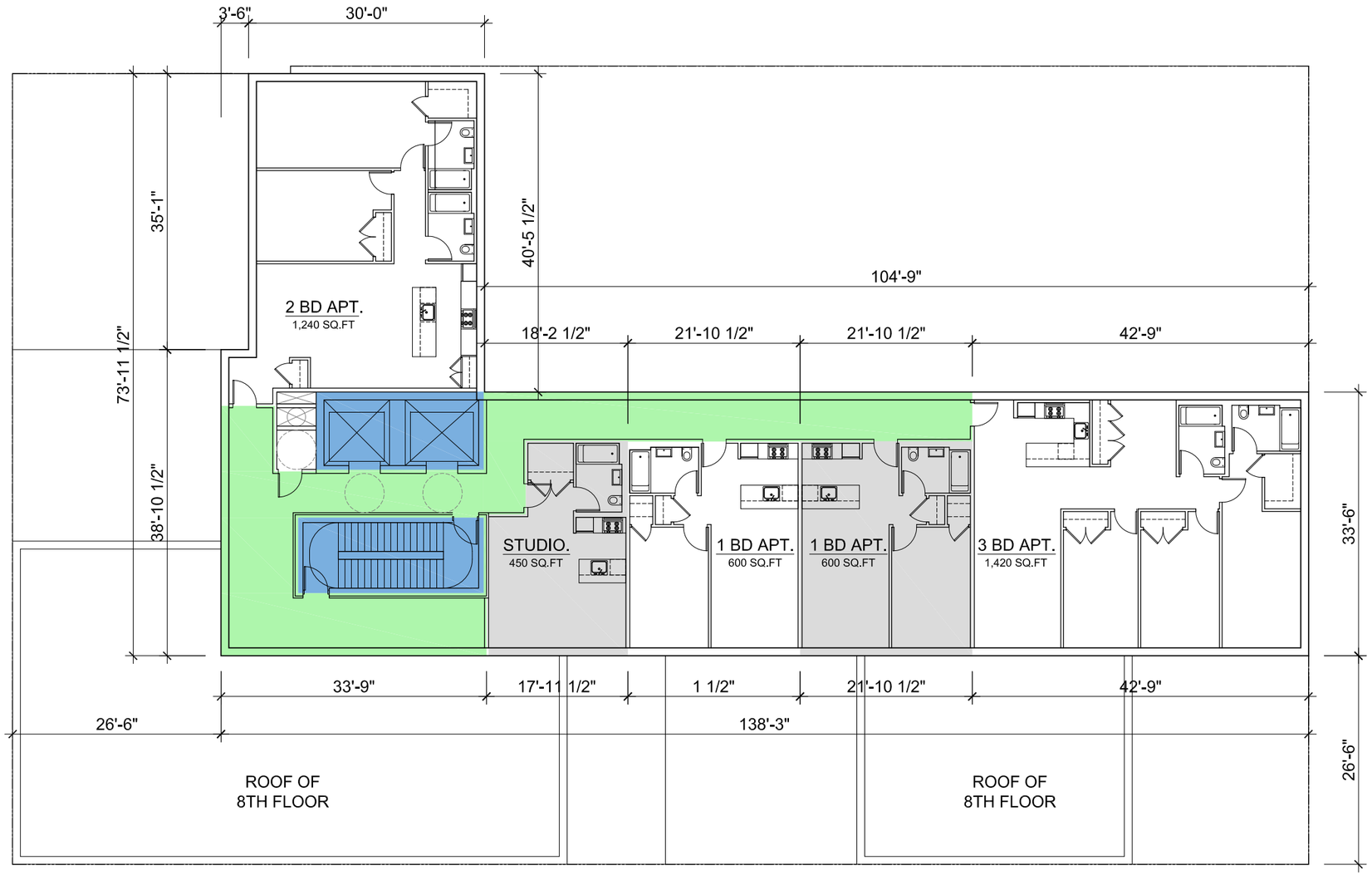

CORRIDOR

VERTICAL CIRCULATION (BUILDING CORE)

RESIDENTIAL

PARKING

COMMERCIAL

BICYCLE STORAGE

MECHANICAL ROOMS

1/09 9TH FLOOR PLAN
SCALE; 1/16"=1'-0"

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PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

9TH
FLOOR PLAN

M1-4 / R7D

DRAWING NO.

09

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1 SOUTH ELEVATION
SCALE: 1/16"=1'-0"

AVERAGE SIDEWALK ELEVATION:
7.92' + 7.59' + 8.29' = 23.8'
23.8' / 3 = 7.93' NAVD88

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PROJECT

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DRAWING TITLE

SOUTH
ELEVATION

M1-4 / R7D

DRAWING NO.

10

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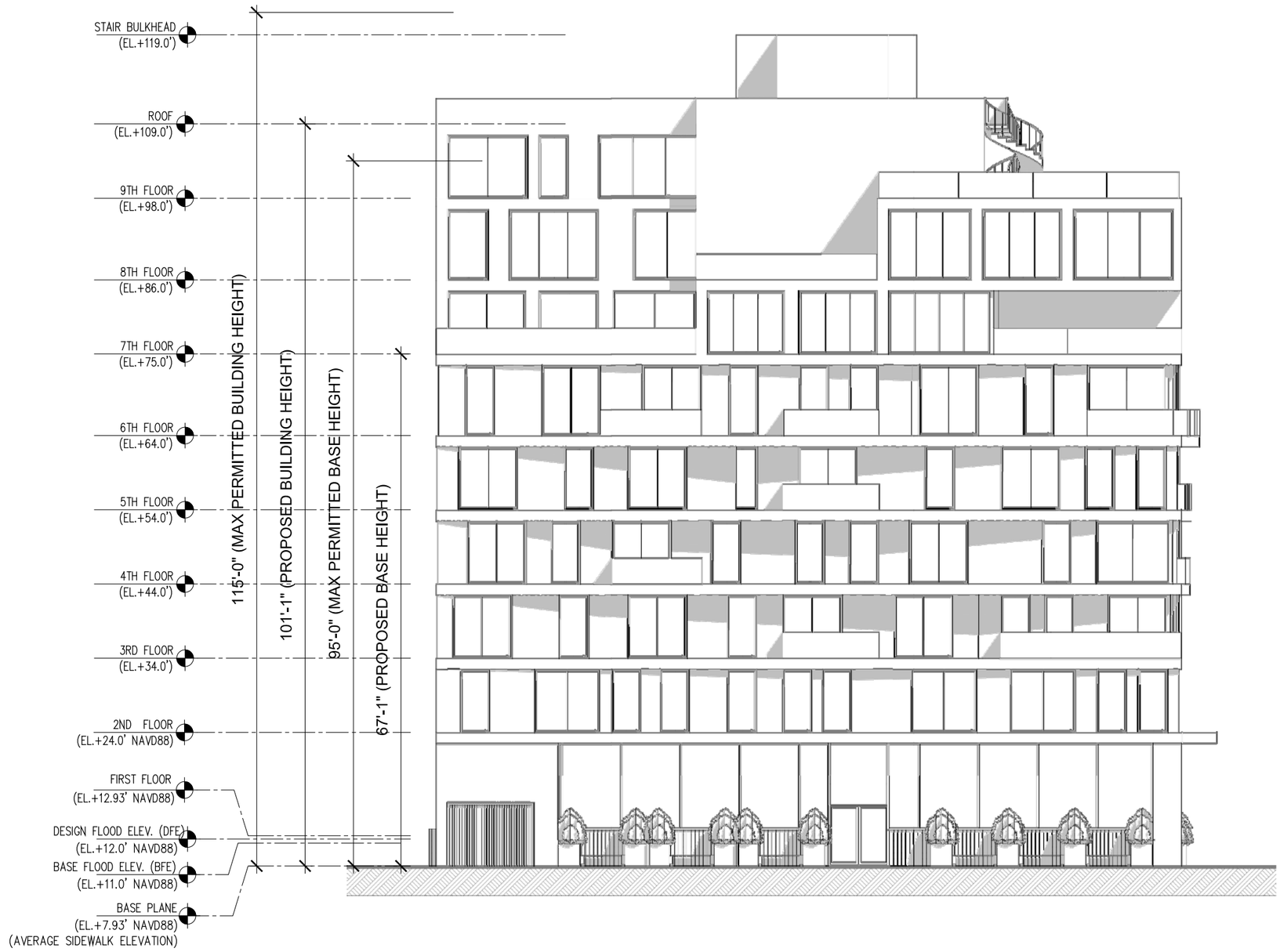

1 WEST ELEVATION
SCALE: 1/16"=1'-0"

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PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

WEST
ELEVATION

M1-4 / R7D

DRAWING NO.

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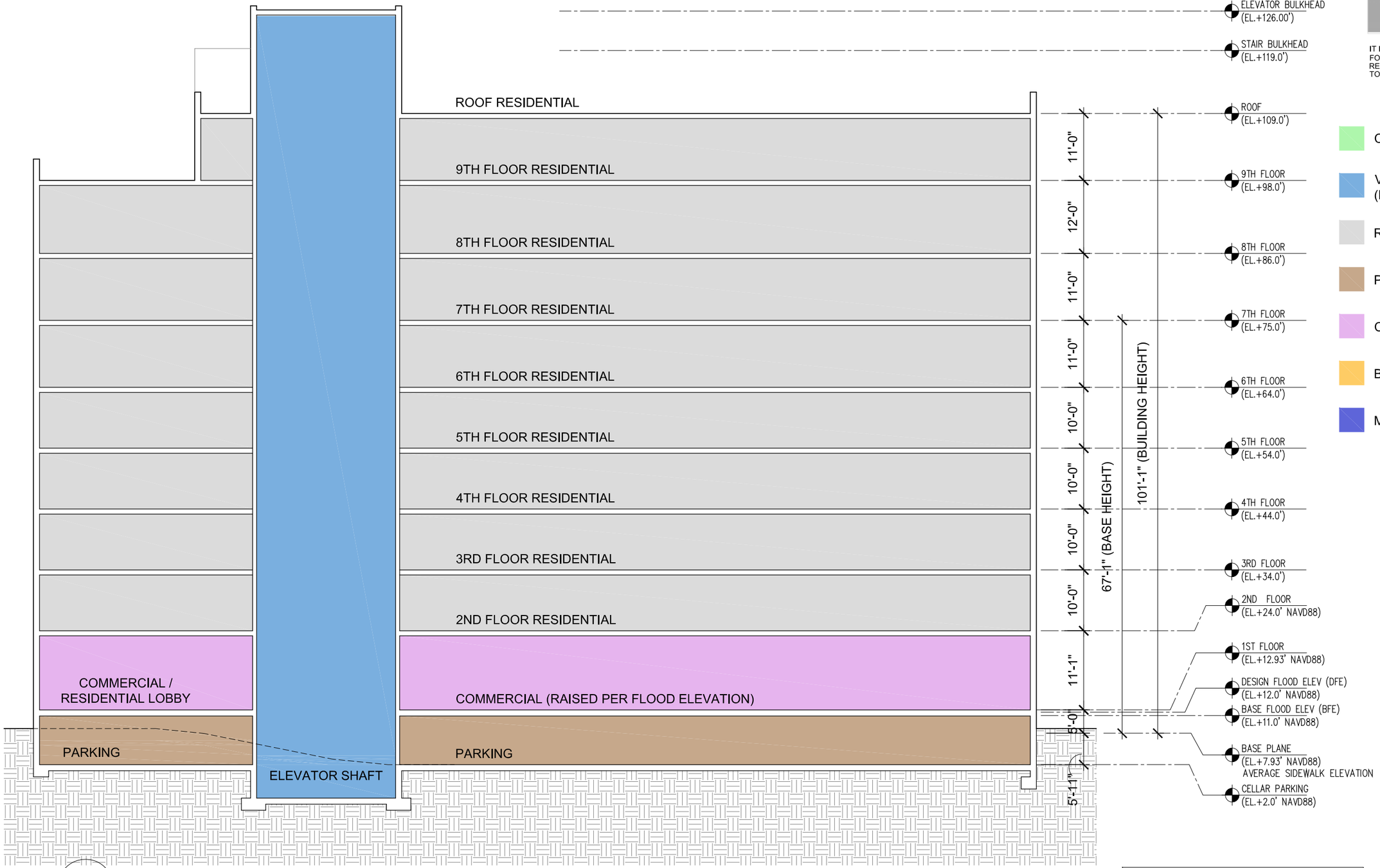

1 SECTION
SCALE: 1/16"=1'-0"

CORRIDOR
VERTICAL CIRCULATION (BUILDING CORE)
RESIDENTIAL
PARKING
COMMERCIAL
BICYCLE STORAGE
MECHANICAL ROOMS

AVERAGE SIDEWALK ELEVATION:
7.92' + 7.59' + 8.29' = 23.8'
23.8' / 3 = EL: +7.93' NAVD88

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

SECTION

M1-4 / R7D

DRAWING NO.

12

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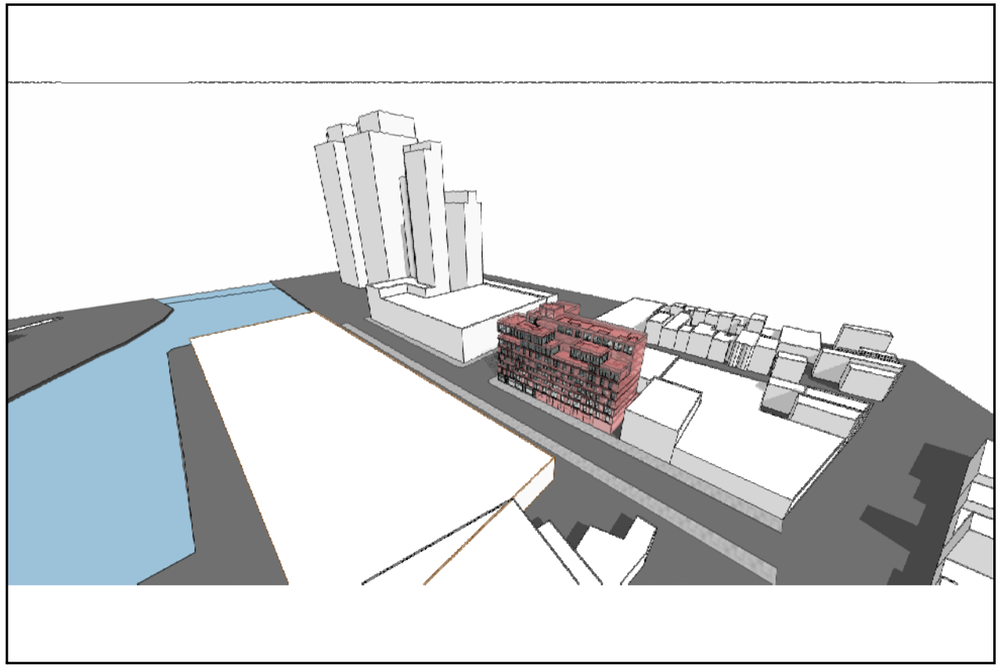
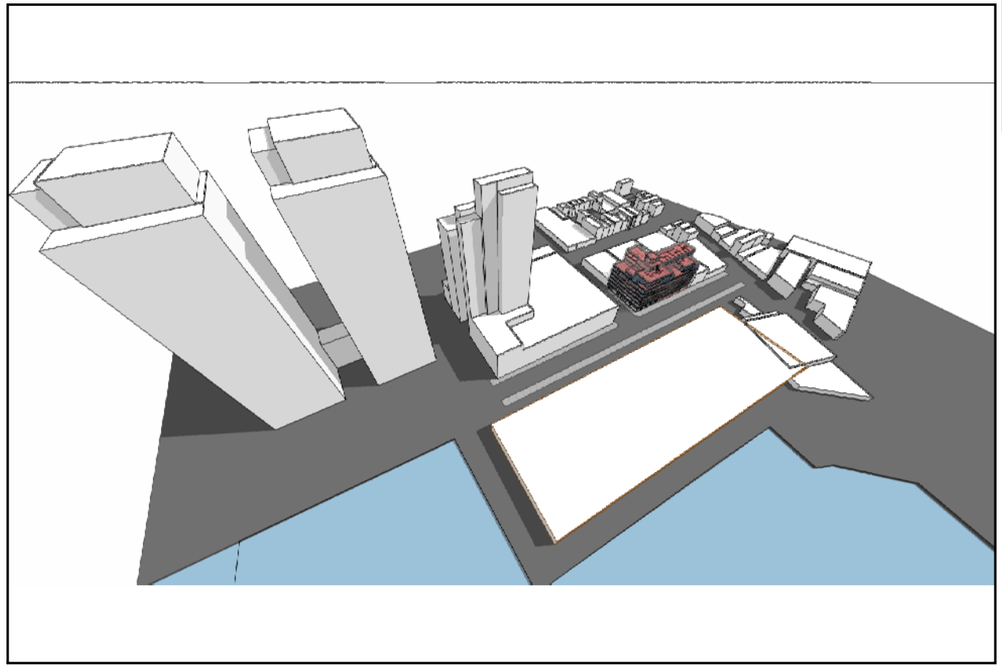
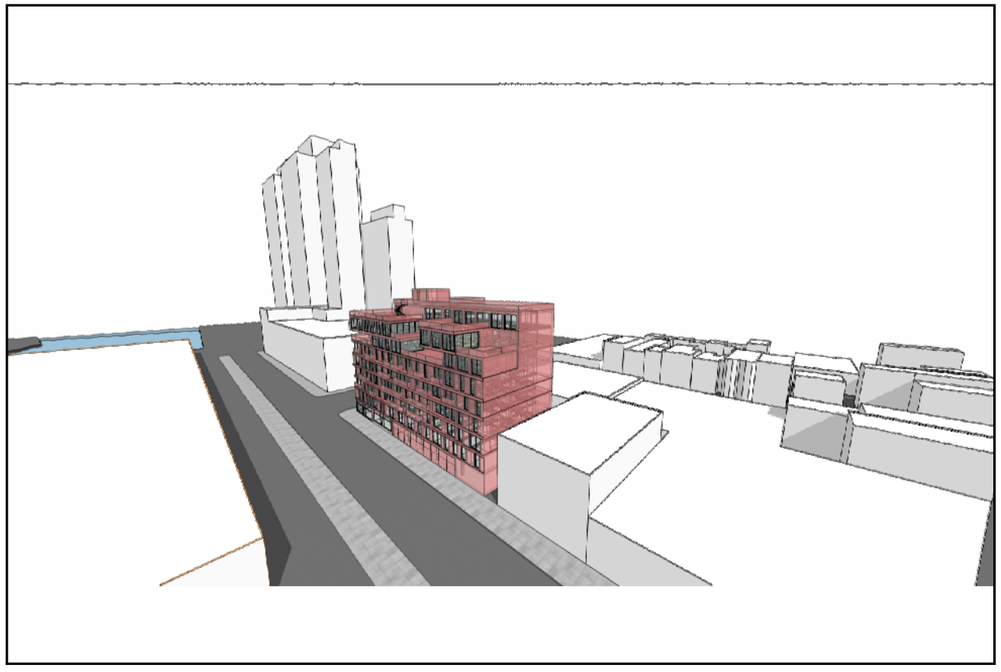


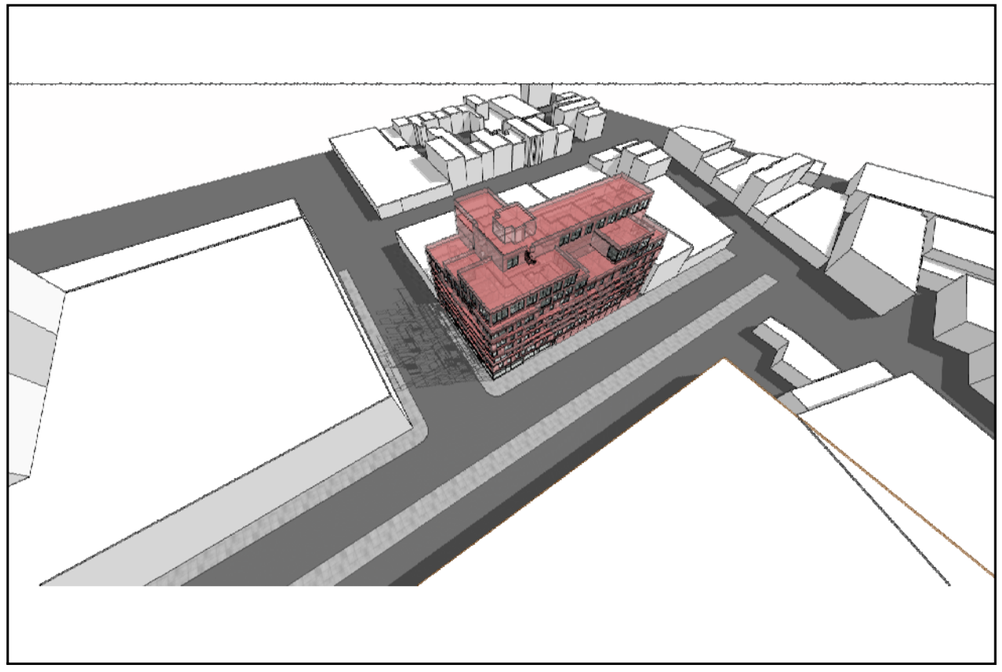
1 - PERSPECTIVE VIEW OF SITE LOOKING NORTH-WEST



2- PERSPECTIVE VIEW OF SITE LOOKING NORTH-EAST



3- PERSPECTIVE VIEW OF SITE LOOKING WEST



4- PERSPECTIVE VIEW OF SITE LOOKING NORTH-EAST

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BROOKLYN, NY

DRAWING TITLE

SITE
PERSPECTIVE
VIEWS

M1-4 / R7D

DRAWING NO.

13

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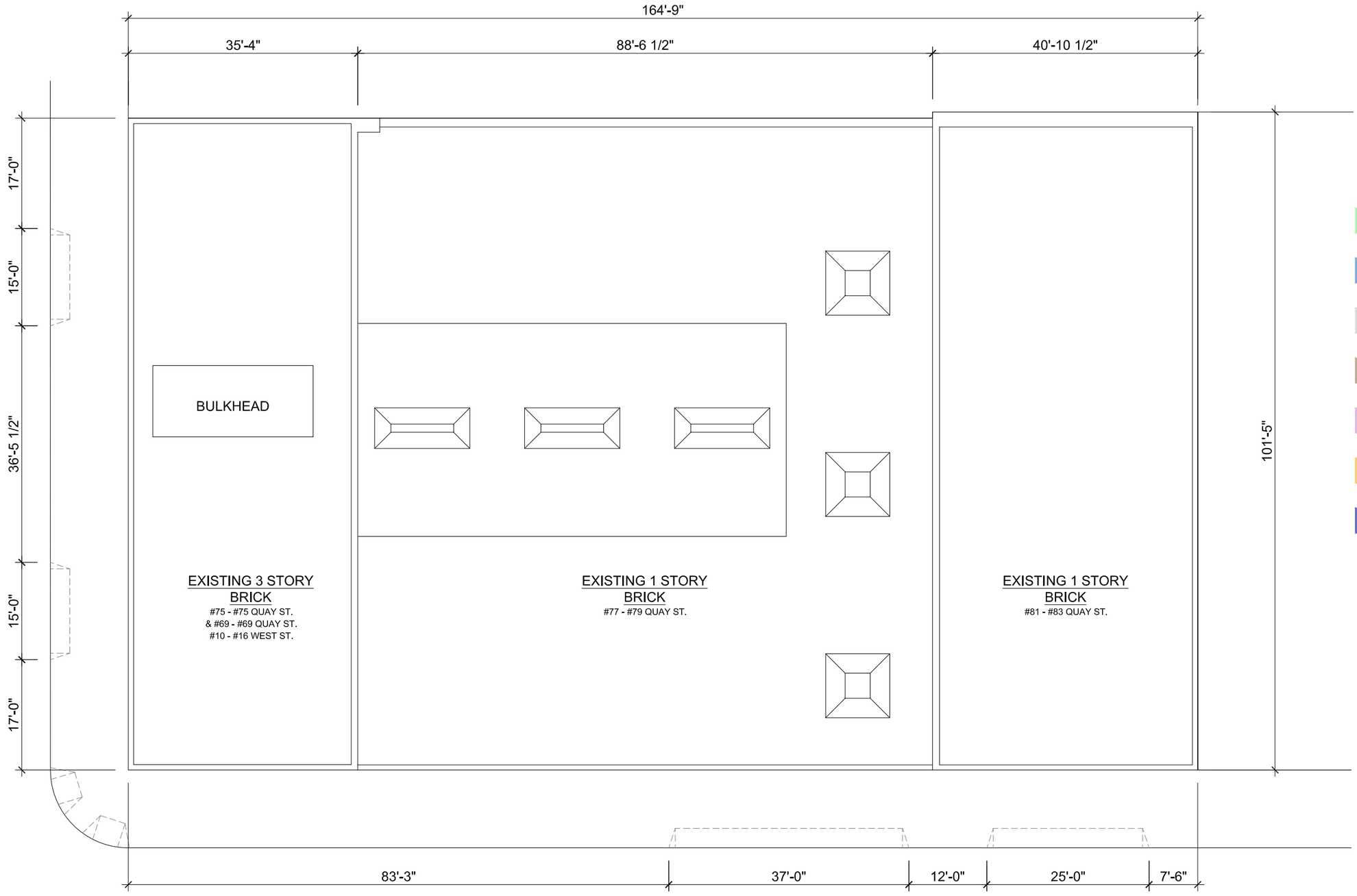

CORRIDOR

VERTICAL CIRCULATION (BUILDING CORE)

RESIDENTIAL

PARKING

COMMERCIAL

BICYCLE STORAGE

MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

EXISTING BUILDINGS & CURB CUTS
M1-4 / R7D

DRAWING NO.

14

1/14 SITE PLAN SHOWING EXISTING BUILDINGS & CURB CUTS
SCALE; 1/16"=1'-0"

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Appendix C: Phase I ESA

Equity Environmental Engineering

November 15, 2019

Chesky Friedman
Quay Plaza LLC.
110A Broadway
Brooklyn, New York

Re: Environmental Site Assessment, Phase I
Quay Street
95 Quay Street
Brooklyn, NY

Please find enclosed a copy of the Phase I Environmental Site Assessment for 95 Quay St., Brooklyn, NY. Please contact me if you have any questions.

Robert L. Jackson
Managing Director

Phase I Environmental Site Assessment Report

Quay Street
95 Quay Street
Brooklyn, NY 11222

Prepared for

Quay Plaza LLC.
110A Broadway
Brooklyn, New York

Prepared by

Equity Environmental Engineering
500 International Drive
Mount Olive, NJ 07828
Phone: 973-527-7451

Job Number: 2019082
11/15/2019

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1.0 GENERAL INFORMATION

Project Information:
Quay Street
Project Number:
2019082

Consultant Information:
Equity Environmental Engineering
500 International Drive
Mount Olive, NJ 07828
Phone: 973-527-7451
Fax: 973-858-0280
E-mail Address: bob.jackson@equityenvironmental.com
Inspection Date: 10/29/2019
Report Date: 11/15/2019

Site Information:
Quay Street
95 Quay Street
Brooklyn, NY 11222
Latitude, Longitude: 40.726431, -73.958295
Site Access Contact: Chesky Friedman

Client Information:
Quay Plaza LLC.
Chesky Friedman
110A Broadway
Brooklyn, New York

Site Assessor

John Vrabel
Project Scientist

Senior Reviewer

Robert L. Jackson
Managing Director

Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Robert L. Jackson - Managing Director

2.0 EXECUTIVE SUMMARY

2.1 Subject Property Description

The Subject Property, known as Block 2589, Tax Lot 1, is located at 79 Quay Street, Brooklyn, New York. The Subject Property has approximately 165 feet of frontage along the north side of Quay Street. The lot is 100 feet deep, and has a total area of 16,500 square feet. The Subject Property is currently developed with a 3-story, 230,500 gross square foot (GSF) warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units. The site location map is located in Appendix A and site photographs are located in Appendix B.

2.2 Data Gaps

Equity did not identify any significant data gaps that would affect its ability to identify Recognized Environmental Conditions (RECs) associated with the Subject Property.

2.3 Environmental Report Summary

Report Section		No Further Action	REC	HREC	CREC	Issue/Further Investigation	Comments
4.4	**Current Use of Property**	X					
4.6	**Adjoining Property Information**	X					
6.1	**Standard Environmental Records Sources**	X					
6.4.1	**Historical Summary**	X					
6.4.7	**Other Environmental Reports**	X					
7.3.1	**Hazardous Substances**	X					
7.3.2	**Petroleum Products**	X					
7.3.3	**USTs**					X	A vent pipe was observed along the western wall of the Subject Property. The Site representative Mr. Chesky Friedman was unable to confirm the presence of a UST.
7.3.4	**ASTs**	X					
7.3.5	**Other Suspect Containers**	X					
7.3.6	**Equipment Likely to Contain PCBs**	X					
7.3.7	**Interior Staining/Corrosion**	X					
7.3.8	**Discharge Features**	X					
7.3.9	**Pits, Ponds, And Lagoons**	X					
7.3.10	**Solid Waste Dumping/Landfills**	X					
7.3.11	**Stained Soil/Stressed Vegetation**	X					
7.3.12	**Wells**	X					

2.4 Recommendations

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release or a material threat of a release into structures on the properties or into the ground, groundwater, or surface waters of the properties. Historic Recognized Environmental Conditions (HRECs) are RECs previously remediated to government standards. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. Controlled Recognized Environmental Conditions (CRECs) are RECs that are under some form of institutional and/or engineering control. A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property. All RECs and VECs are discussed below.

2.4 Recommendations (continued)

Equity performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 at the Subject Property. Any exceptions to, or deviations from, this practice are described in Section 3.5 of this report. This assessment has revealed the following information in connection with the Subject Property:

RECs:

There is one REC associated with the Subject Property. The vent pipe along the western portion of the Subject Property indicating the presence of an underground storage tank (UST) is considered a REC.

HRECs:

There are no HRECs associated with the Subject Property.

CRECs:

There are no CRECs associated with the Subject Property.

VECs:

The EDR Vapor Encroachment database identified numerous VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related to two historical auto garages, Two leaking USTs, and numerous reported spills. Based on these findings, a possible vapor encroachment cannot be ruled out.

3.0 INTRODUCTION

3.1 Purpose

The purpose of the Phase I Environmental Site Assessment (ESA) was to evaluate the current and historical conditions of the Subject Property in an effort to identify recognized environmental conditions in connection with the Subject Property.

A recognized environmental condition is defined by ASTM as:

Recognized Environmental Condition - The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment; under conditions indicative of a release to the environment; or conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.

The identification of recognized environmental conditions in connection with the Subject Property may impose an environmental liability on owners or operators of the site, reduce the value of the site, or restrict the use or marketability of the site, and therefore, further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities.

3.2 Scope of Work

The Phase I ESA conducted at the Subject Property was in general accordance with ASTM Standard E 1527-13 and included the following:

- Review of previous environmental site assessments;
- Records review;
- Interviews with regulatory officials and personnel associated with the subject and adjoining properties;
- A site visit; and
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this Phase I ESA, no additions to the ASTM E 1527-13 standard were made.

3.3 Significant Assumptions

Equity has prepared this Phase IESA report in accordance with the contractual scope of work, using reasonable efforts to attempt to identify RECs. The conclusions presented in this report are based solely on visual observations, readily available records, interviews, and other secondary sources, which are assumed accurate unless otherwise noted. Equity does not warrant the accuracy or completeness of the information provided by secondary sources. Equity does not warrant that contamination that may exist on the site has been discovered, that the site is suitable for any particular purpose, or that the site is clear and free of liability. This report is intended for use in its entirety. No excerpts may be taken to be representative of the findings of this assessment. Opinions and recommendations presented in this report apply to the site conditions and features, as they existed at the time of the site visit, and those reasonably foreseeable. They cannot necessarily apply to conditions and features of which Equity is unaware and has not had an opportunity to evaluate.

3.4 Limitations and Exceptions

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following: access limitations, physical obstructions to observations, outstanding information requests, and historical data source failure.

It should be noted that this assessment did not include a review or audit of operational environmental compliance issues, or of any environmental management systems (EMS) that may exist on the property. Where required, the documents listed in Appendices A and E were used as reference material for the completion of the Phase I ESA. Some of the information presented in this report was provided through existing documents and interviews. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, Equity Environmental Engineering in certain instances has been required to assume that the information provided is accurate.

3.4 Limitations and Exceptions (continued)

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment of Equity Environmental Engineering based on the data obtained from the work. Due to the nature of investigation and the limited data available, Equity Environmental Engineering cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

3.5 Deviations

There were no deviations made during this Phase I ESA.

3.6 Special Terms and Conditions

Authorization to perform this assessment was given by Quay Plaza LLC on October 29, 2019. Instructions as to the location of the property, access, and an explanation of the property and facilities to be assessed were provided by Quay Plaza LLC.

3.7 Reliance

This report has been prepared for the sole benefit of Quay Plaza LLC. The report may not be relied upon by any other person or entity without the express written consent of Equity and Quay Plaza LLC.

4.0 SITE DESCRIPTION

4.1 Location and Legal Description

The Subject Property is known as Quay Street and is located at 79 Quay Street, Brooklyn, NY. The Subject Property is currently developed with a 3-story, 230,500 GSF warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units.

4.2 Activity/Use Limitations

Equity Environmental Engineering has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the property located at 95 Quay Street, Brooklyn, NY 11222. No activity/use limitations were found for the Subject Property.

4.3 Site and Vicinity Description

The Subject Property is approximately 16,500 square feet and is currently developed with a 3-story, 23,500 GSF warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units. The ground surface at the site is predominantly level. Ground cover consists primarily of a concrete sidewalk, and the building. The Subject Property is accessed from the south via Quay Street and the west via West Street. The area surrounding the site is primarily industrial/manufacturing and residential.

4.4 Current Use of Property

The Subject Property is currently developed with a 3-story, 23,500 GSF warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units.

4.5 Description of Structures and Other Improvements

The existing building is constructed of steel framing with a brick exterior and a flat roof. The first floor consists of a warehouse used to store solar panels and associated installation equipment as well as a climbing gym. The second floor consists of office space and a bathroom. The third floor contains two residential dwelling units, a hot water heater, boiler, a laundry room, and miscellaneous storage.

The City of New York supplies drinking water to the Subject Property from the municipal distribution system. Sanitary discharges on the Subject Property are discharged into the municipal sanitary sewer system. The Subject Property area is serviced by the City of Brooklyn. Electricity is provided to the Subject Property by Con Edison. Natural gas is provided by National Grid.

4.6 Adjoining Property Information

During the site reconnaissance, Equity observed that the land use in the immediate vicinity of the Subject Property is primarily industrial/manufacturing and residential. During the vicinity reconnaissance, Equity observed the following land use on properties in the immediate vicinity of the Subject Property:

North: Industrial/manufacturing
South: Industrial/manufacturing (MTA Division of Station Operations)
East: Residential
West: Active construction site

5.0 USER PROVIDED INFORMATION

5.1 Specialized Knowledge

Equity has no specialized knowledge of the Subject Property outside of the research which was conducted and reported as part of this report. The Subject Property representative, Mr. Chesky Friedman who was interviewed as part of this investigation has not reported any specialized knowledge of this Subject Property outside of what is contained in this report.

5.2 Valuation Reduction for Environmental Issues

Equity Environmental Engineering has not been provided with an appraisal for the subject property. No environmental issues were identified by the user/client that could result in property value reduction.

5.3 Owner, Property Manager, and Occupant Information

No written or verbal communication with the site representative Mr. Chesky Friedman revealed any information which suggested that there are currently or historically any RECs associated with the Subject Property.

5.4 Reason For Performing Phase I ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential RECs (as defined by ASTM Standard E 1527-13) in connection with the Subject Property. Equity understands that the findings of this study will be used to evaluate a zoning map amendment.

The Phase I ESA is being conducted as part of environmental due diligence prior to the proposed construction of a new nine-story 81,236 square foot mixed use building with approximately 86 dwelling units at the Subject Property.

6.0 RECORDS REVIEW

6.1 Standard Environmental Records Sources

Equity Environmental Engineering contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property. Copies of the EDR research data and a description of the databases are included in Appendix D of this report.

The Target Property (TP) for this database search was 79 Quay Street Block 2589, Tax Lot 1. The NR designation on the table stands for "Not Requested" at this search distance. The TP was not listed in any of the databases searched by EDR.

Map Findings Summary

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CORRACTS		1	0	0	0	1	NR	1
RCRA-LQG		0.25	5	2	NR	NR	NR	7
RCRA-SQG		0.25	2	2	NR	NR	NR	4
FUDS		1	0	0	1	0	NR	1
EDR Hist Auto		0.125	2	NR	NR	NR	NR	2
SEMS-ARCHIVE		0.5	0	2	1	NR	NR	3
RCRA-VSQG		0.25	1	2	NR	NR	NR	3
RCRA NonGen / NLR		0.25	16	14	NR	NR	NR	30
FUELS PROGRAM		0.25	0	1	NR	NR	NR	1
NY MANIFEST		0.25	24	24	NR	NR	NR	48
NY DRYCLEANERS		0.25	0	1	NR	NR	NR	1
NY SPILLS		0.125	28	NR	NR	NR	NR	28
NY CBS AST		0.25	0	1	NR	NR	NR	1
NY MOSF		0.5	0	1	0	NR	NR	1
NY LTANKS		0.5	3	3	16	NR	NR	22
NY CBS UST		0.25	0	1	NR	NR	NR	1
NY VCP		0.5	1	5	14	NR	NR	20
NY HSWDS		0.5	0	1	1	NR	NR	2
NJ MANIFEST		0.25	5	5	NR	NR	NR	10
NY SWF/LF		0.5	1	2	2	NR	NR	5
NY AST		0.25	3	10	NR	NR	NR	13
NY UST		0.25	10	5	NR	NR	NR	15
NY E DESIGNATION		0.125	17	NR	NR	NR	NR	17
NY BROWNFIELDS		0.5	3	3	7	NR	NR	13
NY SHWS		1	0	3	1	14	NR	18
NY MOSF AST		0.5	0	1	0	NR	NR	1
NY CBS		0.25	0	1	NR	NR	NR	1
NY INST CONTROL		0.5	0	1	1	NR	NR	2
NY MOSF UST		0.5	0	1	0	NR	NR	1
NY ENG CONTROLS		0.5	0	0	1	NR	NR	1
EDR MGP		1	0	0	1	2	NR	3

6.2 Additional Environmental Record Sources

No additional environmental record sources were researched for this Phase I investigation.

6.3 General Site Setting

The Subject Property is located in Brooklyn and surrounded by primarily industrial/manufacturing and residential use. The ground surface at the site is predominantly level. Ground cover consists primarily of a concrete sidewalk and the building. The Subject Property is accessed from the south via Quay Street and the west via West Street.

6.3.1 Topography

Based on a review of the USGS 2013, topographic map for the area, groundwater is inferred to flow to the south toward the Bushwick Inlet.

6.3.2 Surface Water Bodies

The nearest surface water in the vicinity of the Property is the Bushwick Inlet located approximately 350 feet to the south of the Subject Property. No surface water is located on the Subject Property.

6.3.3 Geology and Hydrology

Based on the soil survey maps published by the USDA Soil Conservation Service (1994) and information provided in the EDR Report, the subsurface soils expected at the site include Urban Land, which is variable in texture and does not qualify as hydric soil. Urban land soils are those which have lost original characteristics due to human activity (construction, development, demolition, debris, etc.). The geologic age identification of the rock at the Subject Property is of the Paleozoic Era, Ordovician System, Ordovician Series, (Code Oe).

No settling ponds, lagoons, surface impoundments, wetlands or natural catch basins were observed at the Subject Property during this investigation.

6.4 Historical Use

6.4.1 Historical Summary

Historical information identifying the past site use was obtained from a variety of sources as detailed in Appendix C of this report and included: City Directories, Aerial Photographs, Sanborn Fire Insurance Maps, and Topographic Maps.

Source Reviewed	Date(s)	Source Details
USEPA Enforcement Compliance History Online	June 2007	http://www.epa.gov/echo/
USEPA Envirofacts Data Warehouse Multi-System Report	June 2007	http://www.epa.gov/enviro/html/multisystem_query_java.html

6.4.2 Title Records

Equity was not provided land title records as part of this assessment.

6.4.3 City Directories

Business directories including city, cross reference, and telephone directories were reviewed for the years spanning 1928 through 2014. The Subject Property is listed historically as an industrial site with residential dwelling units.

6.4.4 Aerial Photos

Equity reviewed a total of thirteen aerial photographs spanning from 1924 to 2017. The Subject Property depicted in the aerials from 1951 to 2017 is consistent with the current shape and size of the Subject Property. The Subject Property depicted in the aerials for 1944 is only partially shown. The Subject Property depicted in the aerials from 1924 to 1941 depicts five individual buildings at the Subject Property.

6.4.5 Sanborn/Historical Maps

Equity reviewed a total of twenty three Sanborn Fire Insurance maps from 1887 to 2007. The table below summarizes the observations made based on the maps provided by EDR. The Sanborn maps are located in Appendix C.

6.4.5 Sanborn/Historical Maps (continued)

Summary

Date(s)	Property Comments	Surrounding Area Comments
1887	The Subject Property is developed with a store front, a machine shop, an engine tree nail facility, a wagon trimmings facility, and a residential dwelling unit.	The surrounding area is predominantly industrial and residential with uses consisting of multiple machine shops, grain storage, lumber storage, and an oil company.
1905	The Subject Property is developed with a store front, and a woodworking shop.	The surrounding area is predominantly industrial and residential with uses consisting of multiple machine shops, copper and iron construction, and a smelting shop.
1916	The Subject Property is developed with a chemical manufacturer.	The surrounding area is predominantly industrial and residential with uses consisting of multiple machine shops, copper and iron construction, woodworking shop, and a smelting shop.
1922, 1928	The Subject Property is not depicted.	The surrounding area is predominantly industrial and residential with uses consisting of a machine shop, a roofing material shop, a woodworking facility, and a chemical manufacturing facility.
1942	The Subject Property is developed with a woodworking facility and an auto storage facility.	The surrounding area is predominantly industrial and residential with uses consisting of a machine shop, magnesium casting facility, auto storage, welding facility, wood working shop, and a wax refining facility.
1951, 1965, 1978, 1979, 1980, 1981, 1982, 1983, 1986, 1987, 1988, 1989, 1991, 1993, 1995, 1996, 2001, 2002, 2003, 2004, 2005, 2006, 2007	The Subject Property is developed with a steel manufacturer.	The surrounding area is predominantly industrial and residential with uses consisting of metal finishing facilities, wax resin storage facility, woodworking shop, and an auto garage.

6.4.6 Historical Topographic Maps

Equity reviewed a total of nine historical topographic maps from 1897 through 2013. No discernible information could be obtained from these maps. The topographic maps are provided in Appendix C.

6.4.7 Other Environmental Reports

No other environmental reports were obtained or reviewed for this assessment.

6.4.8 Building Department Records

According to the New York City Department of Buildings (DOB) website, four complaints, two violations, thirteen job filings, and three actions have been identified at 79 Quay Street. The complaints are in relation to building permits, illegal conversion, and construction plans. The violations are both closed. The job filings are in relation to foundation work, sprinkler systems, mechanical and plumbing work, and excavation work. The actions are in relation to certification of occupancy. The Building Department Records are provided in Appendix H.

6.4.9 Other Land Use Records

No other sources of historical information about the site and its surroundings were reviewed.

6.5 Environmental Liens and Activity/Use Limitations

There are no known liens and/or activity/use limitations on the Subject Property.

6.6 Vapor Encroachment Evaluation

A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemicals in the subsurface of the Subject Property caused by the release of vapors from contaminated soil and/or groundwater either on or near the Subject Property. All VECs are discussed below. This Vapor Encroachment Screening was conducted based on a radius search of 1/10 of a mile for petroleum contamination and 1/3 of a mile for other volatile compounds. The screening allows for the distances to be reduced for cross gradient and down gradient contaminated sites.

The EDR Vapor Encroachment database identified numerous VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related to two historical auto garages, Two leaking USTs, and numerous reported spills. Based on these findings, a possible vapor encroachment cannot be ruled out. Details on the VECs can be found in Appendix F.

7.0 SITE RECONNAISSANCE

7.1 Methodology and Limiting Conditions

The site reconnaissance was conducted on October 29, 2019 by John Vrabel, Project Scientist with Equity Environmental Engineering, accompanied by Chesky Friedman of Strekte. Weather conditions at the time of the site reconnaissance were Cloudy and approximately 50 degrees Fahrenheit. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of the on-site structure was observed along with interior accessible common areas, manufacturing, storage and maintenance areas. Photographs of pertinent site features identified during the site reconnaissance are included in Appendix B.

7.2 General Site Setting

The Subject Property, also known as Block 2589, Tax Lot 1, is located at 79 Quay Street, Brooklyn, New York. The Subject Property has approximately 165 feet of frontage along the north side of Quay Street. The lot is 100 feet deep, and has a total area of 16,500 square feet. The Subject Property is currently developed with a 3-story, 230,500 gross square foot (GSF) warehouse used for the distribution and installation of solar panels, a climbing gym, office space, and two residential dwelling units.

7.3 Site Visit Findings

7.3.1 Hazardous Substances

Various paints, bleach, sheet rock joint compound, asphalt patch, and cleaning supplies were observed in the warehouse on the Subject Property. All product were safely stored and contained and no further investigation is recommended.

7.3.2 Petroleum Products

No petroleum products were observed on the Subject Property.

7.3.3 USTs

A vent pipe was observed along the western wall of the Subject Property. The Site representative Mr. Chesky Friedman was unable to confirm the presence of an UST.

7.3.4 ASTs

No ASTs were observed on the Subject Property.

7.3.5 Other Suspect Containers

No other suspect containers were observed on the Subject Property.

7.3.6 Equipment Likely to Contain PCBs

No equipment likely to contain PCBs was observed on the Subject Property.

7.3.7 Interior Staining/Corrosion

No Interior staining or corrosion was observed on the Subject Property.

7.3.8 Discharge Features

No discharge features were observed on the Subject Property.

7.3.9 Pits, Ponds, And Lagoons

No pits, ponds, or lagoons were observed on the Subject Property.

7.3.10 Solid Waste Dumping/Landfills

No solid waste dumping/landfills were observed during the site reconnaissance.

7.3.11 Stained Soil/Stressed Vegetation

No stained soil or stressed vegetation was observed during the site reconnaissance.

7.3.12 Wells

No wells were observed during the site reconnaissance.

8.0 INTERVIEWS

Equity conducted a interview with the Subject Property representative, Mr. Chesky Friedman during the site visit on October 29, 2019. Mr. Friedman indicated that no environmental concerns were previously or presently associated with the Subject Property. Mr. Yang indicated that to his knowledge the Subject Property has always been consist with its current use.

OPINIONS

Information Missing - enter data or select from Default Language.

CONCLUSIONS

Recognized Environmental Conditions (RECs) are defined as the presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing release, past release or a material threat of a release into structures on the properties or into the ground, groundwater, or surface waters of the properties. Historic Recognized Environmental Conditions (HRECs) are RECs previously remediated to government standards. De minimis RECs are those that do not present a threat to health or the environment and would not be the subject of an enforcement action by a government agency. Controlled Recognized Environmental Conditions (CRECs) are RECs that are under some form of institutional and/or engineering control. A Vapor Encroachment Condition (VEC) is the presence or likely presence of chemical of concern vapors in the subsurface of the target property caused by the release of vapors from contaminated soil and/or groundwater either on or near the target property. All RECs and VECs are discussed below.

Equity performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 at the Subject Property. Any exceptions to, or deviations from, this practice are described in Section3.5 of this report. This assessment has revealed the following information in connection with the Subject Property:

RECs:

There is one REC associated with the Subject Property. The vent pipe along the western portion of the Subject Property indicating the presence of an underground storage tank (UST) is considered a REC.

HRECs:

There are no HRECs associated with the Subject Property.

CRECs:

There are no CRECs associated with the Subject Property.

VECs:

The EDR Vapor Encroachment database identified numerous VECs (Vapor Encroachment Conditions) within 1/10 of a mile of the Subject Property that are related to two historical auto garages, Two leaking USTs, and numerous reported spills. Based on these findings, a possible vapor encroachment cannot be ruled out.

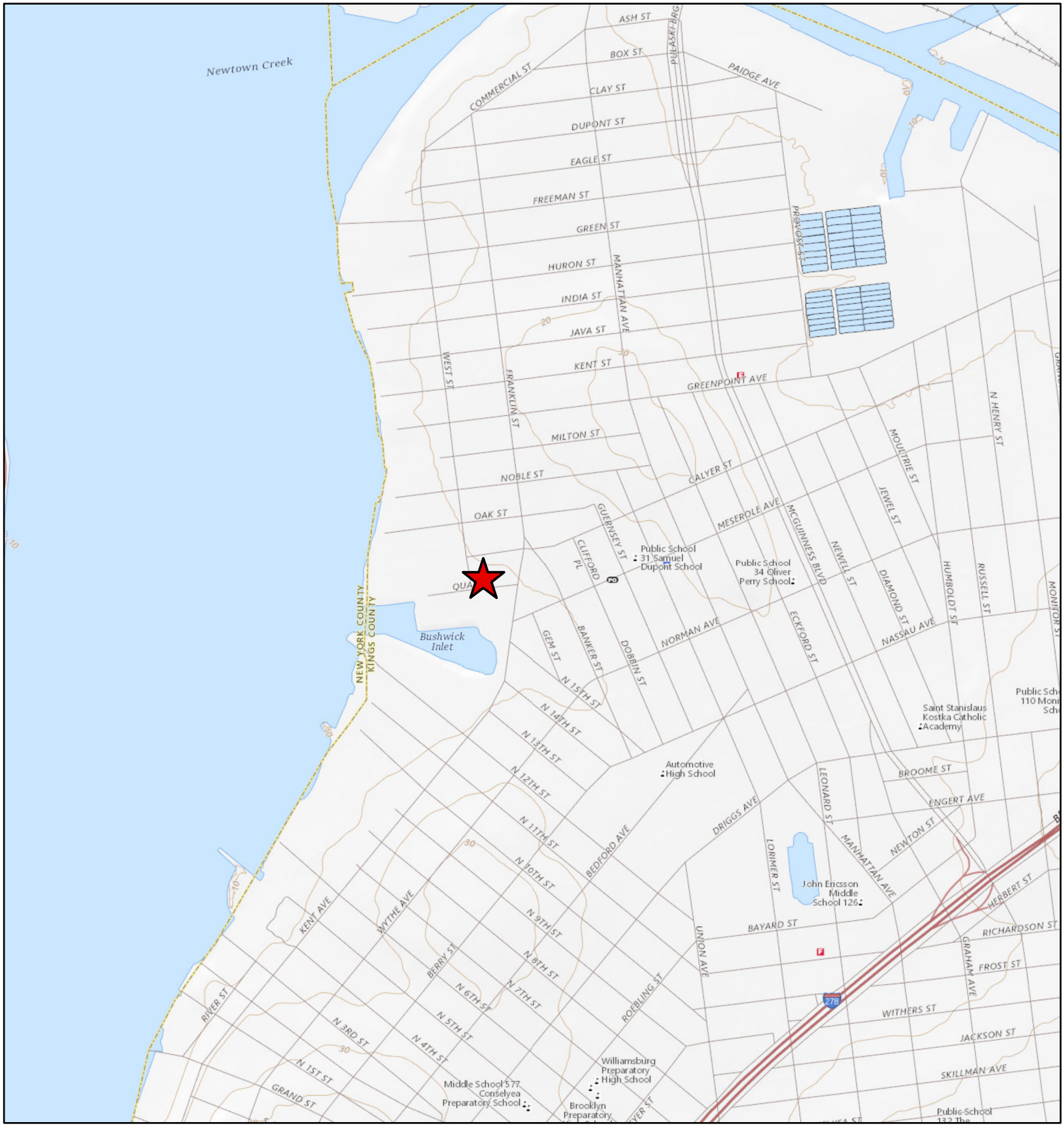
REFERENCES

The following references were used in the preparation of this report:

1. EDR Environmental Databases
2. Aerial Photographs
3. City Directories
4. Historic Topographic Maps
5. Sanborn Maps
6. NYC Zola Database
7. NYC Department of Buildings records
8. Qualifications

Appendix A:

Figures



Legend

79 Quay Street

N

0 0.07 0.15 0.3 0.45 Miles

Figure 1
Phase I ESA
USGS Site Location Map

79 Quay Street
Brooklyn, New York

equity environmental engineering
500 International Drive, Suite 150, Mount Olive, NJ 07828
Office: (973) 527-7451 / Fax: (973) 858-0280

DRAWN BY / DATE	REV / DATE	DRAWING NUMBER
GB/9.16.19		2019082-01



Legend

79 Quay Street

N

0 25 50 100 150 US Feet

Figure 2
Phase I ESA
Site Boundary Map

79 Quay Street
Brooklyn, New York

equity environmental engineering
500 International Drive, Suite 150, Mount Olive, NJ 07828
Office: (973) 527-7451 / Fax: (973) 858-0280

DRAWN BY / DATE	REV / DATE	DRAWING NUMBER
GB/9.16.19		2019082-02

Appendix B:

Photographs



01 VIEW OF THE WESTERN PORTION OF THE SUBJECT PROPERTY



02 VIEW OF THE EASTERN PORTION OF THE SUBJECT PROPERTY



03 VIEW OF THE EASTERN PORTION OF THE SUBJECT PROPERTY



04 VIEW OF A NATURAL GAS HEATER FOUND THROUGHOUT THE SUBJECT PROPERTY



01 VIEW INSIDE THE CLIMBING GYM ON THE SUBJECT PROPERTY



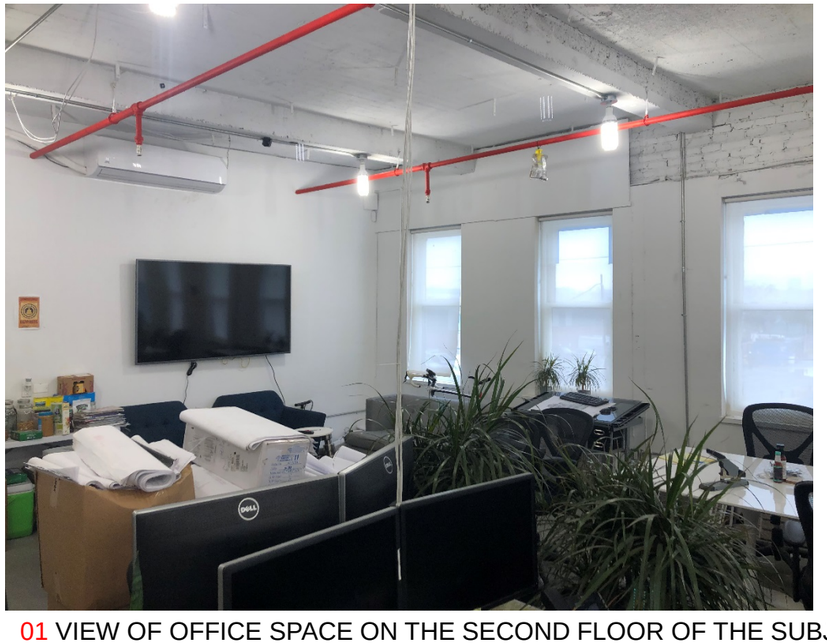
02 VIEW OF AN UNUSED ELECTRICALLY POWERED LIFT INSIDE THE CLIMBING GYM OF THE SUBJECT PROPERTY



03 VIEW INSIDE THE SOLAR PANEL WAREHOUSE ON THE SUBJECT PROPERTY



04 VIEW OF ASPHALT SHINGLE COMPOUND INSIDE THE SOLAR PANEL WAREHOUS ON THE SUBJECT PROPERTY.



01 VIEW OF OFFICE SPACE ON THE SECOND FLOOR OF THE SUBJECT PROPERTY ABOVE THE SOLAR PANEL WAREHOUSE



02 VIEW OF TYPICAL PAINTS AND CLEANING PRODUCTS FOUND ON THE SECOND FLOOR OF THE SUBJECT PROPERTY



03 VIEW OF THE WATER HEATER AND BOILER FOUND ON THE THIRD FLOOR OF THE SUBJECT PROPERTY



04 VIEW OF THE VENT PIPE ALONG THE WESTERN WALL OF THE SUBJECT PROPERTY.

Appendix D: Industrial Processing Emissions Permits

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Vincent Sapienza, P.E.
Commissioner

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: W.H. CHRISTIAN & SONS INC., 22 FRANKLIN STREET, 1, Brooklyn, NY 11222

OWNER Information: W.H. CHRISTIAN & SONS, INC., 22-28 FRANKLIN STREET, 1 BROOKLYN NY 11222

Installation #: **PA000977**
Issued: **7/30/2019**
Expiration: **10/25/2022**
Request ID: **260145**

Legalization: Yes

Environmental Rating: C

Emission Point: 3

Operational Hours/day: 8

Days/year: 200

Number of units: 1

ACFM/Unit: 12000

Contaminant(s): PM

Control(s): Filter

Description: INTEGRAL FILTER LINT TRAPS.

Installation Type: Other Industrial Sources

Equipment Type:

Material Being Processed: Garments
Desc.: Laundry Dryers
2 - Unimac #DT170EG
Desc.:
2 - Milnor # ML-175

Description of Process:

(4) Commercial Laundry Drying: (2) "Unimac" With 2300CFM each; and (2) "Milnor" with 3700CFM each. Total=12000CFM

Special Conditions:

NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PA000977

Kit Liang

Kit Liang, P.E.
Director of Engineering

NYC Environmental Protection

Emily Lloyd
Commissioner

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Compliance
59-17 Junction Boulevard, 9th Floor, Flushing, New York 11373
Records Control (718) 595-3655

TCO Rev 05/2014

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

TRIENNIAL CERTIFICATE OF OPERATION

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

☒PA ☐PB Application	Date Inspected	Date Issued	Expiration Date	E.P. #	E.R.	Issued By
000977X	02/18/16	02/23/16	03/14/19	3	C	MT

Professional Engineer:

Owner:
W.H. Christian & Sons,Inc.
22-28 Franklin Street
Brooklyn, N.Y. 11222

APPLICATION FOR RENEWAL OF THIS CERTIFICATE OF OPERATION MUST BE FILED AT THE DEPARTMENT OF ENVIRONMENTAL PROTECTION **NO LATER THAN NINETY (90) DAYS PRIOR TO ITS EXPIRATION DATE.**

Premise Information:

Street Address	Name of Premise (if any)					
22-28 Franklin Street	-					
Floor	**Room No.**	**Borough**	**Zip Code**	**BIN**	**Block**	**Lot**
1st	-	Brooklyn	11222	-	2616	56

The holder of this Certificate is responsible for the use of the equipment in accordance with all applicable requirements and provisions of the New York City Air Pollution Control Code. The Commissioner may suspend or revoke this Certificate for willful or continued violation of the Code. Any purported or attempted transfer of a Certificate of Operation from one location to another or from one piece of equipment to another automatically revokes the Certificate. Section 24-135 NYC Air Pollution Code.

Description of Installation:	**USED:** Hours / Day:	Days / Year:
Laundry Drying	8.0	200

Description of Equipment: (4) "Unimac" Laundry dryers model #DT170EG, using 1.97Btu/hr of natural gas.

Exhaust Equipment: (4) Integral Fans with 2300cfm each,
Total delivery = 9,200cfm @100F.

Control Equipment: (4) Integral filter lint traps.

Should significant scientific evidence from a recognized institution should result in a decision by NYSDEC that lower ambient guideline concentrations must be established, it may be necessary to reduce emissions from this source(s) prior to the expiration of this Triennial Certificate of Operation.

SPECIAL CONDITIONS / REMARKS

Lint traps filters must be cleaned up or replaced on regular basis.

RECERTIFICATION

R. Radhakrishnan

R. Radhakrishnan, P.E.
Director of Engineering / For the Commissioner

FOR GENERAL INFORMATION, QUESTIONS, AND INQUIRIES: Please visit our website at www.nyc.gov/dep or call 311

AR355
(10/87)

CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR RESOURCES
295 LAFAYETTE ST., NEW YORK, N.Y. 10012

The City of New York

DUPLICATE (AGENT)

PAGE 1 OF 1

VOLUNTARY

AMENDMENT
(TO BE TYPED OR PRINTED)

INSTALLATION: PA 000 977 X
DATE: 7/17/97

PREMISE ADDRESS: 22 FRANKLIN Street ; Brooklyn
(BORO)

ANSWERS TO THE DISAPPROVAL SHOULD BE MADE BELOW. THIS AMENDMENT IS TO BE MADE PART OF THE ORIGINAL PLANS AND IS SUBJECT TO ALL THE CONDITIONS, AGREEMENTS AND STATEMENTS CONTAINED THEREIN. RETURN THIS COMPLETED FORM TO BUREAU OF AIR RESOURCES.

IF MORE SPACE IS NEEDED ADDITIONAL SHEETS MUST BE USED. NO ITEM CAN BE CONTINUED OVER TO ANOTHER SHEET; EACH ITEM MUST BE COMPLETE ON THE SHEET ON WHICH IT APPEARS. ONLY THOSE ITEMS THAT APPEAR ABOVE THE ENDORSEMENT AT THE BOTTOM OF THE PAGE CAN BE CONSIDERED.

The purpose of this amendment is to add three GAS Fired 170lb Unimac Dryers to the subject PA number. Please note that the subject PA number does not expire until 3/14/98. All Dryers are on the same Floor and can be seen at the same time.

P.E. OR R.A.

NAME

NICHOLAS J. CASSELANO

STREET ADDRESS
30-05 84th STREET
JACKSON HEIGHTS, NEW YORK 11370

CITY STATE ZIP CODE

P.E. OR R.A.
SEAL AND SIGNATURE:

STATE OF NEW YORK
NICHOLAS J. CASSELANO
058384
LICENSED PROFESSIONAL ENGINEER

OP | LOCATION | FACILITY | EMISSION POINT

A ADD
C CHANGE
D DELETE

READ INSTRUCTIONS CONTAINED IN FORM 76-11-12 BEFORE ANSWERING ANY QUESTION

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

COPIES
WHITE - ORIGINAL
GREEN - DIVISION OF AIR
WHITE - REGIONAL OFFICE
PINK - FIELD REP
YELLOW - APPLICANT

PROCESS, EXHAUST OR VENTILATION SYSTEM

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

PA0009-77

SECTION A

1. NAME OF OWNER/FIRM: W. H. CHRISTIAN AND SONS
2. NUMBER AND STREET ADDRESS: 22-28 FRANKLIN ST.
3. CITY - TOWN - VILLAGE: BROOKLYN | 4. STATE: N.Y. | 5. ZIP: 11222
6. OWNER CLASSIFICATION: A ☐ COMMERCIAL C ☐ UTILITY E ☐ STATE H ☐ HOSPITAL; B ☒ INDUSTRIAL D ☐ FEDERAL G ☐ EDUC. INST F ☐ MUNICIPAL I ☐ RESIDENTIAL J ☐ OTHER
7. NAME & TITLE OF OWNERS REPRESENTATIVE: ROBERT KONZELMAN, PRODUCTION MANAGER | 8. TELEPHONE: 718 389 7000
9. NAME OF AUTHORIZED AGENT: NICHOLAS J. CASSELANO | 10. TELEPHONE
11. NUMBER AND STREET ADDRESS: 3005 84th STREET
12. CITY - TOWN - VILLAGE: JACKSON HEIGHTS, NEW YORK 11370 | 13. STATE | 14. ZIP
15. NAME OF P.E. OR ARCHITECT PREPARING APPLICATION: NICHOLAS J. CASSELANO, P.E. 056964 | 16. NYS P.E. OR ARCHITECT LICENSE NO. | 17. TELEPHONE
18. SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT: Nicholas J. Casselano
19. FACILITY NAME (IF DIFFERENT FROM OWNER/FIRM)
20. FACILITY LOCATION (NUMBER AND STREET ADDRESS)
21. CITY - TOWN - VILLAGE | 22. ZIP
23. BUILDING NAME OR NUMBER: 22-28 FRANKLIN ST. | 24. FLOOR NAME OR NUMBER: 1
25. START UP DATE: MO / YR | 26. DRAWING NUMBERS OF PLANS SUBMITTED: NJC-29-97-PE
27. PERMIT TO CONSTRUCT: A ☐ NEW SOURCE B ☐ MODIFICATION
28. CERTIFICATE TO OPERATE: A ☐ NEW SOURCE C ☒ EXISTING SOURCE B ☐ MODIFICATION

SECTION B

29 EMISSION POINT ID.	30 GROUND ELEVATION (FT)	31 HEIGHT ABOVE STRUCTURES (FT)	32 STACK HEIGHT (FT)	33 INSIDE DIMENSIONS (IN)	34 EXIT TEMP (°F)	35 EXIT VELOCITY (FT/SEC)	36 EXIT FLOW RATE (ACFM)	37 SOURCE CODE	38 HRS/DAY	39 DAYS/YR	40 % OPERATION BY SEASON (Winter / Spring / Summer / Fall)
0003	0.00	-28 (est)	10	12	170	147	6900		10	250	25 / 25 / 25 / 25

SECTION C

41. DESCRIBE PROCESS OR UNIT:
1. COMMERCIAL LAUNDRY
2.
3. THREE 170 lb. GAS FIRED UNIMAC DRYERS MODEL (DT170
4.
5. FG AND SELF-CLEANING
6. LINT FILTER AT 90°
7. EFFICIENCY
8.

SECTION D

EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
42. 01	43. 08	44. THREE (3) 170 lb. GAS FIRED.	45. 9	46. /	47.
48.	49.	50. UNIMAC DRYERS MODEL (DT170FG)	51.	52. AND	53. SELF CLEANING LINT

SECTION E

CALCULATIONS
FILTER AT 90° EFFICIENCY

E

PA0009-77

SECTION F

54 CONTAMINANT NAME	55 CAS NUMBER	56 INPUT OR PRODUCTION	57 UNIT	58 ENV RATING	59 EMISSIONS ACTUAL	60 UNIT	61 HOW OFTEN	62 PERMISSIBLE	63 % CONTROL EFFIC'CY	64 HOURLY EMISSIONS (LBS/HR) ERP	65 ACTUAL	66 ANNUAL EMISSIONS (LBS/YR) ACTUAL	67 10³	68 PERMISSIBLE
Total Particulates	NY075-00-0								90	0.02	0.002	4.05	0	
SULFUR OXIDES	7446-09-5								0	0.0007	0.0007	1.77	0	
NITROGEN OXIDES	NY210-00-0								0	0.17	0.17	414	0	
99	100	101	102	103	104	105	106	107	108	109	110	111	112	113
114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136	137	138	139	140	141	142	143

SEC G

SOLID FUEL TYPE	SOLID FUEL TONS/YR	SOLID FUEL %S	OIL TYPE	OIL THOUSANDS OF GALLONS/YR	OIL %S	GAS TYPE	GAS THOUSANDS OF CF/YR	GAS BTU/CF
144	145	146	147	148	149	150	151	152

153 APPLICABLE RULE	154 APPLICABLE RULE

Upon completion of construction sign the statement listed below and forward to the appropriate field representative

THE PROCESS, EXHAUST OR VENTILATION SYSTEM HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

155 SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT: Nicholas J. Cassalano

DATE: 7/14/97

AGENCY USE ONLY

156 LOCATION CODE	157 FACILITY ID. NO.	158 U.T.M. (E)	159 U.T.M. (N)	160 SIC NUMBER	161 DATE APPL. RECEIVED	162 DATE APPL. REVIEWED	163 REVIEWED BY:
					/ /	/ /	

PERMIT TO CONSTRUCT

164 DATE ISSUED	165 EXPIRATION DATE	166 SIGNATURE OF APPROVAL	167 FEE
/ /	/ /		

168
1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT
2. THIS IS NOT A CERTIFICATE TO OPERATE
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

RECOMMENDED ACTION RE: C.O.

169 DATE ISSUED	170 EXPIRATION DATE	171 SIGNATURE OF APPROVAL	172 FEE
/ /	/ /		

173
1. ☐ INSPECTED BY _____ DATE _____
2. ☐ INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM
3. ☐ ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT
4. ☐ APPLICATION FOR C.O. DENIED _____ DATE _____ INITIALED

174. SPECIAL CONDITIONS:

1.	2.
3.	4.
5.	6.
7.	8.

76-19-3 (10-79)

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Environmental Protection

Vincent Sapienza, P.E.
Acting Commissioner

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: BUDD WOODWORK INC., 54 FRANKLIN STREET, Brooklyn, NY 11222

OWNER Information: BUDD WOODWORK INC., 54 FRANKLIN ST BROOKLYN NY 11222-2039

Installation #: **PA025190**
Issued: **9/22/2017**
Expiration: **5/22/2020**
Request ID: **210200**

Legalization: Yes

Environmental Rating: B

Emission Point: 1

Operational Hours/day: 4

Days/year: 200

Number of units: 1

ACFM/Unit: 5600

Contaminant(s): VOC

Control(s): Filter

Description: Replaceable fiberglass Filters.

Installation Type: Spray Booth / Spray Area

Equipment Type: SPRAY BOOTH

Custom
Type: FLOOR TYPE
Article(s) Sprayed: WOODWORKING
Opening Height (ft): 7
Opening Width (ft): 8
Floor Area (ft2): 60

Description of Process:

Paint spraying and woodworking.

Special Conditions:

NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PA025190

R. Radhakrishnan, P.E.
Director of Engineering/For the Commissioner

STACK PARAMETERS

6A. Emission Point ID:	6B. Ground Elevation (ft):	6C. Height Above Structure (ft):	6D. Stack Height (ft):	6E. Inside Diameter (in):	6F. Exit Velocity (ft/sec):	6G. Exit Flow Rate (ACFM):	6H. Exit Temperature (°F):
1	25	6	30	24	30	5600	70

6I. Fan Manufacturer:	6J. Fan Model Number:	6K. Number of Units:	6L. Total ACFM / Unit:	6M. Fan Diameter (in):	6N. Fan Motor (HP / RPM)
Aerovent	Unknown	1	5600	24	1

6O. Area of process space (ft2):	6Ob. Height of process space (ft)	6P. Are multiple pieces of equipment exhausted to this stack?

6Q. If Yes, list all pieces of equipment:

EMISSION CONTROL

7A. Does this equipment have an emission control?	7B. Is the control part of the equipment?	7C. Type(s) of pollutant(s) controlled:
Yes	No	VOC

7D. Emission Controls(s):	7E. Description of Control Device(s):
Filter	Replaceable fiberglass Filters.

7F. CONTAMINANT		7G. EMISSIONS					
NAME	CAS NUMBER	EMISSION FACTOR AMT	EMISSION FACTOR UNITS	HOURLY EMISSIONS (lbs/hr)	ANNUAL EMISSIONS (lbs/year)	PERCENT REMOVAL	HOW DETERMINED
Pigments	NY075-00-0			0.01	8	95	6
METHYL ISOBUTYL KETONE	00108-10-1			0.07	56	0	6
ETHANOL	00064-17-5			0.06	48	0	6
BUTYL ALCOHOL, N-	00071-36-3			0.15	120	0	6
XYLENE,M,O&P MIXT.	01330-20-7			0.58	464	0	6
!-Methoxy 2-propyl Acetate	00-108-65-6			0.02	16	0	6

7H. Detailed Calculations (Est. max hourly and max annually):

a. Proposed Environmental Rating:	B

HEATER INFORMATION

If the process is equipped with a heater, please provide the following information.

Q8A. Is there a heater?	8A. Is the heater a separate unit?	8B. Input (BTU/hr):	8C. Output (BTU/hr):
No			

8D. Firing Rate (CFH/GPH):	8E. Manufacturer:	8F. Model Number:	8G. Fuel Type:
			None

ADDITIONAL PERMITTED EQUIPMENT IN FACILITY

9A. INSTALLATION NO.	9B. DESCRIPTION	9C. CERTIFICATION OF OPERATION EXPIRATION DATE

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: Scheel Corporation, 38 Franklin Street, 1, Brooklyn, NY 11222

OWNER Information: Scheel Corporation, 38 Franklin Street Brooklyn NY 11222

Installation #: **PA114788**
Issued: **6/4/2019**
Expiration: **4/18/2022**
Request ID: **257036**

Legalization: No

Environmental Rating: C

Emission Point: 1

Operational Hours/day: 6

Days/year: 200

Number of units: 1

ACFM/Unit: 38100

Contaminant(s): PM, NOx

Control(s):

Description: Exhaust Fans

Installation Type: Other Industrial Sources

Equipment Type:

Material Being Processed: Wax processing
Desc.: Natural gas-fired wax melting vats
3 - Vats

Description of Process:
Manufacturing of Wax Pellets

Special Conditions:
NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PA114788

R. Radhakrishnan, P.E.
Director of Engineering/For the Commissioner

STACK PARAMETERS

6A. Emission Point ID:	6B. Ground Elevation (ft):	6C. Height Above Structure (ft):	6D. Stack Height (ft):	6E. Inside Diameter (in):	6F. Exit Velocity (ft/sec):	6G. Exit Flow Rate (ACFM):	6H. Exit Temperature (°F):
1	15	3	12	36	29	38100	94

6I. Fan Manufacturer:	6J. Fan Model Number:	6K. Number of Units:	6L. Total ACFM / Unit:	6M. Fan Diameter (in):	6N. Fan Motor (HP / RPM)
ACORN	2425; 3025; 3633	1	38100		

6O. Area of process space (ft2):	6Ob. Height of process space (ft)	6P. Are multiple pieces of equipment exhausted to this stack?

6Q. If Yes, list all pieces of equipment:

EMISSION CONTROL

7A. Does this equipment have an emission control?	7B. Is the control part of the equipment?	7C. Type(s) of pollutant(s) controlled:
No	No	PM, NOx

7D. Emission Controls(s):	7E. Description of Control Device(s):
	Exhaust Fans

7F. CONTAMINANT		7G. EMISSIONS					
		EMISSION FACTOR		HOURLY	ANNUAL	PERCENT	HOW
NAME	CAS NUMBER	AMT	UNITS	EMISSIONS (lbs/hr)	EMISSIONS (lbs/year)	REMOVAL	DETERMINED
PARTICULATES	NY075-00-0			15	18000	1	5
SULFUR DIOXIDE	07446-09-5			1	1200	1	5
OXIDES OF NITROGEN	NY210-00-0			263	315000	1	5

7H. Detailed Calculations (Est. max hourly and max annually):

a. Proposed Environmental Rating:	C

HEATER INFORMATION

If the process is equipped with a heater, please provide the following information.

Q8A. Is there a heater?	8A. Is the heater a separate unit?	8B. Input (BTU/hr):	8C. Output (BTU/hr):
8D. Firing Rate (CFH/GPH):	8E. Manufacturer:	8F. Model Number:	8G. Fuel Type:
382			Natural Gas

ADDITIONAL PERMITTED EQUIPMENT IN FACILITY

9A. INSTALLATION NO.	9B. DESCRIPTION	9C. CERTIFICATION OF OPERATION EXPIRATION DATE

PART IV: OTHER INDUSTRIAL PROCESS

Provide the following information for any other type of industrial process or operation

EQUIPMENT INFORMATION

15A. Material Being Processed:	15B. Maximum Hourly Processing Rate:	15C. Annual Amount of Material Processed:
Wax processing		

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Environmental Protection

Vincent Sapienza, P.E.
Acting Commissioner

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: BUDD WOODWORK INC, 54 FRANKLIN STREET, Brooklyn, NY 11222

OWNER Information: BUDD WOODWORK INC, 54 FRANKLIN ST BROOKLYN NY 11222-2039

Installation #: **PB002302**
Issued: **7/7/2017**
Expiration: **5/22/2020**
Request ID: **210201**

Legalization: No

Environmental Rating: C

Emission Point: 2

Hours/day: 8

Days/year: 200

Number of units: 1

ACFM/Unit: 10000

Contaminant Controlled: PM

Controls: Bag House

Description: (1) Deidan Industries Ltd. dust collector- 25HP

Installation Type: Other Industrial Sources

Equipment Type:

Material Being Processed: Wood
Desc.: Planer
1 - Powermatic 221
Desc.: Moulder
1 - Profimat 22N
Desc.: Jointer
1 - SAC Sueri F35
Desc.: Ripsaw
1 - IMC RP-12
Desc.: Wide Belt Sander
1 - Butfering Optimat SBO 209

Description of Process:

Two floors of various wood working equipment as well as one spray booth

Special Conditions:

NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PB002302

R. Radhakrishnan, P.E.
Director of Engineering/For the Commissioner

DEP Registrations

Installation #:

PB 002302

THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard, 9th Floor, Corona, New York 11368-5107
JOEL A. MIELE SR., P.E., Commissioner

ROBERT C. AVALTRONI
Deputy Commissioner

Bureau of Air Noise & Hazardous Materials

DEP AIR PERMITTING
2002 JAN 11 A 9:31

133R

~~PA#0007/02T~~
PB0023-022

Date: 12/5/01

~~PA 0007-02T~~
(Installation Number)

(EN Number)

Re: 54 Franklin Street — Brooklyn
(Premise Address) (Boro)

ORIGINAL-KEEP IN FILE

PROFESSIONAL CERTIFICATION

Being duly mindful of my responsibilities as a Licensed Professional Engineer in the State of New York and acting as Designated Agent for the applicant, I hereby certify that the application, plans and all supplementary documents submitted in connection with this filing are complete and fully comply with all applicable laws, codes, rules, regulations and directives of the Department of Environmental Protection, Bureau of Air, Noise & Hazardous Materials of the City of New York in effect at the time filed.

P.E. Seal & Signature

FOR DEP USE ONLY	

Company Name of Installer: Deidan Industries Ltd.

Company Address: 433 Park Avenue

Town or Boro Brooklyn State: NY Zip: 11205

Installer's Name: C. Deidan Title: V.P.

Installer's Signature:

THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard, 9th Floor, Corona, New York 11368-5107
JOEL A. MIELE SR., P.E., Commissioner

ROBERT C. AVALTRONI
Deputy Commissioner

Bureau of Air Noise & Hazardous Materials

INDUSTRIAL PROCESSES DIVISION
ENVIRONMENTAL RATING REPORT
SUMMARY OF POINTS OF EMISSION

ORIGINAL-KEEP IN FILE

EN NO. _____

Premise Identification No.

1. **Company Name** Budd Woodworking Inc.
2. **Premise Address** 54 Franklin Street Brooklyn **Zip** 11222
3. **Mailing Address** same **Zip** _____

   Telephone No. 718-389-1110
4. **Name of Person Preparing Report** Stanley Wald, P.E.
5. **Address** 2316 East 64th Street Brooklyn, NY **Zip** 11234
6. **Telephone No.** 718-763-2596

7. SEC.	LOT	BLOCK
	20	2592

8. Emission Point No.	9. Operation Producing Emission	10. Environmental Rating Proposed	Assigned By BAR
A	Air Pollution Control Equipment	C	C

This Report is: **New** ☒ **Revision** ☐ **Addendum** ☐

Signature Stanley Wald **Title** P.E. **Date** 12/5/01

(Rev. 1/76)

The City of New York

ENVIRONMENTAL PROTECTION ADMINISTRATION
DEPARTMENT OF AIR RESOURCES
120 WALL STREET, NEW YORK, N. Y. 10005
BUREAU OF ENGINEERING
PROCESS EXHAUST OR VENTILATION SYSTEM
APPLICATION FOR CERTIFICATE OF OPERATION

ORIGINAL-KEEP IN FILE

BLOCK 2592 LOT 20 ZONING M1 (By Applicant)

PLEASE PRINT OR TYPE IN

SECTION A

1. COMPANY NAME: Budd Woodworking Inc.
10. NAME OF P.E.: Stanley Wald
11. TELEPHONE: 763-2596
19. FACILITY NAME (IF DIFFERENT FROM COMPANY NAME): same

2. NUMBER AND STREET ADDRESS: 54 Franklin Street
12. NUMBER AND STREET ADDRESS: 2316 E.64 St.
20. FACILITY LOCATION (NUMBER AND NEAREST ADDRESS): same

3. TOWN OR BORO: Brooklyn
4. STATE: NY
5. ZIP: 11222
13. TOWN OR BORO: Bklyn
14. STATE: NY
15. ZIP: 11234
21. BORO: same
22. ZIP: same

6. OWNER CLASSIFICATION: A ☐ COMMERCIAL B ☒ INDUSTRIAL C ☐ UTILITY D ☐ FEDERAL E ☐ STATE F ☐ MUNICIPAL G ☐ EDUC. INST. H ☐ HOSPITAL I ☐ RESIDENTIAL J ☐ OTHER
16. Application includes: A. ☒ NEW EQUIP'T B. ☐ MODIFICATION C. ☐ EXISTING EQUIP'T ONLY
23. BLDG. NAME OR NUMBER: same
24. FLOOR NAME OR NUMBER: yard

7. OWNER OR OFFICER'S NAME: Serafin Caamano
TITLE: Pres.

8. OWNER OR OFFICER'S SIGNATURE: S. Caamano
9. TELEPHONE: 718-389-1110

"I hereby affirm under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief, and that the equipment and/or apparatus concerned will be installed, altered and operated in accordance with the requirements of the NYC Air Pollution Control Code. I hereby authorize the P.E. named herein to file this application on my behalf. I hereby acknowledge that false statements are punishable as a Class A misdemeanor pursuant to Section 1401.2-15.29 of the NYC Air Pollution Control Code and Section 210.45 of the Penal Law."

I hereby certify to the best of my knowledge and belief to the accuracy of the technical information contained in this application, plans and any supplementary data submitted.

PLACE SEAL ABOVE

17. NYS P.E. LIC. NO.: 36068
18. SIGNATURE OF PROFESSIONAL ENGINEER: Stanley Wald

25. DATE APPLICATION RECEIVED: 1-11-02
26. IDENTIFICATION #: PB0023-02M
27. DATE APPLICATION REVIEWED: 02/07/02
28. APPLICATION INCLUDES: A. ☒ NEW EQUIP'T B. ☐ MODIFICATION C. ☐ EXISTING EQUIP'T ONLY

ASSIGN NYC - DAN PREMISES I.D. NO. AND SOURCE EM. PT. NO. IN SECTION B

FEE: $ 410 DATE OF RECEIPT 1/11/02
RECEIPT # 593444 CASHIER

NOTE: PERMIT WILL NOT BE ISSUED UNLESS:
(a). INSTALLER IS NAMED AND
(b). WORKMEN'S COMP. & DISABILITY ARE ON FILE WITH DAN

FINAL APPROVAL OF THE INSTALLATION IN THE FORM OF A CERTIFICATE OF OPERATION WILL NOT BE ISSUED UNTIL COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF LAW, RULE AND REGULATION OF THE N.Y.C. AIR POLLUTION CONTROL CODE HAS BEEN VERIFIED AT THE INSTALLATION SITE BY A REPRESENTATIVE OF THE DEPARTMENT.

"I hereby certify that upon approval of this application, plans and any supplementary data, I will make the installation of and adjustments to the equipment and/or apparatus described herein."

Installer's Signature: C. Deidan

Company Name of Installer: Deidan Industries Ltd.
Installer's Name: C. Deidan
Title: V.P.
Company Address: 433 Park Avenue
Town or Boro: Brooklyn
State: NY
Zip: 11205

30. CONDITIONS OF WORK PERMIT:
a) PROPOSED DEVIATION FROM APPROVED APPLICATION MUST BE BY FILING OF AMENDMENT, AND APPROVAL BY DAN.
b) STACK TEST REQUIRED YES ☐ NO ☐
c) APPROVAL OF THIS APPLICATION DOES NOT IN ANY WAY ALTER, AFFECT OR CHANGE THE REQUIREMENT(S) FOR OTHER LICENCES OR PERMITS AS MAY BE REQUIRED BY OTHER GOVERNMENTAL AGENCIES AND DEPARTMENTS.

APPROVED FOR WORK PERMIT ONLY:

by Head, Industrial Processes Division
by Director of Engineering

FOR AGENCY USE ONLY

29 LOCATION CODE	30 FACILITY ID NO	31 U T M (E)	32 U T M (N)	33 SIC NUMBER	34. DATE ISSUED	35. DATE EXPIRES
					/ /	/ /

COPY PLANT

C.O. APPROV.
41. DATE ISSUED / / 42. L.L. / / 43. DATE / /

A No. /Yr. 1

Date / /
COPY TO NYS - DEC

SECTION B

4) SPRAY BOOTHS: (FURNISH DATA B/OR CHECK APPROPRIATE BOX(ES))

Mfr.	Model	Frontal opening: Height C.	Width D.	Baffles: Single E.	Triple F.	Filters G.	Water wash H.
A.	B.						

Manual I.	Automatic J.	Air atomizing K.	Airless L.	Electrostatic M.	Coating Mat'l N.	NO. Use Rate Max. ___ Gals./Hr. ___ Hrs./Day	P. Odor Yes ___ No ___

(CONTINUED ON OTHER SIDE)

OR LOCATION / FACILITY / EMISSION POINT: A / 1000 / 33 / R0001

A ADD
C CHANGE
D DELETE

READ INSTRUCTIONS CONTAINED IN FORM 76-11-12 BEFORE ANSWERING ANY QUESTION

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

P80033-02Z

PROCESS, EXHAUST OR VENTILATION SYSTEM

ORIGINAL-KEEP IN FILE

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

SECTION A

1. NAME OF OWNER / FIRM	9. NAME OF AUTHORIZED AGENT	10. TELEPHONE
Budd Woodworking Inc.	Stanley Wald, P.E.	718-763-2596
2. NUMBER AND STREET ADDRESS	**11. NUMBER AND STREET ADDRESS**	
54 Franklin Street	2316 East 64th Street	
3. CITY - TOWN - VILLAGE / **4. STATE** / **5. ZIP**	**12. CITY - TOWN - VILLAGE** / **13. STATE** / **14. ZIP**	
Brooklyn / NY / 11222	Brooklyn / NY / 11234	

6. OWNER CLASSIFICATON
A. ☐ COMMERCIAL C. ☐ UTILITY E. ☐ STATE F. ☐ MUNICIPAL H. ☐ HOSPITAL I. ☐ RESIDENTIAL
B. ☒ INDUSTRIAL D. ☐ FEDERAL G. ☐ EDUC. INST. J. ☐ OTHER

15. NAME OF P.E. OR ARCHITECT PREPARING APPLICATION	16. N.Y.S. P.E. OR ARCHITECT LICENSE NO.	17. TELEPHONE
Stanley Wald, P.E.	36068	718-763-2596

7. NAME & TITLE OF OWNERS REPRESENTATIVE	8. TELEPHONE	18. SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT
Serafin Caamano, Pres.	718-389-1110	

19. FACILITY NAME (IF DIFFERENT FROM OWNER / FIRM)	
20. FACILITY LOCATION (NUMBER AND STREET ADDRESS)	
21. CITY - TOWN - VILLAGE	22. ZIP
23. BUILDING NAME OR NUMBER	24. FLOOR NAME OR NUMBER: 1st & 2nd fl. & yard
25. START UP DATE: 1 (MO) / 02 (YR)	26. DRAWING NUMBERS OF PLANS SUBMITTED: A2820

27. PERMIT TO CONSTRUCT: A. ☒ NEW SOURCE B. ☐ MODIFICATION
28. CERTIFICATE TO OPERATE: A. ☐ NEW SOURCE C. ☐ EXISTING SOURCE B. ☐ MODIFICATION

SEC. B

29. EMISSION POINT ID.	30. GROUND ELEVATION (FT.)	31. HEIGHT ABOVE STRUCTURES (FT.)	32. STACK HEIGHT (FT.)	33. INSIDE DIMENSIONS (IN.)	34. EXIT TEMP.(°F)	35. EXIT VELOCITY (FT./SEC.)	36. EXIT FLOW RATE (ACFM)
I000 A	25	4	30	22	70	3	10000

37. SOURCE CODE	38. HRS / DAY	39. DAYS / YR	40. % OPERATION BY SEASON: Winter	Spring	Summer	Fall
1101	8	200	25	25	25	25

SEC. C

41. DESCRIBE PROCESS OR UNIT

1. Erect Air Pollution Control Equipment in yard connected to exhaust system to remove wood shavings
2.
3. from woodworking machinery located on 1st & 2nd floors
4.
5. (Woodworking)
6.
7.
8.

SEC. D

EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
42. 02	43. 99	44. 22" Exhauster 25HP	45.	46. /	47.
48. 01	49. 08	50. Deidan Dust Arrestor	51. 9	52. 1/02	53. 20

SECTION E

CALCULATIONS

Air to be recycled back into factory during winter months.

25# of wood shavings collected /hr.

ERP = .01#/hr.

SEC. F

CONTAMINANT NAME	CONTAMINANT CAS NUMBER	INPUT OR PRODUCTION	UNIT	ENV RATING	EMISSIONS ACTUAL	EMISSIONS UNIT	EMISSIONS HOW DET.	EMISSIONS PERMISSIBLE	% CONTROL EFFIC'CY	HOURLY EMISSIONS (LBS/HR) ERP	HOURLY EMISSIONS (LBS/HR) ACTUAL	ANNUAL EMISSIONS (LBS/YR) ACTUAL	ANNUAL EMISSIONS (LBS/YR) 10^x	ANNUAL EMISSIONS (LBS/YR) PERMISSIBLE
54. Wood Particles	55. NY 075 - 00 0	56.	57.	58. C	59. .01	60. 1	61. 6	62.	63. 99.9	64. 25.0	65. .01	66. 16	67. 0	68.
69.	70. - -	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	82.	83.
84.	85. - -	86.	87.	88.	89.	90.	91.	92.	93.	94.	95.	96.	97.	98.
99.	100. - -	101.	102.	103.	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.
114.	115. - -	116.	117.	118.	119.	120.	121.	122.	123.	124.	125.	126.	127.	128.
129.	130. - -	131.	132.	133.	134.	135.	136.	137.	138.	139.	140.	141.	142.	143.

SEC. G

SOLID FUEL TYPE	SOLID FUEL TONS / YR	SOLID FUEL % S	LIQUID FUEL TYPE	LIQUID FUEL THOUSANDS OF GALLONS/YR	LIQUID FUEL % S	GAS TYPE	GAS THOUSANDS OF CF/YR	GAS BTU/CF	APPLICABLE RULE	APPLICABLE RULE
144.	145.	146.	147.	148.	149.	150.	151.	152.	153. 212	154.

Upon completion of construction sign the statement listed below and forward to the appropriate field representative

THE PROCESS. EXHAUST OR VENTILATION SYSTEM HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

155. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT

DATE: 12/5/01

AGENCY USE ONLY

156. LOCATION CODE	157. FACILITY ID. NO.	158. U.T.M. (E)	159. U.T.M. (N)	160. SIC NUMBER	161. DATE APPL. RECEIVED	162. DATE APPL. REVIEWED	163. REVIEWED BY:
					/ /	02/07/02	A.S.

PERMIT TO CONSTRUCT

164. DATE ISSUED	165. EXPIRATION DATE	166. SIGNATURE OF APPROVAL	167. FEE
/ /	/ /		

168.
1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT
2. THIS IS NOT A CERTIFICATE TO OPERATE
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

CERTIFICATE TO OPERATE

169. DATE ISSUED	170. EXPIRATION DATE	171. SIGNATURE OF APPROVAL	172. FEE
/ /	/ /		

173.
1. ☐ INSPECTED BY _____ DATE _____
2. ☐ INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM
3. ☐ ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT
4. ☐ APPLICATION FOR C.O. DENIED _____ (DATE) _____ (INITIALED)

311C

174. SPECIAL CONDITIONS:

1. PA 7-02 T	2.
3.	4.
5.	6.
7.	8.

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: Scheel Corporation, 38 Franklin Street, GROUND, Brooklyn, NY 11222

OWNER Information: Scheel Corporation, 38 Franklin Street Brooklyn NY 11222

Installation #: **PB016407**
Issued: **6/4/2019**
Expiration: **4/18/2022**
Request ID: **257037**

Legalization: Yes

Environmental Rating: C

Emission Point: 2

Operational Hours/day: 6

Days/year: 250

Number of units: 1

ACFM/Unit: 1100

Contaminant(s): PM

Control(s): Bag House

Description: Dust Collector

Installation Type: Other Industrial Sources

Equipment Type:

Material Being Processed: Wax blocks processing
Desc.: Wax processor used to manufacture the wax pellets.
1 - Pulverizer

Description of Process:
Manufacturing of wax pellets.

Special Conditions:
NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PB016407

R. Radhakrishnan, P.E.
Director of Engineering/For the Commissioner

DEP Registrations

Installation #:

PB 0160407

07037

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Compliance
59-17 Junction Boulevard, 9th Floor, Flushing, New York 11373-5108
RECORDS CONTROL (718) 595-3855

Y25312

Emily Lloyd,
Commissioner

Robert C. Avaltroni,
Deputy Commissioner

ORIGINAL - KEEP IN FILE

DATE: 4/30/07

INSTALLATION #: PB016407 L

RE: 38 FRANKLIN STREET (PREMISES ADDRESS) BROOKLYN (Borough)

PROFESSIONAL CERTIFICATION

Being duly mindful of my responsibilities as a licensed Professional Engineer / Registered Architect in the State of New York and acting as designated agent for the applicant, I hereby certify that the application, plans and all supplementary documents submitted in connection with this filing are complete and fully comply with all applicable laws, codes, rules, regulations and directives of the Department of Environmental Protection, Bureau of Environmental Compliance of the City of New York in effect at the time filed.

STATE OF NEW YORK ROBERT F. GERMAIN 071735 PROFESSIONAL ENGINEER

P.E. / R.A. Seal & Signature

Fee $250 Check/Rcpt No 0008195

B.E.C. Clerk

INSTRUCTIONS: Pursuant to Engineering Directive # 1-78, this certification must be submitted in triplicate with all APC 5-0, APC 5-R and APC5-PA applications and does not preclude the necessity to sign and seal the certification now contained on the application forms. This certification shall also be submitted in triplicate with all APC 5-0 applications submitted and certified by a Professional Engineer / Registered Architect.

2007 MAY -7 P 12:03
DEP AIR PERMITTING

(Revised 10/04/05)

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Environmental Compliance
59-17 Junction Boulevard, 9th Floor, Flushing, New York 11373-5107
Records Control (718) 595-3855

07037

Emily Lloyd, Commissioner

Robert C. Avaltroni, Deputy Commissioner

ORIGINAL - KEEP IN FILE

INDUSTRIAL PROCESSES DIVISION
ENVIRONMENTAL RATING REPORT
SUMMARY OF POINTS OF EMISSION

EN NUMBER:

PREMISE IDENTIFICATION NUMBER:

1. COMPANY NAME: SCHEEL CORPORATION

2. PREMISE ADDRESS: 38 FRANKLIN STREET, BROOKLYN, NY ZIP CODE: 11222

3. MAILING ADDRESS: PO BOX 567, CRANBURY, NJ ZIP CODE: 08512

TELEPHONE NUMBER: 718-389-3480

4. NAME OF PERSON PREPARING REPORT: ROBERT F. GERMAIN, ME, PE

5. ADDRESS: 443 EAST FIFTH STREET, MT VERNON, NY ZIP CODE: 10553

6. TELEPHONE NUMBER: 914-668-7086

7. SEC.	LOT	BLOCK
	15	2592

8. EMISSION POINT NUMBER	9. OPERATION PRODUCING EMISSION	10. ENVIRONMENTAL RATING PROPOSED	ASSIGNED BY BEC
00001	WAX PULVERIZING PROCESS	X	

THIS REPORT IS: [X] NEW [ ] REVISION [ ] ADDENDUM

STATE OF NEW YORK ROBERT F. GERMAIN LICENSED PROFESSIONAL ENGINEER

11. SIGNATURE: TITLE: PROFESSIONAL ENGINEER DATE: 5/4/07

07037

99088

APC - APA (Rev. 1/84)

ORIGINAL - KEEP IN FILE

DEPT. OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES
120 WALL STREET, NEW YORK, N. Y. 10005
BUREAU OF ENGINEERING
PROCESS EXHAUST OR VENTILATION SYSTEM
APPLICATION FOR CERTIFICATE OF OPERATION

DCAS CO. | B/C | EMISSION POINT

2592 BLOCK | 15 LOT | M1-1 ZONING
(By Applicant)

PLEASE PRINT OR TYPE xx

SECTION A

1. COMPANY NAME: SCHEEL CORPORATION

2. NUMBER AND STREET ADDRESS: PO BOX 567

3. TOWN OR BORO: CRANBURY | 4. STATE: NJ | 5. ZIP: 08512

6. OWNER CLASSIFICATION: A. [X] COMMERCIAL C. [ ] UTILITY E. [ ] STATE H. [ ] HOSPITAL; B. [ ] INDUSTRIAL D. [ ] FEDERAL F. [ ] MUNICIPAL G. [ ] EDUC. INST. I. [ ] RESIDENTIAL J. [ ] OTHER

7. OWNER OR OFFICER'S NAME: THOMAS CARINI | TITLE:

8. OWNER OR OFFICER'S SIGNATURE: Thomas Carini | 9. TELEPHONE: 718 389-3480

"I hereby affirm under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief, and that the equipment and/or apparatus concerned will be installed, altered and operated in accordance with the requirements of the NYC Air Pollution Control Code. I hereby authorize the P.E. named herein to file this application on my behalf. I hereby acknowledge that false statements are punishable as a Class A misdemeanor pursuant to Section 1403.2-15.25 of the NYC Air Pollution Control Code and Section 210.45 of the Penal Law."

10. NAME OF P.E.: ROBERT F. GERMAIN, P.E. | 11. TELEPHONE: 914 668-7086

12. NUMBER AND STREET ADDRESS: 443 E. 5TH ST.

13. TOWN OR BORO: MT. VERNON | 14. STATE: NY | 15. ZIP: 10553

STATE OF NEW YORK — ROBERT F. GERMAIN — LICENSED PROFESSIONAL ENGINEER — NO. 047135

16. application includes: A. [ ] NEW EQUIP'T C. [X] EXISTING EQUIP'T ONLY; B. [ ] MODIFICATION

I hereby certify to the best of my knowledge and belief to the accuracy of the technical information contained in this application, plans and any supplementary data submitted.

PLACE SEAL ABOVE

17. NYS P.E. Lic. NO.: 047135 | 18. SIGNATURE OF PROFESSIONAL ENGINEER: Robert F. Germain

WORK PERMIT WILL NOT BE ISSUED UNLESS:
(a) INSTALLER IS NAMED AND
(b) WORKMEN'S COMP. & DISABILITY ARE ON FILE WITH DAR

FINAL APPROVAL OF THE INSTALLATION IN THE FORM OF A CERTIFICATE OF OPERATION WILL NOT BE ISSUED UNTIL COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF LAW, RULE AND REGULATION OF THE N.Y.C. AIR POLLUTION CONTROL CODE HAS BEEN VERIFIED AT THE INSTALLATION SITE BY A REPRESENTATIVE OF THE DEPARTMENT.

"I hereby certify that upon approval of this application, plans and any supplementary data, I will make the installation of and adjustments to the equipment and/or apparatus described herein."

Installer's Signature _____

Company Name of Installer: BY OWNER | Installer's Name _____ | Title _____

Company Address _____ | Town or Boro _____ | State _____ | Zip _____

19. FACILITY NAME (IF DIFFERENT FROM COMPANY NAME): SCHEEL CORPORATION

20 FACILITY LOCATION (NUMBER AND STREET ADDRESS): 38 FRANKLIN ST.

21. BORO: BROOKLYN | 22. ZIP: 11122

23. BLDG. NAME OR NUMBER: | 24. FLOOR NAME OR NUMBER: 1ST / GROUND

25. DATE APPLICATION RECEIVED: 5/7/07 | 26. IDENTIFICATION #: RB0164-07L

27. DATE APPLICATION REVIEWED: / / | 28. APPLICATION INCLUDES: A. [ ] NEW EQUIP'T C. [ ] EXISTING EQUIP'T ONLY; B. [ ] MODIFICATION

ASSIGN NYC - DAR PREMISES I.D. NO. AND SOURCE EM. PT. NO. IN SECTION B

FEE 250 | DATE OF RECEIPT / / 19 | RECEIPT # 008195 | CASHIER TW

30. CONDITIONS OF WORK PERMIT:
a) PROPOSED DEVIATION FROM APPROVED APPLICATION MUST BE BY FILING OF AMENDMENT, AND APPROVAL OF SAME.
b) STACK TEST REQUIRED YES [ ] NO [ ]
c) APPROVAL OF THIS APPLICATION DOES NOT IN ANY WAY ALTER, AFFECT OR CHANGE THE REQUIREMENT(S) FOR OTHER LICENCES OR PERMITS AS MAY BE REQUIRED BY OTHER GOVERNMENTAL AGENCIES AND DEPARTMENTS

APPROVED FOR WORK PERMIT ONLY:

by Head, Industrial Processes Division

by Director of Engineering

C.O. APPROVAL: 41. DATE ISSUED / / | 42. EXP. DATE / /

EM No. /Yr. 1

Date / / COPY TO NYS - DEC

FOR AGENCY USE ONLY

29. LOCATION CODE	30. FACILITY ID NO.	31. U.T.M.(E)	32. U.T.M.(N)	33. SIC NUMBER

WORK PERMIT: 37. DATE ISSUED / / | 38. DATE EXPIRES / /

SECTION B

43. SPRAY BOOTHS: (FURNISH DATA &/OR CHECK APPROPRIATE BOXES)

Mfr.	Model	Frontal opening: Height x Width C. D.	Baffles: Single E.	Triple F.	Filters G.	Water wash H.
A.	B.					

Handgun I.	Automatic J.	Air atomizing K.	Airless L.	Electrostatic M.	Coating Mat'l N.	NO. Use Rate Max. ___ Gals./Hr. ___ Hrs./Day	P. Odor Yes _ No _

Job: 07037 38 FRANKLIN STREET, BROOKLYN, NY 11122

AMERICAN PULVERIZER MODEL P&R

CONTAMINANT	CAS	USAGE LBS/YR	USAGE TON/YR	USAGE LBS/HR	USAGE TON/HR	PM-10 LB/TON	LB/HR	LB/YR	TON/YR
KEMAMIDE	110-30-5	332000	166	159.6154	0.079808	0.00054	0.00004310	179.28	0.08964
SASOLWAX H-1	8002-74-2	575000	287.5	276.4423	0.138221	0.00054	0.00007464	310.5	0.15525
AC-8 POLYETHYLENE	9002-88-4	179000	89.5	86.05769	0.043029	0.00054	0.00002324	96.66	0.04833
AC-325 POLYETHYLENE	68441-17-8	174000	87	83.65385	0.041827	0.00054	0.00002259	93.96	0.04698
HI WAX 200P	9002-88-4	278000	139	133.6538	0.066827	0.00054	0.00003609	150.12	0.07506

Vincent Sapienza, P.E.
Commissioner

THE CITY OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Environmental Compliance
59-17 Junction Blvd. 9th Floor, Flushing, NY 11373
Records Control (718) 595-3855

Michael Gilsenan
Assistant Commissioner
Environmental Compliance

CERTIFICATE TO OPERATE

PREMISES ADDRESS: W.H. CHRISTIAN & SONS INC., 22 FRANKLIN STREET, Brooklyn, NY 11222

OWNER Information: W.H. CHRISTIAN & SONS INC., 22 FRANKLIN STREET
BROOKLYN N.Y. 11222

Installation #: **PB033501**
Issued: **7/30/2019**
Expiration: **10/25/2022**
Request ID: **276070**

Legalization: Yes

Environmental Rating: C

Emission Point: #7

Operational Hours/day: 6

Days/year: 200

Number of units: 1

ACFM/Unit: 3700

Contaminant(s): PM

Control(s): Filter

Description: Internal Lint Filter Trap.

Installation Type: Other Industrial Sources

Equipment Type:

Material Being Processed: Fabrics
Desc.: Commercial Laundry Dryer.
1 - Milnor #ML-175

Description of Process:
Laundry Drying.

Special Conditions:
NA

The holder of this certificate of operation is responsible for the use of the equipment in accordance with all the applicable requirements and provisions of the New York City Air Pollution Control Code. Violations of the Air Pollution Control Code can result in the imposition of penalties by the Environmental Control Board. This Certificate must be posted in the vicinity of the designated equipment. It may not be transferred to any other equipment.

Application for Renewal of this certificate of operation must be submitted no later than ninety (90) days prior to the expiration date.

DISPLAY CERTIFICATE ON PREMISES NEAR EQUIPMENT

PB033501

Kit Liang

Kit Liang, P.E.
Director of Engineering

case

DEP Registrations

Installation #:

PB 033501

OP LOCATION FACILITY EMISSION POINT
A 1601 00003 11132 00001

A ADD
C CHANGE
D DELETE

READ INSTRUCTIONS CONTAINED IN FORM 76-11-12 BEFORE ANSWERING ANY QUESTION

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PB0335-01P

PROCESS, EXHAUST OR VENTILATION SYSTEM

APPLICATION FOR PERMIT TO CONSTRUCT OR CERTIFICATE TO OPERATE

ORIGINAL-KEEP IN FILE

SECTION A

1. NAME OF OWNER / FIRM	9. NAME OF AUTHORIZED AGENT	10. TELEPHONE
W.H. Christian & Sons	Stanley Wald, P.E.	718-763-2596

2. NUMBER AND STREET ADDRESS	11. NUMBER AND STREET ADDRESS
22 Franklin Street	2316 East 64th Street

3. CITY - TOWN - VILLAGE	4. STATE	5. ZIP	12. CITY - TOWN - VILLAGE	13. STATE	14. ZIP
Brooklyn	NY	11222	Brooklyn	NY	11234

6. OWNER CLASSIFICATON
A. ☐ COMMERCIAL C. ☐ UTILITY E. ☐ STATE F. ☐ MUNICIPAL H. ☐ HOSPITAL I. ☐ RESIDENTIAL
B. ☒ INDUSTRIAL D. ☐ FEDERAL G. ☐ EDUC. INST. J. ☐ OTHER

15. NAME OF P.E. OR ARCHITECT PREPARING APPLICATION	16. N.Y.S. P.E. OR ARCHITECT LICENSE NO.	17. TELEPHONE
Stanley Wald, P.E.	36068	718-763-2596

7. NAME & TITLE OF OWNERS REPRESENTATIVE	8. TELEPHONE
Robert Kunzelman, Maint.	718-389-7000

18. SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT

19. FACILITY NAME (IF DIFFERENT FROM OWNER / FIRM)	
20. FACILITY LOCATION (NUMBER AND STREET ADDRESS)	
21. CITY - TOWN - VILLAGE	22. ZIP
23. BUILDING NAME OR NUMBER	24. FLOOR NAME OR NUMBER: 1st
25. START UP DATE: 1 / 00 (MO / YR)	26. DRAWING NUMBERS OF PLANS SUBMITTED: A2805

27. PERMIT TO CONSTRUCT
A. ☐ NEW SOURCE
B. ☐ MODIFICATION

28. CERTIFICATE TO OPERATE
A. ☐ NEW SOURCE C. ☒ EXISTING SOURCE
B. ☐ MODIFICATION

SEC. B

29. EMISSION POINT ID.	30. GROUND ELEVATION (FT.)	31. HEIGHT ABOVE STRUCTURES (FT.)	32. STACK HEIGHT (FT.)	33. INSIDE DIMENSIONS (IN.)	34. EXIT TEMP.(°F)	35. EXIT VELOCITY (FT./SEC.)	36. EXIT FLOW RATE (ACFM)
00007	25	-20	12	12	70	43	2000

37. SOURCE CODE	38. HRS / DAY	39. DAYS / YR	40. % OPERATION BY SEASON: Winter	Spring	Summer	Fall
1404	8	200	25	25	25	25

SEC. C

41. DESCRIBE PROCESS OR UNIT		
1. Unimac Steam Heated Laundry Dryer	2.	
3. (Laundry)	4.	
5.	6.	
7.	8.	

SEC. D

EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
42. 02	43. 99	44. 12" Integral Fan 1½HP	45.	46. /	47.
48. 01	49. 98	50. Lint Trap	51. 9	52. 1 / 00	53. 20

SECTION E

CALCULATIONS

1# of lint collected /10 hrs. = .1#/hr.

ERP = .1 / .98 = .102#.hr.

SECTION F

CONTAMINANT NAME	CONTAMINANT CAS NUMBER	INPUT OR PRODUCTION	UNIT	ENV. RATING	EMISSIONS ACTUAL	EMISSIONS UNIT	EMISSIONS HOW DET.	EMISSIONS PERMISSIBLE	% CONTROL EFFIC'CY	HOURLY EMISSIONS (LBS/HR) ERP	HOURLY EMISSIONS (LBS/HR) ACTUAL	ANNUAL EMISSIONS (LBS/YR) ACTUAL	ANNUAL EMISSIONS (LBS/YR) 10^x	ANNUAL EMISSIONS (LBS/YR) PERMISSIBLE
54. Lint	55. NY 075 00 0	56.	57.	58. C	59. .002	60. 1	61. 6	62.	63. 98	64. .102	65. .002	66. 3.2	67. 0	68.
69.	70.	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.	82.	83.
84.	85.	86.	87.	88.	89.	90.	91.	92.	93.	94.	95.	96.	97.	98.
99.	100.	101.	102.	103.	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.
114.	115.	116.	117.	118.	119.	120.	121.	122.	123.	124.	125.	126.	127.	128.
129.	130.	131.	132.	133.	134.	135.	136.	137.	138.	139.	140.	141.	142.	143.

SEC. G

SOLID FUEL TYPE	SOLID FUEL TONS / YR	SOLID FUEL % S	LIQUID FUEL TYPE	LIQUID FUEL THOUSANDS OF GALLONS/YR	LIQUID FUEL % S	GAS TYPE	GAS THOUSANDS OF CF/YR	GAS BTU/CF
144.	145.	146.	147.	148.	149.	150.	151.	152.

APPLICABLE RULE	APPLICABLE RULE
153. 212	154.

Upon completion of construction sign the statement listed below and forward to the appropriate field representative

THE PROCESS, EXHAUST OR VENTILATION SYSTEM HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

155. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT — DATE: 1/22/01

AGENCY USE ONLY

156. LOCATION CODE	157. FACILITY ID. NO.	158. U.T.M. (E)	159. U.T.M. (N)	160. SIC NUMBER	161. DATE APPL. RECEIVED	162. DATE APPL. REVIEWED	163. REVIEWED BY:
		587.8	4509.3	2211	/ /	/ /	A.G.

PERMIT TO CONSTRUCT

164. DATE ISSUED	165. EXPIRATION DATE	166. SIGNATURE OF APPROVAL	167. FEE
/ /	/ /		250

168.
1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT
2. THIS IS NOT A CERTIFICATE TO OPERATE
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

CERTIFICATE TO OPERATE

169. DATE ISSUED	170. EXPIRATION DATE	171. SIGNATURE OF APPROVAL	172. FEE
/ /	/ /		

*311C

173.
1. ☐ INSPECTED BY _____ DATE _____
2. ☐ INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM
3. ☐ ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT
4. ☐ APPLICATION FOR C.O. DENIED _____ (DATE) _____ (INITIALED)

174. SPECIAL CONDITIONS:

1. PA 0023-01T	2.
3.	4.
5.	6.
7.	8.

THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard, 9th Floor, Corona, New York 11368-5107
JOEL A. MIELE SR., P.E., Commissioner

ROBERT C. AVALTRONI
Deputy Commissioner

Bureau of Air Noise & Hazardous Materials

Date: 1/22/01

ORIGINAL-KEEP IN FILE

PA 0023-01T
(Installation Number)

(EN Number)

Re: 22 Franklin Street (Premise Address) Brooklyn (Boro)

PROFESSIONAL CERTIFICATION

Being duly mindful of my responsibilities as a Licensed Professional Engineer in the State of New York and acting as Designated Agent for the applicant, I hereby certify that the application, plans and all supplementary documents submitted in connection with this filing are complete and fully comply with all applicable laws, codes, rules, regulations and directives of the Department of Environmental Protection, Bureau of Air, Noise & Hazardous Materials of the City of New York in effect at the time filed.

Stanley Wald

STATE OF NEW YORK STANLEY WALD No. 36068 P.E. LICENSED PROFESSIONAL ENGINEER

P.E. Seal & Signature

FOR DEP USE ONLY	

Company Name of Installer: Legalize

Company Address:

Town or Boro **State:** **Zip:**

Installer's Name: **Title:**

Installer's Signature:

DEC - EPA
(Rev. 1/76)

The City of New York

ENVIRONMENTAL PROTECTION ADMINISTRATION
DEPARTMENT OF AIR RESOURCES
120 WALL STREET, NEW YORK, N. Y. 10005
BUREAU OF ENGINEERING
PROCESS EXHAUST OR VENTILATION SYSTEM
APPLICATION FOR CERTIFICATE OF OPERATION

ORIGINAL-KEEP IN FILE

2592 BLOCK | 6 LOT | M1 ZONING (By Applicant)

PLEASE PRINT OR TYPE ALL

SECTION A

1. COMPANY NAME: W.H. Christian & Sons
10. NAME OF P.E.: Stanley Wald
11. TELEPHONE: 763-2596
19. FACILITY NAME (IF DIFFERENT FROM COMPANY NAME): same

2. NUMBER AND STREET ADDRESS: 22 Franklin Street
12. NUMBER AND STREET ADDRESS: 2316 E.64 St.
20. FACILITY LOCATION (NUMBER AND STREET ADDRESS): same

3. TOWN OR BORO: Brooklyn | 4. STATE: NY | 5. ZIP: 11222
13. TOWN OR BORO: Bklyn | 14. STATE: NY | 15. ZIP: 11234
21. BORO: same | 22. ZIP: same

6. OWNER CLASSIFICATION: A ☐ COMMERCIAL B ☒ INDUSTRIAL C ☐ UTILITY D ☐ FEDERAL E ☐ STATE F ☐ MUNICIPAL G ☐ EDUC INST. H ☐ HOSPITAL I ☐ RESIDENTIAL J ☐ OTHER

16. Application includes: A. ☐ NEW EQUIP'T B. ☐ MODIFICATION C. ☒ EXISTING EQUIP'T ONLY

23. BLDG. NAME OR NUMBER: same | 24. FLOOR NAME OR NUMBER: 1st

7. OWNER OR OFFICER'S NAME: Robert Kunzelman | TITLE: Maintainance

8. OWNER OR OFFICER'S SIGNATURE: Robert Kunzelman | 9. TELEPHONE: 718-389-7000

"I hereby affirm under penalty of perjury that the information provided on this form is true to the best of my knowledge and belief, and that the equipment and/or apparatus concerned will be installed, altered and operated in accordance with the requirements of the NYC Air Pollution Control Code. I hereby authorize the P.E. named herein to file this application on my behalf. I hereby acknowledge that false statements are punishable as a Class A misdemeanor pursuant to Section 1401.2-15.24 of the NYC Air Pollution Control Code and Section 210.45 of the Penal Law."

I hereby certify to the best of my knowledge and belief to the accuracy of the technical information contained in this application, plans and any supplementary data submitted.

PLACE SEAL ABOVE

17. NYS P.E. Lic. NO.: 36068 | 18. SIGNATURE OF PROFESSIONAL ENGINEER: Stanley Wald

25. DATE APPLICATION RECEIVED: -1 1 | 26. IDENTIFICATION #: A0023-01T

27. DATE APPLICATION REVIEWED: 02 122 1200 | 28. APPLICATION INCLUDES: A. ☐ NEW EQUIP'T B. ☐ MODIFICATION C. ☒ EXISTING EQUIP'T ONLY

ASSIGN NYC - DAN PREMISES I.D. NO. AND SOURCE EM. PT. NO. IN SECTION B

FEE: $200 DATE OF RECEIPT ____ 19__

RECEIPT # ____ CASHIER ____

NO WORK PERMIT WILL NOT BE ISSUED UNLESS:
(a). INSTALLER IS NAMED AND
(b). WORKMEN'S COMP. & DISABILITY ARE ON FILE WITH DAN

FINAL APPROVAL OF THE INSTALLATION IN THE FORM OF A CERTIFICATE OF OPERATION WILL NOT BE ISSUED UNTIL COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF LAW, RULE AND REGULATION OF THE N.Y.C. AIR POLLUTION CONTROL CODE HAS BEEN VERIFIED AT THE INSTALLATION SITE BY A REPRESENTATIVE OF THE DEPARTMENT.

"I hereby certify that upon approval of this application, plans and any supplementary data, I will make the installation of and adjustments to the equipment and/or apparatus described herein."

Installer's Signature _____

Company Name of Installer: Legalize | Installer's Name _____ | Title _____

Company Address _____ | Town or Boro _____ | State _____ | Zip _____

NO. CONDITIONS OF WORK PERMIT:
a) PROPOSED DEVIATION FROM APPROVED APPLICATION MUST BE BY FILING OF AMENDMENT, AND APPROVAL BY DAN.
b) STACK TEST REQUIRED YES ☐ NO ☐
c) APPROVAL OF THIS APPLICATION DOES NOT IN ANY WAY ALTER, AFFECT OR CHANGE THE REQUIREMENT(S) FOR OTHER LICENCES OR PERMITS AS MAY BE REQUIRED BY OTHER GOVERNMENTAL AGENCIES AND DEPARTMENTS.

APPROVED FOR WORK PERMIT ONLY:

by Head, Industrial Processes Division

Director of Engineering

FOR AGENCY USE ONLY

29 LOCATION CODE	30 FACILITY ID NO	31 U T M (E)	32 U T M (N)	33 SIC NUMBER	WORK PERMIT 37. DATE ISSUED	38. DATE EXPIRES
					/ /	/ /

C.O. APPROV

41. DATE ISSUED	42. EX.	43. DATE
/ /	/ /	

SECTION B

40. ANY BOOTHS: (FURNISH DATA B/OR CHECK APPROPRIATE BOX(ES)

Air.	Hood	Frontal opening: Height x Width	Baffles: Single	Baffles: Triple	Filters	Water wash
A.	B.	C. D.	E.	F.	G.	H.

Manogun I.	Automatic J.	Air atomizing K.	Airless L.	Electrostatic M.	Coating Mat'l N.	VO. Use Rate Max. ___ Gals./Hr. ___ Hrs./Day	P. Odor Yes _ No _

No. /Hr. 1

Date / / COPY TO NYS - DEC

(CONTINUED ON OTHER SIDE)

THE CITY OF NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard, 9th Floor, Corona, New York 11368-5107
JOEL A. MIELE SR., P.E., Commissioner

ROBERT C. AVALTRONI
Deputy Commissioner

Bureau of Air Noise & Hazardous Materials

INDUSTRIAL PROCESSES DIVISION
ENVIRONMENTAL RATING REPORT
SUMMARY OF POINTS OF EMISSION

ORIGINAL-KEEP IN FILE

EN NO. _____

Premise Identification No.

1. **Company Name** W.H. Christian & Sons
2. **Premise Address** 22 Franklin Street Brooklyn **Zip** 11222
3. **Mailing Address** same **Zip** _____

   Telephone No. 718-389-7000
4. **Name of Person Preparing Report** Stanley Wald, P.E.
5. **Address** 2316 East 64th Street Brooklyn, NY **Zip** 11234
6. **Telephone No.** 718-763-2596

7. SEC.	LOT	BLOCK
	6	2592

8. Emission Point No.	9. Operation Producing Emission	10. Environmental Rating Proposed	Assigned By BAR
7	Unimac Laundry Dryer (steam) (E.S.#1-6 filed previously)	D	C

This Report is: **New** ☐ **Revision** ☐ **Addendum** ☒

Signature Stanley Wald **Title** P.E. **Date** 1/22/01

STATE OF NEW YORK STANLEY WALD No. 36068 P.E. LICENSED PROFESSIONAL ENGINEER

Appendix E: WRP Assessment Form

FOR INTERNAL USE ONLY	WRP No. 19-170
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Quay Plaza, LLC

Name of Applicant Representative: Equity Environmental Engineering

Address: 500 International Dr. Suite 150, Mount Olive NJ 07828

Telephone: 973-527-7541 Email: kira.xiang@equityenvironmental.com

Project site owner (if different than above): _____

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant, Quay Plaza, LLC, is seeking the approval of a zoning map amendment and a zoning text amendment affecting 79 Quay Street (Block 2589, Lot 1), 85 Quay Street (Block 2589, Lot 23), and 95 Quay Street (Block 2589, Lot 13). The zoning map amendment would rezone Block 2589, Lots 1, p/o 23, and p/o 13 from M1-2/R6A (MX-8) zoning district to an M1-4/R7D (MX) zoning district. The zoning text amendment would affect Zoning Resolution section 123-63 by adding R7D to designated residence districts in MX-8. The Applicant is also requesting a Zoning Text Amendment to map the area for a Mandatory Inclusionary Housing Area.

2. Purpose of activity

The Proposed Project would replace the existing building on 79 Quay Street with a 119,005 GSF, 9-story, 101-foot-tall mixed-use building to help induce the development of an underutilized lot as well as to provide permanently affordable housing units in alignment with the needs of city's affordable housing provision goals.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 2589, Lots 1, p/o 23, and p/o 13

Street Address: 79, 85, and 95 Quay Street

Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☑ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit
  (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1. Does the project require a waterfront site? ☐ Yes ☑ No
2. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters? ☐ Yes ☑ No
3. Is the project located on publicly owned land or receiving public assistance? ☐ Yes ☑ No
4. Is the project located within a FEMA 1% annual chance floodplain? *(6.2)* ☑ Yes ☐ No
5. Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)* ☐ Yes ☑ No
6. Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).* ☐ Yes ☑ No

   ☐ Significant Maritime and Industrial Area (SMIA) (*2.1*)

   ☐ Special Natural Waterfront Area (SNWA) (*4.1*)

   ☐ Priority Maritime Activity Zone (PMAZ) (*3.5*)

   ☐ Recognized Ecological Complex (REC) (*4.4*)

   ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) (*2.2, 4.2*)

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☐	☐	☑
5.1	Manage direct or indirect discharges to waterbodies.	☐	☐	☑
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☐	☐	☑
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☐	☐	☑
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☐	☐	☑
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☐	☐	☑
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☐
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☐
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☐
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☐
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☐
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☐

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Equity Environmental Engineering

Address: 500 International Dr, Suite 150 Mount Olive NJ 07828

Telephone: 917-470-3077 Email: kira.xiang@equityenvironmental.com

Applicant/Agent's Signature: Kira Xiang

Date: 6/16/21

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

New York City Coastal Zone

The Project Site is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures; therefore, the Proposed Actions must be reviewed and assessed for consistency with the policies set forth in the New York City Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation and public use of the waterfront while minimizing any potential conflicts among these objectives. The WRP Consistency Assessment Form (CAF) was completed and is provided in Appendix E. The CAF assists the Applicant in identifying the relevant WRP policies and certifying that the project is consistent with the WRP.

The Proposed Actions place one new mixed-use structure in a designated "AE Zone" within the 1% annual chance floodplain (100-year flood zone) as per the 2015 FEMA Preliminary Flood Insurance Rate Maps (PFIRM) and the 2007 effective Flood Insurance Rate Maps (FIRMS).

High Risk Areas

Zone AE are areas that have a 1% probability of flooding every year (also known as the "100-year floodplain"), and where predicted flood water elevations above mean sea level have been established. Properties in Zone AE are considered to be at high risk of flooding under the National Flood Insurance Program (NFIP). Besides designating the geography and risk profile where flood events are likely to happen, the FIRMs also indicate the Base Flood Elevation (BFE), the computed elevation to which floodwater is anticipated to rise during a flood that has a 1% chance of occurring in any given year. The most recent maps issued by FEMA, the 2015 Preliminary FIRMs, are used for building code, planning, and zoning purposes, whereas the effective FIRMs issued in 2007 by FEMA are still in use for flood insurance purposes.

The WRP Consistency Assessment Form (CAF) was completed to determine the consistency of the proposed project with the Waterfront Revitalization Program's (WRP's) ten policies. Additionally, as the site is located within the boundaries of a flood zone, the Flood Evaluation Worksheet was also completed. The Flood Evaluation Worksheet allows applicants to calculate future flood elevations and assess site-specific risks to vulnerable or critical project features. (Refer to Appendix E and Policy 6).

Based on the information provided in the CAF, a Detailed Methodology and policy response is provided below, which incorporates the findings of the Flood Evaluation Worksheet, and the Proposed Actions consistency with the applicable WRP Policies (Policy 1 and 6) and Sub-Policies (Policy 1.1, 1.3, 1.5, 6.1, 6.2).

Waterfront Revitalization Program

Because the Project Site is within the Coastal Management Zone, it is subject to consistency review under the New York City Waterfront Revitalization Program (WRP). The WRP Form was completed, and is attached. Based on the information provided in the WRP Form, the proposed project requires assessment relative to the following policies:

Policy 1: Support and Facilitate Commercial and Residential Development in Areas Well-Suited to Such Development

Sub-Policy 1.1: Encourage commercial and residential development in appropriate coastal zone areas.

Criteria that should be considered to determine areas appropriate for reuse through public and private actions include: compatibility with the continued functioning of the designated Special Natural Waterfront Areas, the Arthur Kill Ecologically Sensitive Maritime and Industrial Area, or Significant Maritime and Industrial Areas, where applicable; the absence of unique or significant

natural features or, if present, the potential for compatible development; the presence of substantial vacant or underused land; proximity to existing residential or commercial uses; the potential for strengthening upland residential or commercial areas and for opening up the waterfront to the public; transportation access; the maritime and industrial jobs potentially displaced or created; and the new opportunities created by redevelopment. Public actions— such as property disposition, urban renewal plans, and infrastructure provision—should facilitate

redevelopment of underused property to promote housing and economic development and enhance the city's tax base, subject to consideration of Policy 2, where applicable.

The Proposed Actions are consistent with this policy. It would allow redevelopment of an underutilized site between two major commercial corridors in close proximity to established and newly emerging commercial and retail areas that is well served by public transit, local commercial services, and open space and community facilities.

Sub-Policy 1.3 Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.

Encourage development at a density compatible with the capacity of surrounding roadways, mass transit, and essential community services such as public schools. Lack of adequate local infrastructure need not preclude development, but it may suggest the need to upgrade or expand inadequate or deteriorated local infrastructure.

The Proposed Actions are consistent with this policy. The project would redevelop an underutilized site for retail and residential uses in close proximity to high-capacity roadways, mass transit infrastructure, and would integrate the site into the surrounding residential and commercial area.

Sub-Policy 1.5 Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development pursuant to WRP Policy 6.2.

Residential, commercial, and other non-industrial projects that comply with Article 6 Chapter 2 of the New York City Zoning Resolution satisfy the consistency requirements for Policy 1.2. If the project is not subject to the Zoning Resolution, the standards of Article 6 Chapter 2 of the Zoning Resolution should be used as guidelines for development and the inclusion of open space, visual access, upland connections, and water-related uses.

The Proposed Actions are consistent with this policy. The new development would incorporate building features as required by the New York City Building Code Appendix G Flood Resistant Construction Standards.

Policy 6: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, And Increase Resilience to Future Conditions Created by Climate Change.

Policy 6.1 Minimize losses from flooding and erosion by employing non-structural and structural design measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Where shoreline protection is necessary to protect development, it should incorporate climate change projections into its design, pursuant to Policy 6.2. Shoreline protection can be structural, natural, or a hybrid. An appropriate form of shoreline protection should protect public health and safety while minimizing impacts on ecosystems and public access.

As indicated below in **Figure 2.1-2**, the Project Site is located within the 2007 FIRMs and 2015 PFIRMS 1% annual chance floodplain (100-year flood zone). Under Policy 6, the primary goal for projects within flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase due to climate change and sea level rise.

As the project site falls within the 1% annual chance floodplain, the proposed building would be subject to compliance with NYC Building Code Appendix G. Appendix G requires owners of severely damaged or destroyed buildings in the 1% annual chance floodplain to comply with the flood resistant construction standards of the Building Code when they rebuild. The same requirements are applicable to any new development, or substantially improved properties, whether the development is located in whole or in part within the 1% annual chance floodplain. Areas of high flood hazard risk are prone to flooding, and habitable areas for any new construction must begin one foot above the BFE, also known as The Design Flood Elevation (DFE)[1] or Flood Resistant Construction Elevation (FRCE).

As further discussed in Policy 6.2 below, the proposed building design must incorporate floodproofing measures to protect building features below the DFE (See **Figure 2.1-1**). Therefore, the Proposed Project would meet the requirements of building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards and would be consistent with Policy 6.1.

[1] The elevation of the project's flood protection including the height of the BFE plus any additional freeboard.

Figure 2.1-1: Proposed Building Elevation

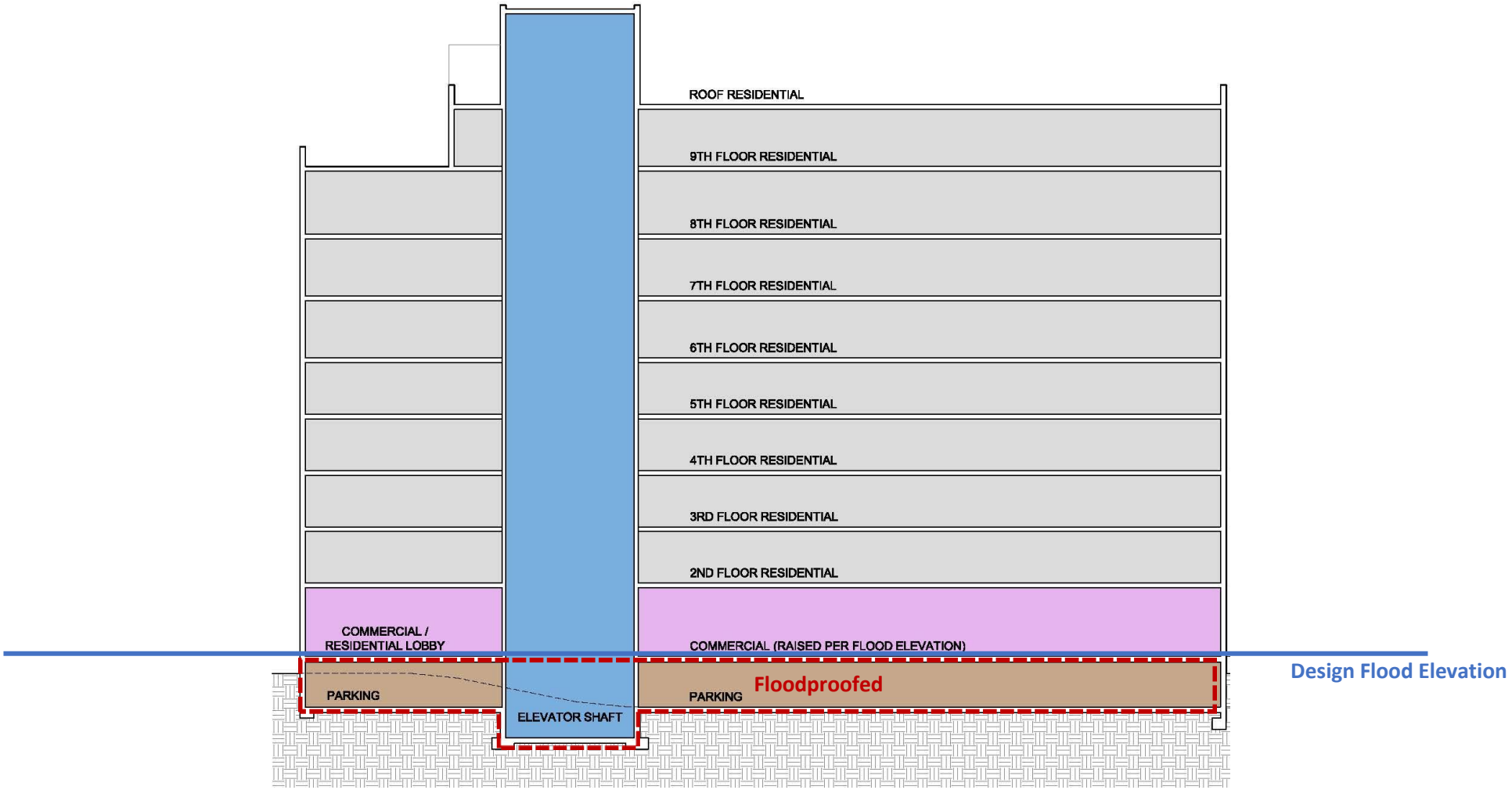
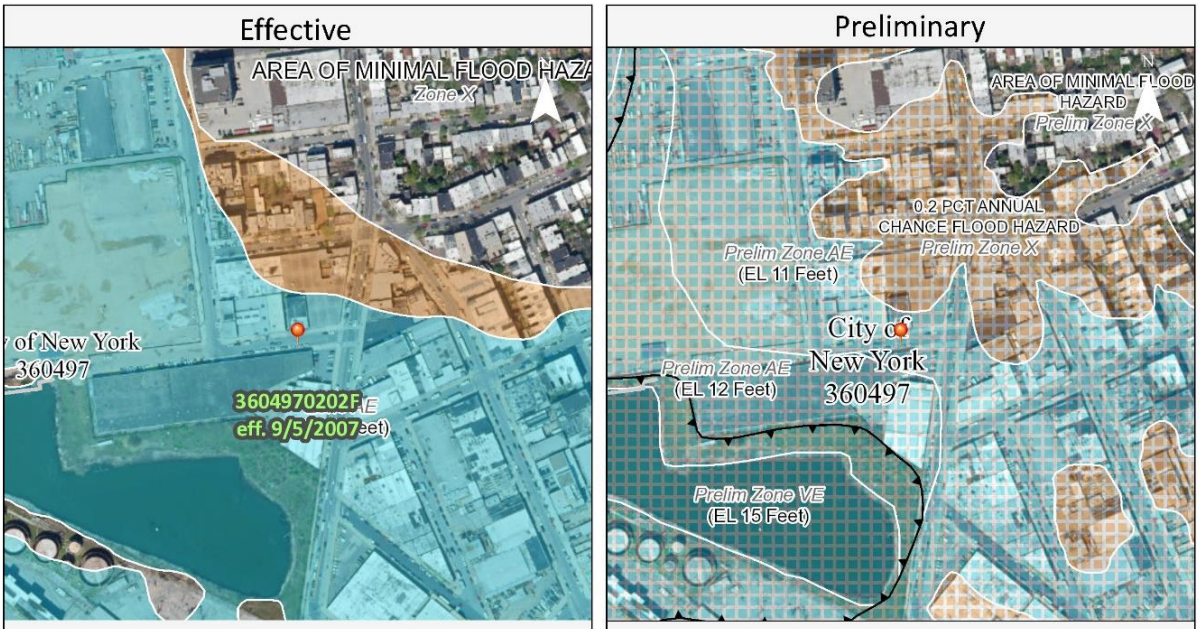


Figure 2.1-2: 2007 FIRM vs. 2015 PFIRM

Comparison of Flood Hazard

Effective & Preliminary Flood Hazards

FEMA



Effective	
POI Longitude/Latitude	-73.9579, 40.7263
Effective FIRM Panel	3604970202F
Effective Date	9/5/2007
Flood Zone	AE
Static BFE*	10.0 Feet
Flood Depth	Not Available
Vertical Datum	NGVD29

Preliminary	
POI Longitude/Latitude	-73.9579, 40.7263
Preliminary FIRM Panel	3604970202G
Preliminary Issue Date	1/30/2015
Flood Zone	AE
Estimated Static BFE*	11.0 Feet
Estimated Flood Depth	Not Available
Vertical Datum	NAVD88

* A **Base Flood Elevation** is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a base flood event.

Hazard Level	Flood Hazard Zone
High Flood Hazard	**AE, A, AH, AO, VE and V Zones.** Properties in these flood zones have a 1% chance of flooding each year. This represents a 26% chance of flooding over the life of a 30-year mortgage.
Moderate Flood Hazard	**Shaded Zone X.** Properties in the moderate flood risk areas also have a chance of flooding from storm events that have a less than 1% chance of occuring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is prone to flooding during a 0.2% annual chance storm event. These areas may have been indicated as areas of shallow flooding by your community.
	Unshaded Zone X. Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event.
Low Flood Hazard	**Insurance Note:** High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local insurance agent or visit https://www.fema.gov/national-flood-insurance-program for more information.

Disclaimer: This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised in some areas. Please contact your local floodplain administrator for more information or go to msc.fema.gov to view an official copy of the Flood Insurance Rate Maps.

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

2/24/2020 11:49:56 AM

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2*[2]*.* The three basic steps to assessing an action's consistency with Policy 6.2 of the Waterfront Revitalization Program include identifying vulnerabilities and consequences, identifying adaptive strategies, and assessing policy consistency.

Sub-Policy 6.2 Detailed Methodology

1. Identify Vulnerabilities and Consequences

a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)

The information in the following subsections is based on the results of the completed flood evaluation worksheet, which is provided in Appendix E.

New York City is highly susceptible to coastal hazards such as flooding, hurricanes, and storm surges as a result of climate change and sea level rise. As indicated below in **Table 2.1-1**, according to the New York City Panel on Climate Change (NPCC)[3] 2015 projections, sea levels have risen 1.1 feet at the Battery since 1900, and higher sea levels in the future are highly anticipated.

Table 2.1-1: Sea Level Rise Projections

	Low Estimate	Middle Range			High Estimate
	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
2020s	+ 2 in.	+ 4 in.	+ 6 in.	+8 in.	+10 in.
2050s	+8 in.	+ 11 in.	+16 in.	+21 in.	+30 in.
2080s	+13 in/	+18 in.	+29 in.	+39 in.	+58 in.
2100	+15 in.	+22 in.	+36 in.	+50 in.	+75 in.

Sea level rise projections, relative to the 2000-2004 base period (NPCC, 2015).

The Project Site is located within the boundaries of 1% annual chance floodplain pursuant to both the 2007 Effective FIRMs and the 2015 PFIRMs. **Figure 2.1-3** and **Figure 2.1-4** show future flood and high tide projections for 2020, **Figure 2.1-5** and **Figure 2.1-6** show future flood and high tide projections for 2050, **Figure 2.1-7** and **2.1-8** show future flood and high tide projections for 2080, and **Figure 2.1-9** and **Figure 2.1-10** show future flood and high tide projections for 2100.[4]

[2] https://www1.nyc.gov/assets/planning/download/pdf/planning-level/waterfront/wrp/revisions-2017/policy-62-guidance-document-nov2018.pdf

[3] http://onlinelibrary.wiley.com/doi/10.1111/nyas.2015.1336.issue-1/issuetoc

[4] https://www1.nyc.gov/site/planning/data-maps/flood-hazard-mapper.page

Figure 2.1-3: Future 2020's Flood Projections

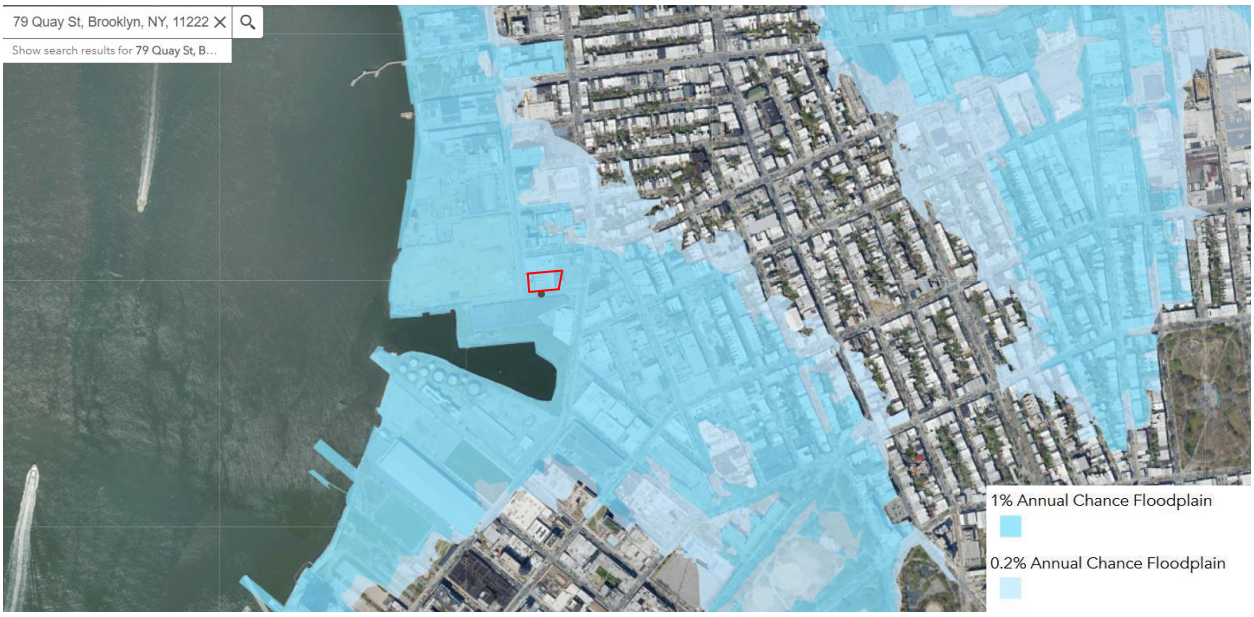


Figure 2.1-4: Future 2020's High Tide

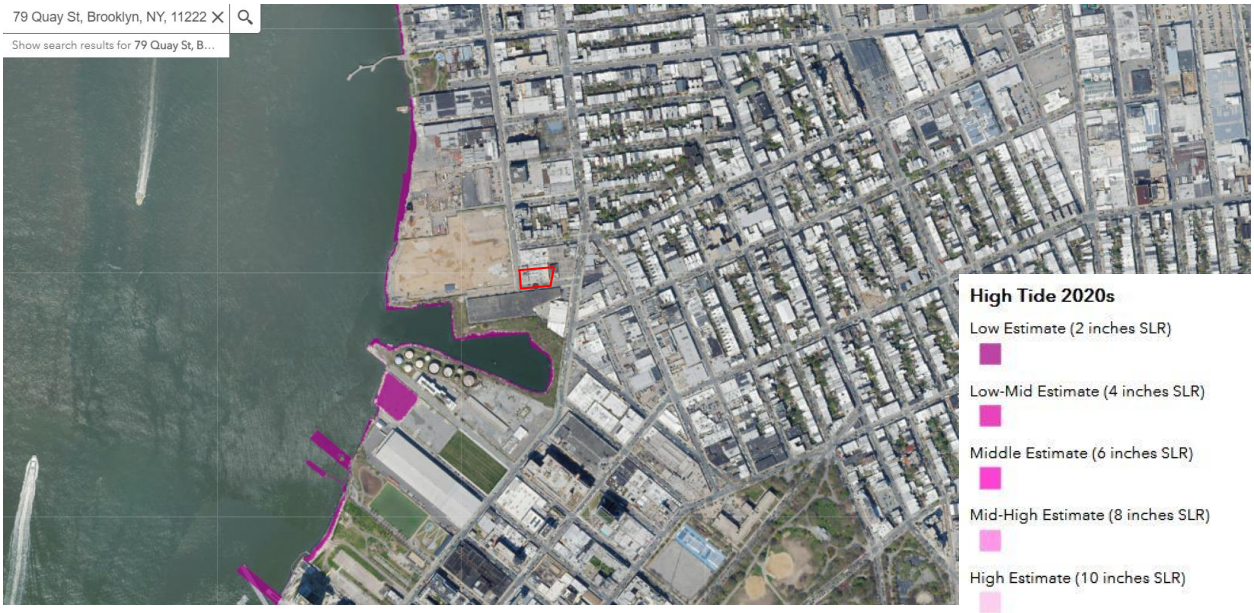


Figure 2.1-5: Future 2050's Flood Projections



Figure 2.1-6: Future 2050's High Tide



Figure 2.1-7: Future 2080's Flood Projections



Figure 2.1-8: Future 2080's High Tide



Figure 2.1-9: Future 2100's Flood Projections



Figure 2.1-10: Future 2100's High Tide



As shown in **Figure 2.1-2** above, the Project Site is located within the 1% chance annual floodplain based on FEMA's 2007 Flood Insurance Rate Maps and 2015 Preliminary Flood Insurance Rate Maps (PFIRMs). This analysis considers the worst-case Base Flood Elevation (BFE) pursuant to the PFIRMs of 11 feet (NAVD88).

As indicated in **Figures 2.1-3 to 2.1-10** above, the Project Site will continue to be in Zone AE under future flood projections according to the NYC flood hazard mapper[5]. Based on these projections, the Project Site is currently, and in the future, anticipated to be impacted by the 1% annual chance flood plain. The Project Site is not anticipated to be impacted by High Tides currently and through the 2100s.

*The Flood Evaluation Worksheet, provided in **Appendix E**, was completed using the site-specific data as follows:*

The Proposed Development would contain one building structure on the project lots. As shown in **Figure 2.1-11 to 2.1-14** below, the cellar floor level would be located at 2.0 feet in elevation (NAVD88 Datum). The first-floor building space, with the exception of the commercial entrances and the residential vestibule, are located 12.93 feet in elevation (NAVD88 Datum). The first-floor mechanicals would be placed 18 inches above the first-floor building space on concrete pads, which is 14.43 feet in elevation (NAVD88 Datum).

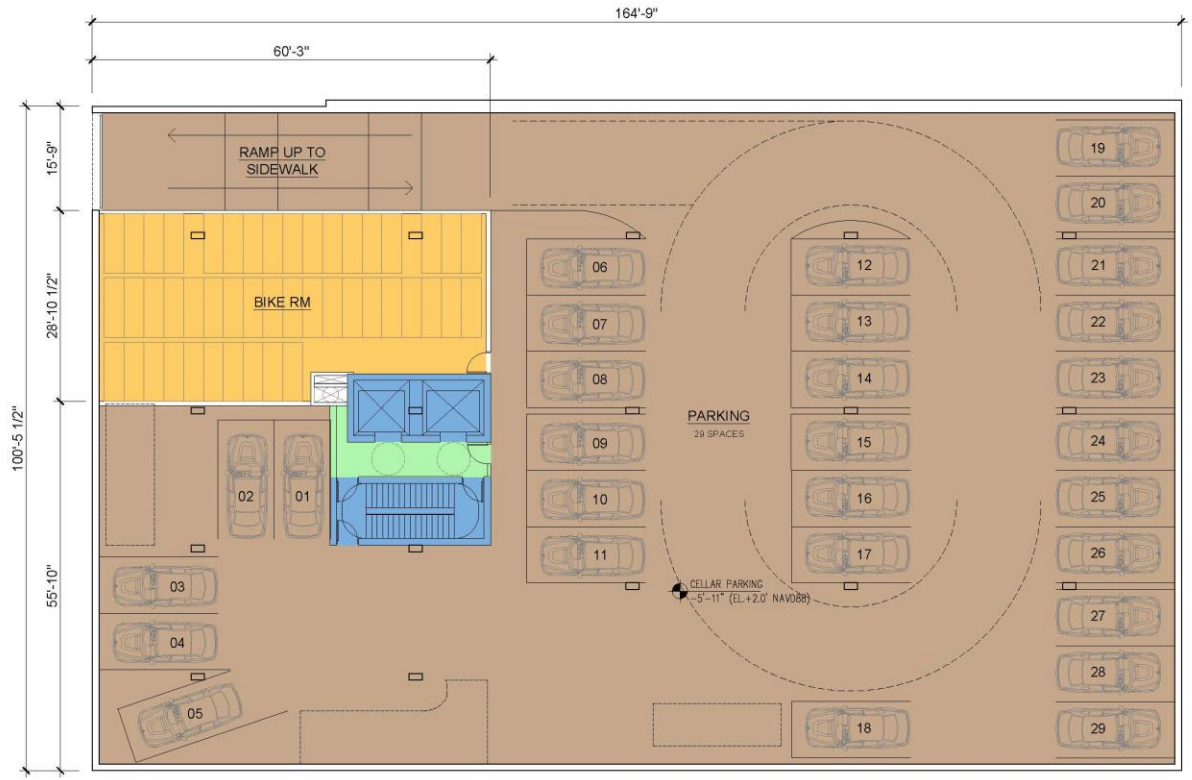
Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA)[6] website for the nearest NOAA station – Williamsburg Bridge Station (Station ID 8518699) - the adjusted mean of the higher high-water height (MHHW) is 2.47 feet. Pursuant to the 2015 PFIRM, the 1% flood height for the AE zone in which the project is located in is 11.0 feet. Accordingly, the DFE is 12.0 feet.

*Based on the results of the calculations completed in the flood evaluation worksheet using site-specific data, **Figure 2.1-15** shows the results of the 1% Flood Elevation and Sea Level Rise projections, and **Figure 2.1-16** shows the results of the MHHW and SLR projections.*

[5] Not intended for site-specific analysis, but serves as an estimate of future flood risk.

[6] https://tidesandcurrents.noaa.gov/datums.html?id=8518699

Figure 2.1-11: Proposed Development Cellar Floor Plan



1/04 CELLAR FLOOR PLAN
SCALE: 1/16"=1'-0"

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- CORRIDOR
- VERTICAL CIRCULATION (BUILDING CORE)
- RESIDENTIAL
- PARKING
- COMMERCIAL
- BICYCLE STORAGE
- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

CELLAR FLOOR PLAN

M1-4 / R7D

DRAWING NO.

04

FLOOD PROOFING NOTES:
- WALLS SHALL CONSTRUCTED WITH PERMEABLE MEMBRANE, REINFORCED AS NEEDED AND STRENGTHENED TO RESIST FLOOD LOADS.
- ALL EQUIPMENT SHALL BE LOCATED 18 INCHES ABOVE FIRST FLOOR LEVEL (+12.93') ON CONCRETE PADS.
- FLOOR DRAINS SHALL BE LOCATED THROUGHOUT CELLAR WITH SUMP PIT.

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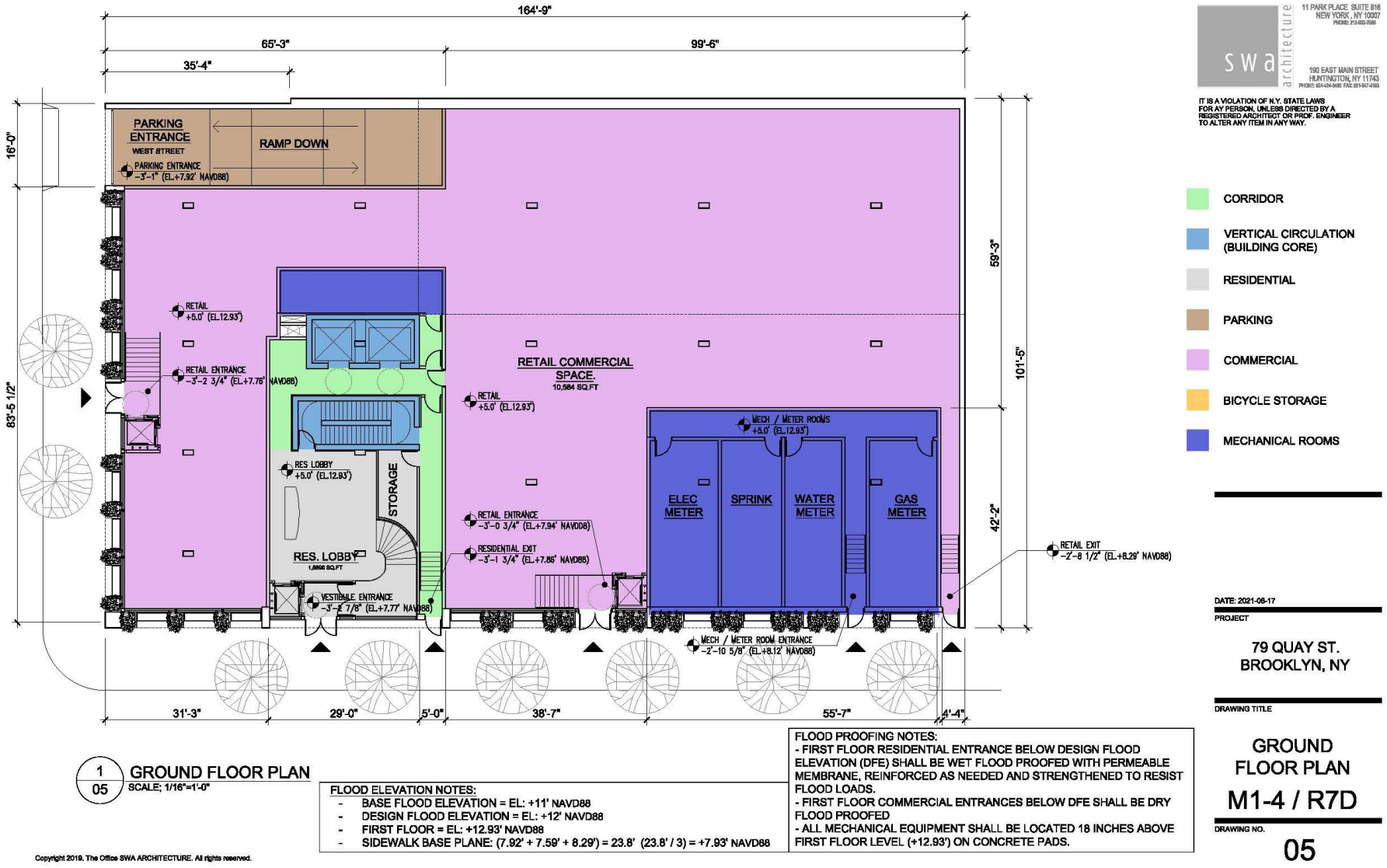
Figure 2.1-12: Proposed Development Ground Floor Plan



1/05 GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"

FLOOD ELEVATION NOTES:
- BASE FLOOD ELEVATION = EL: +11' NAVD88
- DESIGN FLOOD ELEVATION = EL: +12' NAVD88
- FIRST FLOOR = EL: +12.93' NAVD88
- SIDEWALK BASE PLANE: (7.92' + 7.59' + 8.29') = 23.8' (23.8' / 3) = +7.93' NAVD88

FLOOD PROOFING NOTES:
- FIRST FLOOR RESIDENTIAL ENTRANCE BELOW DESIGN FLOOD ELEVATION (DFE) SHALL BE WET FLOOD PROOFED WITH PERMEABLE MEMBRANE, REINFORCED AS NEEDED AND STRENGTHENED TO RESIST FLOOD LOADS.
- FIRST FLOOR COMMERCIAL ENTRANCES BELOW DFE SHALL BE DRY FLOOD PROOFED
- ALL MECHANICAL EQUIPMENT SHALL BE LOCATED 18 INCHES ABOVE FIRST FLOOR LEVEL (+12.93') ON CONCRETE PADS.

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- MECHANICAL ROOMS

DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

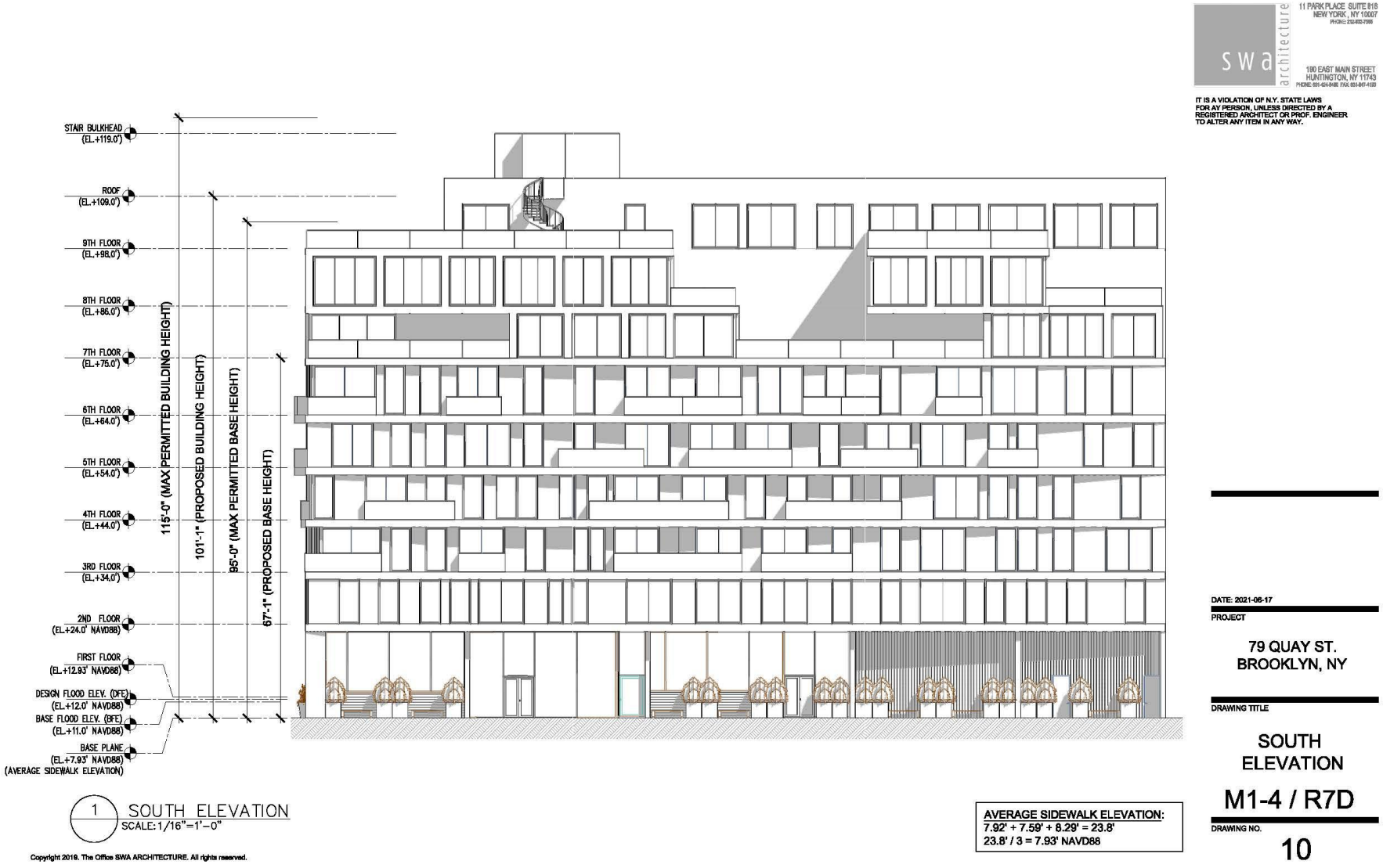
GROUND FLOOR PLAN

M1-4 / R7D

DRAWING NO.

05

Figure 2.1-13: Proposed Development South Elevation



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DATE: 2021-06-17

PROJECT

79 QUAY ST.
BROOKLYN, NY

DRAWING TITLE

SOUTH ELEVATION

M1-4 / R7D

DRAWING NO.

10

Figure 2.1-14: Proposed Development Section

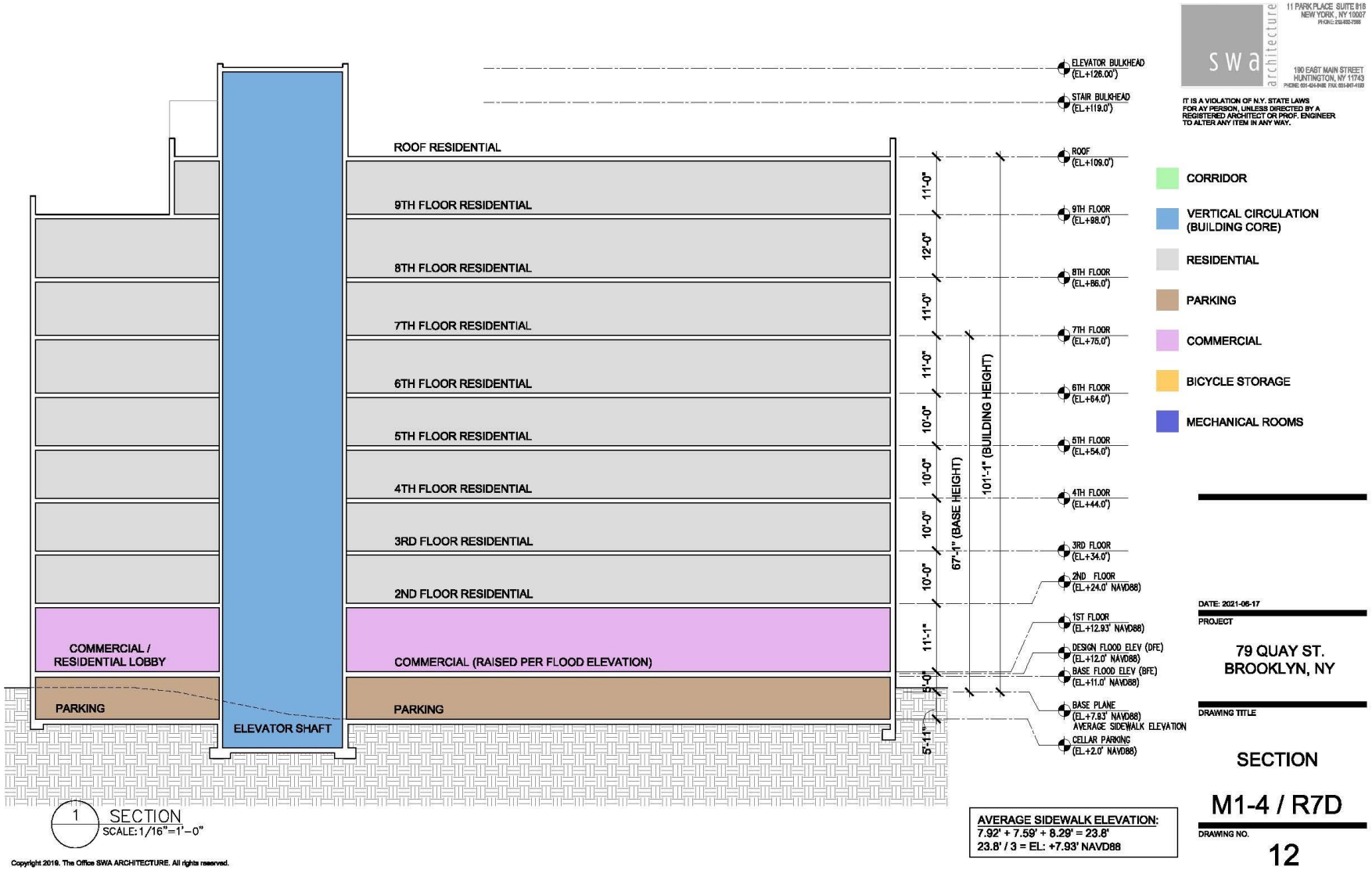


Figure 2.1-15: 1% Flood Elevation and SLR Projections

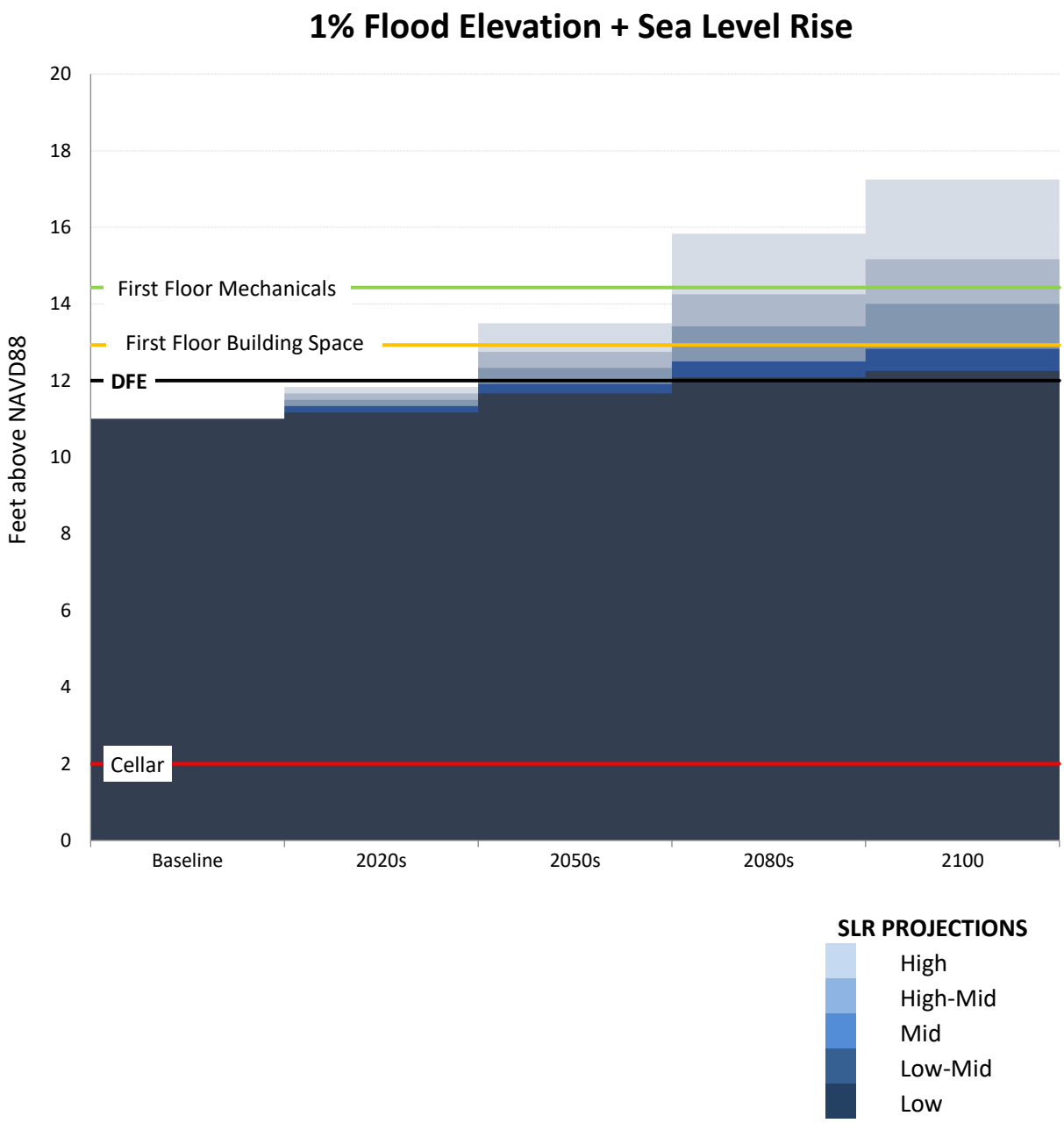
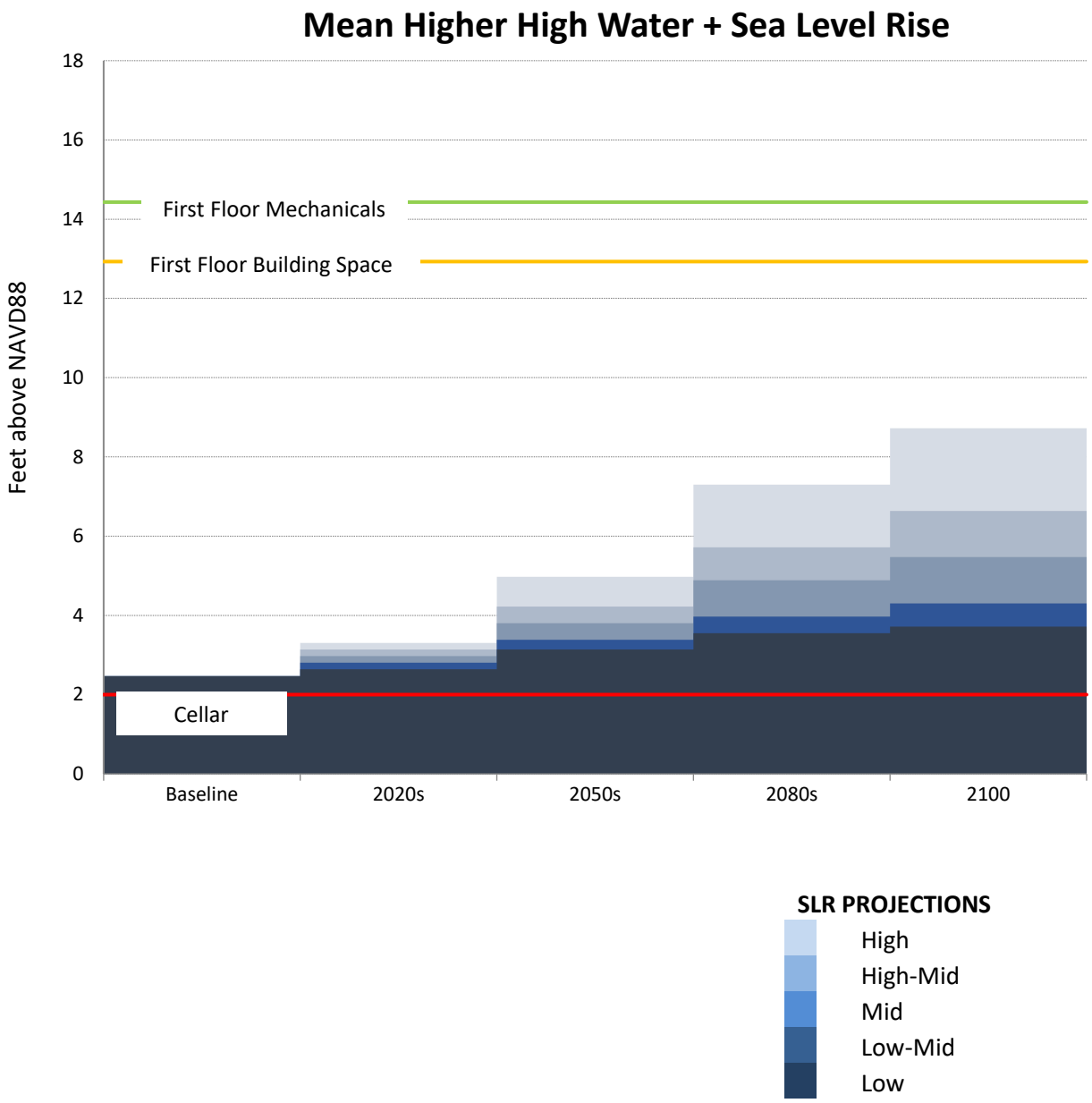


Figure 2.1-16: MHHW and SLR Projections



b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:

As indicated in **Figure 2.1-15** above, currently and in the future, the Proposed Development's cellar level is located within the 1% annual chance flood elevation under Low Sea Level Rise (SLR) projections. The first-floor building space has the potential to be impacted by the 1% chance annual floodplain by the 2050s under high SLR projections, and by the 2080s-2100s under mid SLR projections. The first-floor mechanicals have the potential to be impacted by the 1% chance annual floodplain by the 2080s under high SLR projections, and by the 2100s under high-mid SLR projections.

The cellar-floor level, located at an elevation of 2.0' (NAVD88), would contain enclosed parking spaces, walls, flooring, and elevator shaft. The first-floor building space level would contain commercial space, residential lobby, and elevator shaft. The first-floor mechanicals would contain electricity meters, water meters, gas meters, and sprinklers.

c) ***Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.***

Only the Proposed Development's cellar floor level has the potential to be impacted by the elevation of Mean Higher High Water under low SLR projections currently and in the future. The project features that are listed as vulnerable on the cellar level include enclosed parking spaces, walls, flooring, and elevator shaft. There are no project features that are listed as critical or potentially hazardous below the level of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

Vulnerable, Critical or Potentially Hazardous Features Pursuant to Policy 6.2 guidance[7]:

- ***Vulnerable Features if damaged have the potential to incur significant damage if flooded.***

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

  The project features that are listed as vulnerable are on the cellar level include enclosed parking areas, walls, flooring, and elevator shaft. On the first-floor building space level, the vulnerable features include commercial space, residential lobby, and elevator shaft. On the first-floor mechanicals level, the vulnerable features include sprinklers and water meters.

- ***Critical Features if damaged, would have severe impacts on the project and its ability to function.***

  The project features that if damaged would have severe impacts on the project and its

[7] http://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/revisions-2017/policy-62-guidance-document.pdf

ability to function as designed. Examples include electrical utilities, building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces.

There are no project features that are listed as critical in the cellar level. The first-floor mechanicals contain electricity meters and gas meters, which are listed as critical features.

- ***Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the environment.***

  Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

  The Proposed Development would not introduce any hazardous features, materials or substances that if made insecure, would result in a threat to public health or the environment.

The Following are Vulnerable and Critical Features Project Features:

- **The Cellar Level:** The cellar level, located at an elevation of 2.0' (NAVD88), is subject to flooding from MHHW and the 1% annual chance flood currently, and in the future, both under low SLR projections.

  The cellar-floor level would contain enclosed parking spaces, walls, flooring, and elevator shaft (vulnerable building features).

  Accordingly, the proposed development would currently introduce building features subject to flooding in the cellar level under 90th percentile SLR projections.

- **The First-Floor Building Space**: The first-floor building space level, located at an elevation of 12.93' (NAVD88), would contain commercial space, residential lobby, and elevator shaft.

  This level would not be subject to MHHW under any SLR projections, and would be subject to flooding from the 1% annual chance flood plain by the 2050s under high SLR projections, and by the 2080s-2100s under mid SLR projections. Accordingly, the proposed development would not introduce building features subject to flooding in the first-floor building space level by the 2050s under 90th percentile SLR projections.

- **The First-Floor Mechanical Space**: The first-floor building mechanicals, located at an elevation of 14.43' (NAVD88), would contain electricity meters, water meters, gas meters, and sprinklers.

  This level would not be subject to MHHW under any SLR projections, and would be subject to flooding from the 1% annual chance flood plain by the 2080s under high SLR projections, and by the 2100s under high-mid SLR projections. Accordingly, the proposed development would not introduce building features subject to flooding in the first-floor mechanical level by the 2080s under 90th percentile SLR projections.

The vulnerable features in the cellar level, and below the DFE, would be subject to floodproofing measures pursuant to Appendix G of the NYC Building Code. Therefore, the Proposed Actions comply with Policy 6.2.

2. Identify Adaptive Strategies

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Project Site is susceptible to the impacts of sea level rise and future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to *Policy 6.2: Climate Change Adaptation Guidance*, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The Proposed Development should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

Recommendations

As indicated above in Policy 6.0, and under Policy 6.2, Step 1(d), the Proposed Actions would employ floodproofing construction measures below the DFE to protect the vulnerable building features within the cellar level. However; the Proposed Project should consider employing future building-scale resiliency measures for the ground floor building level and ground floor mechanicals level to avoid the potential risks related to future coastal flooding. Site-specific vulnerable or critical features, not protected by Appendix G flood provisions above the DFE include flooring, walls, commercial spaces, residential lobby, electricity meters, water meters, gas meters, and sprinklers. Based on the flood projections above, measures should be considered to increase first-floor building-scale resilience to future flood conditions.

a) Flood Damage Reduction Elements/Controls:

Building Scale Resilience Measures

The following are recommendations for flood resilience techniques and controls will minimize future damage and vulnerability to the subject building:

- Water-resistant flooring with waterproof adhesive or pressure-treated subfloor;
- Rigid, closed-cell foam insulation;
- Removable or hinged wainscot panels;
- Elevated outlets;
- Dry floodproofing of building mechanicals on the first-floor level;
- Chair rail molding over a gap in the wallboard to prevent wicking; and
- Extra-wide snap on baseboard.

While not required, these building-scale resiliency controls, if implemented, will protect the

first-floor commercial space, residential lobby, electrical facilities, and first floor building mechanicals and reduce the susceptibility of water damage to the interior spaces. The applicant has been educated about flood risks and mitigation measures and may consider the implementation of the above listed future adaptive flood damage reduction elements.

b) <u>Flood Protection of Adjacent Sites:</u>

The Proposed Development would not increase stormwater runoff and would not introduce any hazardous features that would impact the health, safety, or welfare of surrounding residents in the event of a flood. Therefore, the proposed action would not affect the flood protection of adjacent sites.

3. Assess Policy Consistency

<u>Pursuant to Policy 6.2 Guidance:</u>

A project or action would advance the policy when:

- *No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan, or*
- *All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.*

A project or action would hinder the policy when:

- *Vulnerable, critical or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.*
- *Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.*
- *Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.*
- *Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.*

As discussed above, critical infrastructure (building mechanicals) at the first-floor level, while above the DFE, could be subject to future flooding from a 1% annual chance flood event by the 2080s under high SLR projections, and by the 2100s under high-mid SLR projections. Accordingly, the Proposed Development should incorporate dry-floodproofing of the first-floor mechanicals as a future building scale resiliency measure to protect these critical building features from future flood events. These future building-scale resiliency measures and adaptive strategizes would minimize the potential damage to site-specific critical features. The Applicant has been educated of future flood risks, and would consider the employment of future building scale resiliency measures for the ground floor level based on the flood projections related to the 1% annual chance flood elevation. Lastly, construction and remediation of the site would be performed pursuant to applicable Local, State, Federal regulations and laws. Therefore, the Proposed Action is consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.