

# 55-63 Summit Street Rezoning

## Environmental Assessment Statement

**CEQR Number: 18DCP072K**

Prepared by:

Environmental Studies Corp.  
Urban Cartographics

Prepared for:

PHD Summit LLC

February 23, 2018



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 55-63 Summit Street Rezoning

3. Reference Numbers

CEQR REFERENCE NUMBER (to be assigned by lead agency) 18DCP072K		BSA REFERENCE NUMBER (if applicable)			
ULURP REFERENCE NUMBER (if applicable) 17 0047 ZMK, 17 0046 ZRK		OTHER REFERENCE NUMBER(S) (if applicable) (e.g., legislative intro, CAPA)			
<b>4a. Lead Agency Information</b> NAME OF LEAD AGENCY NYC City Planning Commission		<b>4b. Applicant Information</b> NAME OF APPLICANT PHD Summit LLC			
NAME OF LEAD AGENCY CONTACT PERSON Robert Dobruskin, Director, EARD		NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Hiram Rothkrug, Environmental Studies Corp.			
ADDRESS 120 Broadway, 31 <sup>st</sup> floor		ADDRESS 55 Water Mill Road			
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 11021
TELEPHONE 212-720-3423	EMAIL rdobrus@planning.nyc.gov	TELEPHONE 718-343-0026	EMAIL hrothkrug@epdsco.com		

5. Project Description

The Applicant, PHD Summit LLC, is seeking a Zoning Map Amendment from M1-1 to an R6B contextual medium density residential district on a portion of Brooklyn Block 352 (Lots 48, 49, 50, 51, and 52) within the Columbia Street Waterfront neighborhood of Brooklyn Community District 6. The Applicant is also seeking a Zoning Text Amendment to Appendix F to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the rezoning area, in which Options 1 and 2 would both be available. The proposed action would facilitate a proposal by the applicant to construct 14 dwelling units and 450 gsf of community facility space within a five-story (55'), 20,829 gsf building on the project site (consisting of Lots 49-52). For purposes of a conservative analysis, however, this EAS addresses a RWCDs that also projects a five-story (55') building on Lot 48. Under the RWCDs there would be 17 dwelling units, 900 sf of community facility space, and a total of 25,959 gsf.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 6	STREET ADDRESS 55-63 Summit St.
TAX BLOCK(S) AND LOT(S) Block 352, Lots 48, 49, 50, 51, and 52	ZIP CODE 11231	
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS north side of Summit St. on the block between Van Brunt and Columbia Streets		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY M1-1	ZONING SECTIONAL MAP NUMBER 16a	

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

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

<input type="checkbox"/> CITY MAP AMENDMENT	<input type="checkbox"/> ZONING CERTIFICATION	<input type="checkbox"/> CONCESSION
<input checked="" type="checkbox"/> ZONING MAP AMENDMENT	<input type="checkbox"/> ZONING AUTHORIZATION	<input type="checkbox"/> UDAAP
<input checked="" type="checkbox"/> ZONING TEXT AMENDMENT	<input type="checkbox"/> ACQUISITION—REAL PROPERTY	<input type="checkbox"/> REVOCABLE CONSENT
<input type="checkbox"/> SITE SELECTION—PUBLIC FACILITY	<input type="checkbox"/> DISPOSITION—REAL PROPERTY	<input type="checkbox"/> FRANCHISE
<input type="checkbox"/> HOUSING PLAN & PROJECT	<input type="checkbox"/> 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: building permit from DOB

**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.): 10,000 Waterbody area (sq. ft) and type: 0

Roads, buildings, and other paved surfaces (sq. ft.): 6,000 Other, describe (sq. ft.): 4,000 unpaved lot

**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): 26,359

NUMBER OF BUILDINGS: 2 GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 20,829 and 5,530

HEIGHT OF EACH BUILDING (ft.): 55 NUMBER OF STORIES OF EACH BUILDING: 5

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: 8,000

The total square feet not owned or controlled by the applicant: 2,000

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: 5,651 sq. ft. (width x length) VOLUME OF DISTURBANCE: 14,336 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 5,651 sq. ft. (width x length)

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

	<b>Residential</b>	<b>Commercial</b>	<b>Community Facility</b>	<b>Industrial/Manufacturing</b>
<b>Size</b> (in gross sq. ft.)	25,059	0	900	0
<b>Type</b> (e.g., retail, office, school)	17 units		medical office and TBD	

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 37 NUMBER OF ADDITIONAL WORKERS: 4

Provide a brief explanation of how these numbers were determined: 17 dwelling units, times 2.19 persons per household (average household size in census tract 51); 900 sf community facility, times 4 workers per 1,000 sf

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): 2020

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 12		
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:		
<b>10. Predominant Land Use in the Vicinity of the Project</b> (check all that apply)		
<input checked="" type="checkbox"/> RESIDENTIAL	<input checked="" type="checkbox"/> MANUFACTURING	<input checked="" type="checkbox"/> COMMERCIAL <input checked="" type="checkbox"/> PARK/FOREST/OPEN SPACE <input type="checkbox"/> 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
<b>1. LAND USE, ZONING, AND PUBLIC POLICY:</b> <a href="#">CEQR Technical Manual Chapter 4</a>		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Is there the potential to affect an applicable public policy?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) If “yes,” to (a), (b), and/or (c), complete a preliminary assessment and attach.		
(e) Is the project a large, publicly sponsored project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City’s <a href="#">Waterfront Revitalization Program boundaries</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” complete the <a href="#">Consistency Assessment Form</a> .		
<b>2. SOCIOECONOMIC CONDITIONS:</b> <a href="#">CEQR Technical Manual Chapter 5</a>		
(a) Would the proposed project:		
o Generate a net increase of 200 or more residential units?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Generate a net increase of 200,000 or more square feet of commercial space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 500 residents?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Directly displace more than 100 employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Affect conditions in a specific industry?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>3. COMMUNITY FACILITIES:</b> <a href="#">CEQR Technical Manual Chapter 6</a>		
(a) Direct Effects		
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Indirect Effects		
o <b>Child Care Centers:</b> 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 <a href="#">Chapter 6</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o <b>Libraries:</b> 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 <a href="#">Chapter 6</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o <b>Public Schools:</b> 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 <a href="#">Chapter 6</a> )	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o <b>Health Care Facilities and Fire/Police Protection:</b> Would the project result in the introduction of a sizeable new neighborhood?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>4. OPEN SPACE:</b> <a href="#">CEQR Technical Manual Chapter 7</a>		
(a) Would the proposed project change or eliminate existing open space?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Is the project located within an under-served area in the <a href="#">Bronx</a> , <a href="#">Brooklyn</a> , <a href="#">Manhattan</a> , <a href="#">Queens</a> , or <a href="#">Staten Island</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” would the proposed project generate more than 50 additional residents or 125 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(c) Is the project located within a well-served area in the <a href="#">Bronx</a> , <a href="#">Brooklyn</a> , <a href="#">Manhattan</a> , <a href="#">Queens</a> , or <a href="#">Staten Island</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If “yes,” would the proposed project generate more than 350 additional residents or 750 additional employees?	<input type="checkbox"/>	<input type="checkbox"/>
(d) If the project is located in an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
<b>5. SHADOWS:</b> <a href="#">CEQR Technical Manual Chapter 8</a>		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>6. HISTORIC AND CULTURAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 9</a>		
(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 <a href="#">GIS System for Archaeology and National Register</a> to confirm)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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.		
<b>7. URBAN DESIGN AND VISUAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 10</a>		
(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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>8. NATURAL RESOURCES:</b> <a href="#">CEQR Technical Manual Chapter 11</a>		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of <a href="#">Chapter 11</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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 <a href="#">Jamaica Bay Watershed</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o If "yes," complete the <a href="#">Jamaica Bay Watershed Form</a> , and submit according to its <a href="#">instructions</a> .		
<b>9. HAZARDOUS MATERIALS:</b> <a href="#">CEQR Technical Manual Chapter 12</a>		
(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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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 <a href="#">Appendix 1</a> (including nonconforming uses)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Has a Phase I Environmental Site Assessment been performed for the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: An auto repair shop previously occupied part of the project site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>10. WATER AND SEWER INFRASTRUCTURE:</b> <a href="#">CEQR Technical Manual Chapter 13</a>		
(a) Would the project result in water demand of more than one million gallons per day?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If the proposed project located in a <a href="#">separately sewered area</a> , would it result in the same or greater development than the amounts listed in Table 13-1 in <a href="#">Chapter 13</a> ?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) If the project is located within the <a href="#">Jamaica Bay Watershed</a> or in certain <a href="#">specific drainage areas</a> , including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO
involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	<input type="checkbox"/>	<input type="checkbox"/>
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>11. SOLID WASTE AND SANITATION SERVICES:</b> <a href="#">CEQR Technical Manual Chapter 14</a>		
(a) Using Table 14-1 in <a href="#">Chapter 14</a> , the project's projected operational solid waste generation is estimated to be (pounds per week): 774		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>12. ENERGY:</b> <a href="#">CEQR Technical Manual Chapter 15</a>		
(a) Using energy modeling or Table 15-1 in <a href="#">Chapter 15</a> , the project's projected energy use is estimated to be (annual BTUs): 3,158,840,300		
(b) Would the proposed project affect the transmission or generation of energy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>13. TRANSPORTATION:</b> <a href="#">CEQR Technical Manual Chapter 16</a>		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in <a href="#">Chapter 16</a> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? <i>**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 <a href="#">Chapter 16</a> for more information.</i>	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>
<b>14. AIR QUALITY:</b> <a href="#">CEQR Technical Manual Chapter 17</a>		
(a) <i>Mobile Sources:</i> Would the proposed project result in the conditions outlined in Section 210 in <a href="#">Chapter 17</a> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) <i>Stationary Sources:</i> Would the proposed project result in the conditions outlined in Section 220 in <a href="#">Chapter 17</a> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in <a href="#">Chapter 17</a> ? (Attach graph as needed)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Does the proposed project involve multiple buildings on the project site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>15. GREENHOUSE GAS EMISSIONS:</b> <a href="#">CEQR Technical Manual Chapter 18</a>		
(a) Is the proposed project a city capital project or a power generation plant?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the proposed project fundamentally change the City's solid waste management system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in <a href="#">Chapter 18</a> ?	<input type="checkbox"/>	<input type="checkbox"/>
<b>16. NOISE:</b> <a href="#">CEQR Technical Manual Chapter 19</a>		
(a) Would the proposed project generate or reroute vehicular traffic?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Would the proposed project introduce new or additional receptors (see Section 124 in <a href="#">Chapter 19</a> ) 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>17. PUBLIC HEALTH:</b> <a href="#">CEQR Technical Manual Chapter 20</a>		

	YES	NO
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in <a href="#">Chapter 20</a> , "Public Health." Attach a preliminary analysis, if necessary.		
<b>18. NEIGHBORHOOD CHARACTER:</b> <a href="#">CEQR Technical Manual Chapter 21</a>		
(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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in <a href="#">Chapter 21</a> , "Neighborhood Character." Attach a preliminary analysis, if necessary.		
<b>19. CONSTRUCTION:</b> <a href="#">CEQR Technical Manual Chapter 22</a>		
(a) Would the project's construction activities involve:		
o Construction activities lasting longer than two years?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o The operation of several pieces of diesel equipment in a single location at peak construction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Closure of a community facility or disruption in its services?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Activities within 400 feet of a historic or cultural resource?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o Disturbance of a site containing or adjacent to a site containing natural resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
o 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in <a href="#">Chapter 22</a> , "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 Brian Kintish	DATE February 23, 2018
--	---------------------------

SIGNATURE *Brian Kintish*

**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.

**Potentially Significant Adverse Impact**

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

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.

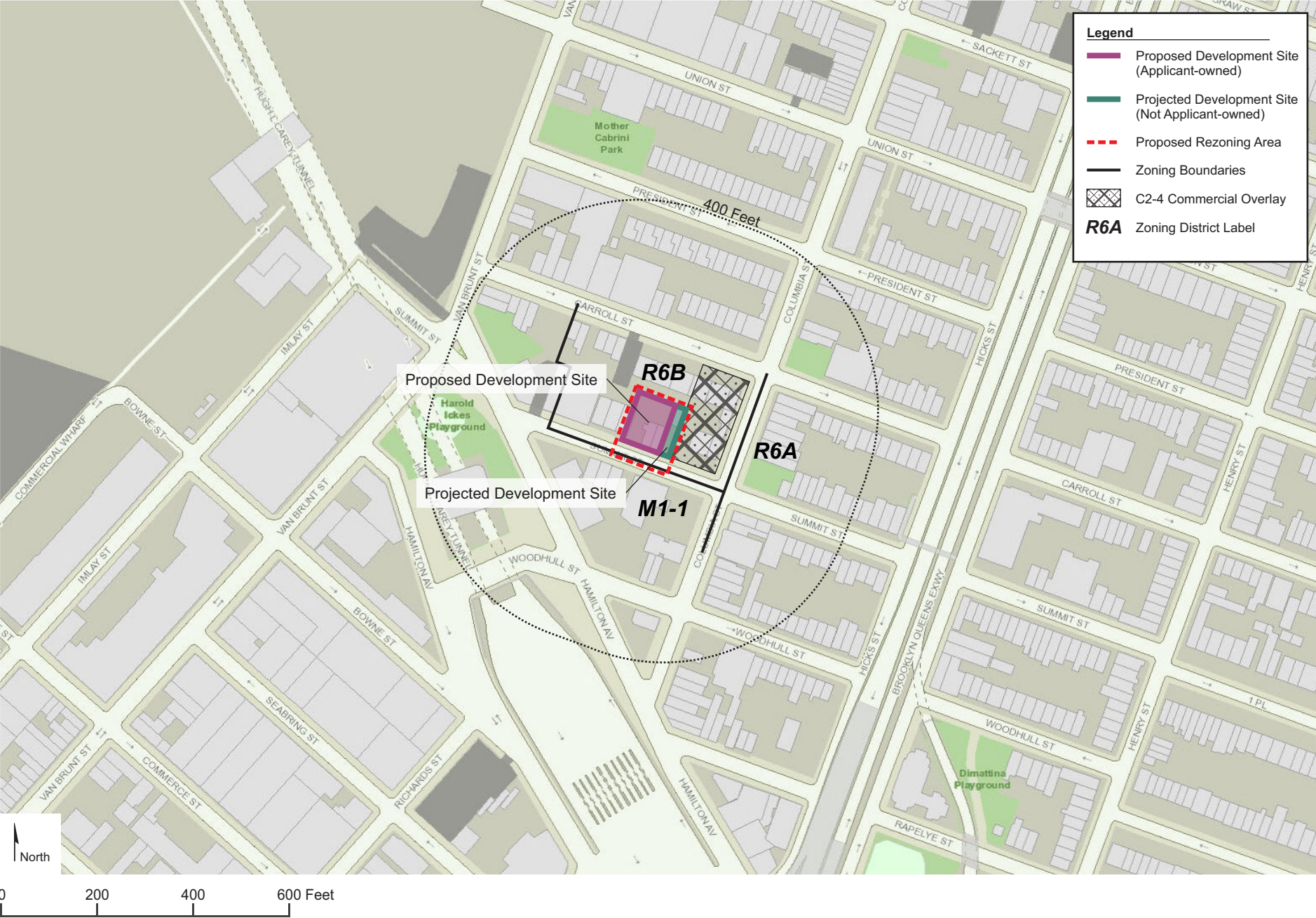
3. Check determination to be issued by the lead agency:

- 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 Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning
NAME Robert Dobruskin, AICP	DATE 02/23/18
SIGNATURE <i>Robert Dobruskin</i>	

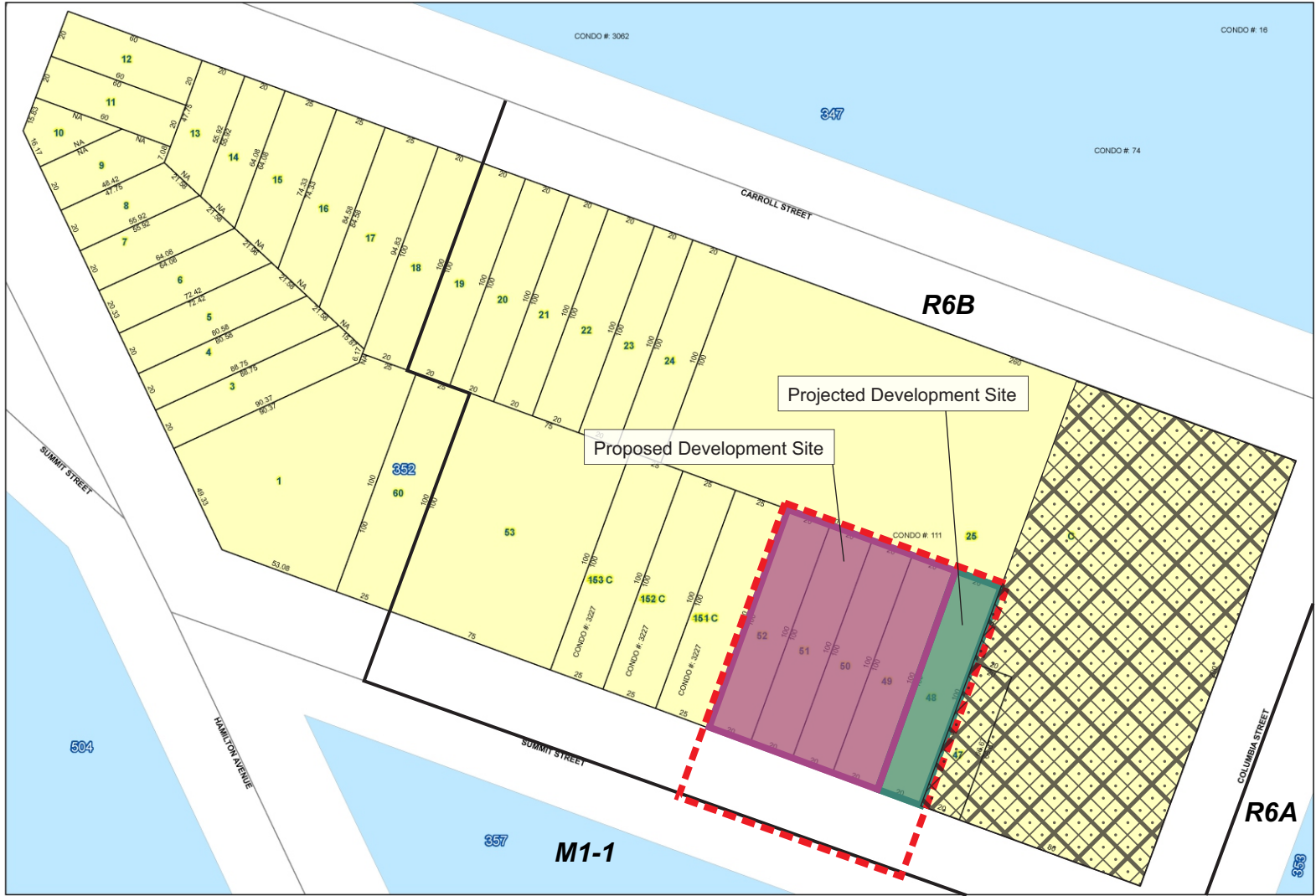




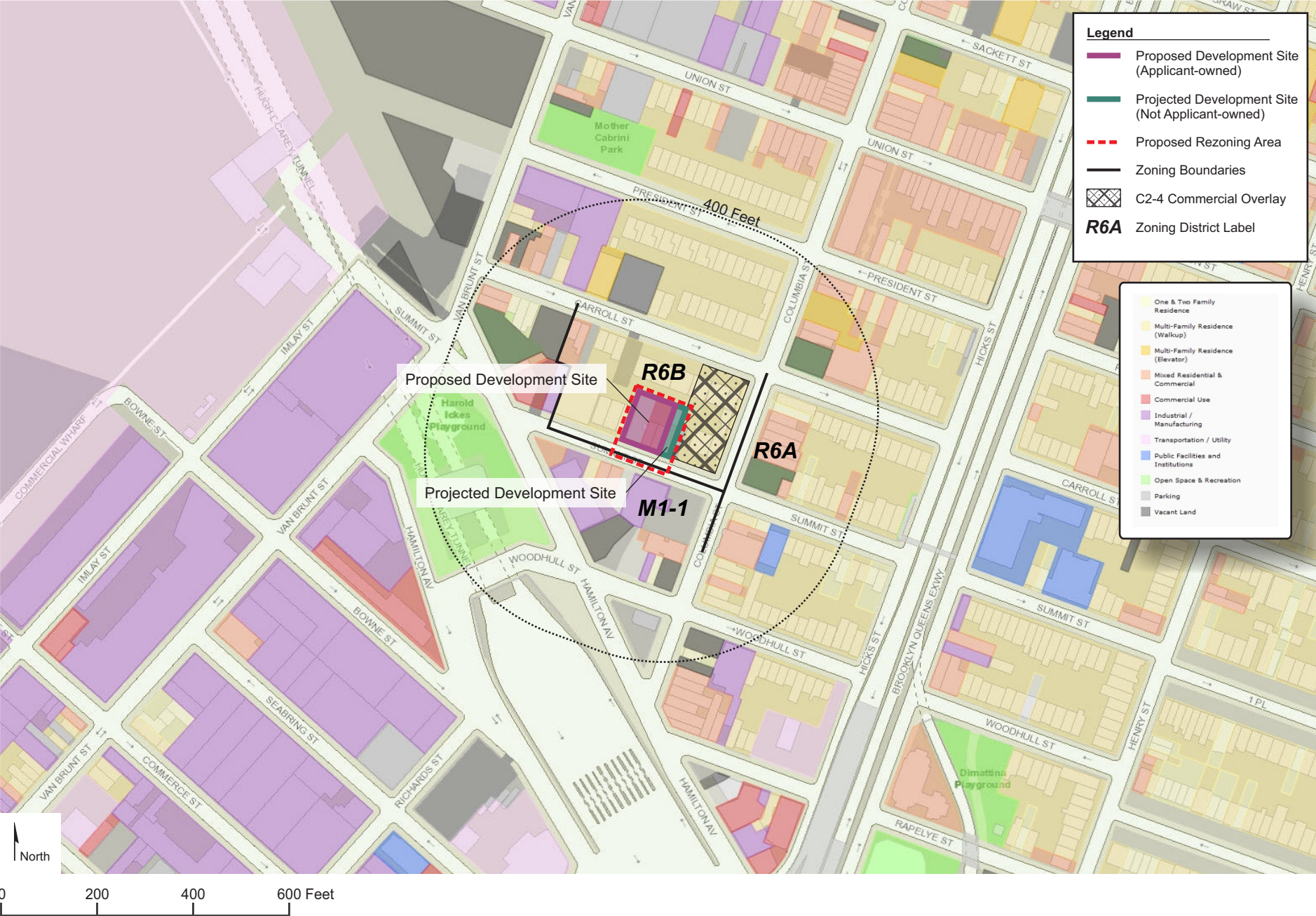


NYC Digital Tax Map  
Effective Date : 06-04-2012 10:21:18  
End Date : Current  
Brooklyn Block: 352

- Legend**
- Streets
  - Miscellaneous Text
  - Possession Hooks
  - Boundary Lines
  - Lot Face Possession Hooks
  - Regular
  - Undewater
  - Tax Lot Polygon
  - Condo Number
  - Tax Block Polygon
- Proposed Development Site (Applicant-owned)
  - Proposed Development Site (Not Applicant-owned)
  - Proposed Rezoning Area
  - Zoning Boundaries
  - C2-4 Commercial Overlay
  - R6A** Zoning District Label















**Legend**

- Proposed Development Site (Applicant-owned)
- Projected Development Site (Not Applicant-owned)
- Proposed Rezoning Area
- Zoning Boundaries
- C2-4 Commercial Overlay
- R6A Zoning District Label





Proposed Project (for Illustrative Purposes Only)



55-61 Summit, Brooklyn

PILOT REAL ESTATE GROUP/  
HORRIGAN DEVELOPMENT LLC  
13 West 36th St.  
New York, New York 10018

Perspective

22december17

The data contained within this preliminary analysis is considered schematic and for review purposes only and should be reviewed / confirmed by a Land Use Attorney prior to any actions regarding this site.

p09



# PROPOSED 55-63 SUMMIT STREET REZONING

## PROJECT DESCRIPTION

### PROPOSED ACTION

The Applicant, PHD Summit LLC, is seeking an amendment to zoning sectional map 16a to rezone Block 352, Lots 48, 49, 50, 51, and 52 (the “proposed rezoning area”), in the neighborhood of the Columbia Street Waterfront, Brooklyn, Community District 6, from M1-1 to R6B. The Applicant is also seeking a zoning text amendment to Appendix F to establish a Mandatory Inclusionary Housing Area (MIHA) coterminous with the rezoning area in accordance with the City’s Mandatory Inclusionary Housing policy (N 160051 ZRY), in which Options 1 and 2 would both be available.

The remainder of the block is currently mapped with R6B, R6B/C2-4, and M1-1 zoning districts, and is bounded by Van Brunt, Carroll, Columbia, and Summit Streets and Hamilton Avenue. (See Figures 1-5 above.) The proposed zoning map amendment would expand an existing R6B district to include a 100-foot-by-100-foot area fronting on Summit Street, which abuts an R6B district on three sides (along all five rear lot lines, the eastern side lot line of Lot 48, and the western side lot line of Lot 52).

The proposed action would facilitate a proposal by the Applicant to construct a total of 14 dwelling units and 450 square feet of community facility space within a five-story building on the “project site” (which consists of Lots 49, 50, 51, and 52). The property is now unutilized, with a vacant one-story building and vacant land.

### ZONING COMPARISON

The existing M1-1 district is a manufacturing district that permits most but not all commercial uses (including semi-industrial uses listed in Use Group 16), light manufacturing uses listed in Use Group 17, and certain specified community facility uses but precludes all residential and most community facility uses. In contrast, the proposed R6B district is a residential zone that permits the full range of residential and community facility uses listed in Use Groups 1, 2, 3, and 4 but precludes all commercial and manufacturing uses.

The two districts also differ in terms of bulk regulations. The maximum permitted floor area ratio (FAR) under M1-1 is 1.00 for commercial or manufacturing uses and 2.40 for community facility uses, and the maximum FAR under R6B is generally 2.00 for either residential or community facility development, but 2.20 for residential development within an MIHA or Inclusionary Housing designated area that satisfies the applicable Inclusionary Housing Program requirements. The proposed rezoning area would be coterminous with an MIHA in which under any development of more than ten dwelling units or more than 12,500 sf of residential floor area must comply with either Option 1 or Option 2 as set forth in ZR Section 23-154(d), which provide alternative minimum percentages of the residential square footage that must be within income-restricted affordable dwelling units and the income ranges applicable to those alternatives. For any development that would exceed the specified minimum, or for any smaller residential development that voluntarily satisfies the Option 1 or Option 2 requirements, the maximum permitted residential FAR would be 2.20.

The maximum street wall height under M1-1 is 30 feet or two stories, whichever is less, and the maximum under R6B is 45 feet (40 feet unless the building includes a qualifying ground floor). At that height a setback from the street line is required. On a narrow street such as Summit Street, the minimum required setback is 15 feet. The two districts regulate additional building height in different ways. The M1-1 regulations do not impose a maximum building height but instead require that the building not penetrate a sky exposure plane that begins at 30 feet above the front lot line and slopes upwards and rearwards at a 45 degree angle. The R6B regulations impose a maximum building height of either 50 feet or, for buildings with qualifying ground floors, of 55 feet (capped at 5 stories).

No lot coverage restrictions apply under M1-1. Under R6B the maximum permitted lot coverage is 60 percent on an interior or through lot (such as the project site) and 80 percent on a corner lot.

## **ANALYSIS FRAMEWORK**

### **Existing Conditions**

The proposed rezoning area is 100 feet by 100 feet, for a total of 10,000 square feet (sf). Located on the southern part of Block 352, the proposed rezoning area consists of five adjacent tax lots, each measuring 20 feet by 100 feet, with 20 feet of frontage along Summit Street.

The 8,000 sf project site consists of 55-61 Summit Street, Brooklyn Block 352, Lots 49, 50, 51, and 52 (all Applicant-owned). A vacant one-story building, last used as a kennel for boarding dogs and cats, is located on the eastern part of the project site (Lots 49 and 50). It is 15 feet tall and contains 2,160 square feet of floor area. The western half of the project site (Lots 51 and 52) is vacant.

Block 352, Lot 48, which is outside the project site but within the proposed rezoning area, is developed with a single-story automotive-related use with 700 square feet of floor area (0.35 FAR) where 1.00 FAR is permitted. The remainder of the lot is currently utilized as accessory parking. There is no Certificate of Occupancy for the property, but available records appear to indicate prior development of the property with a small residential or mixed-use building similar to those common in the area.

### **The Future without the Proposed Action**

In the absence of the proposed action, it is assumed that no reuse or redevelopment of the project site would occur. Lot 48, to the immediate east of the project site, would continue to be occupied by a surface parking lot and a small, 700 square foot parking garage.

### **The Future with the Proposed Action**

In the future with the proposed rezoning to R6B, for the purposes of a conservative analysis, it is assumed that redevelopment would occur on all five lots within the rezoning area. The existing buildings and uses on the lots would be cleared, and new mixed-use buildings would be constructed, as described below.

On the project site, the Applicant would construct a 20,829 gross square foot (gsf), five-story building with 14 dwelling units in 20,379 gsf of residential space and 450 gsf of community facility space. It would have an FAR of 2.20, the maximum that would be permitted. The building would have a footprint of 4,686 square feet, for a lot coverage of approximately 59 percent. The building would be 55 feet tall, with approximately two-thirds of the front façade setting back 15 feet above the fourth floor, at a height of 45 feet. Of the 80-foot-wide street wall, 52'6" would be 45 feet tall, and 27'6" would be 55 feet tall. The ground floor would have a height of 13 feet; the top story would have a height of 10 feet, and the three middle stories would each be 10'8" tall. The ground floor would contain a residential lobby, the

community facility space (which would be for the use of a local organization), recreational space for the residents, mechanical space, bicycle parking, and five accessory off-street parking spaces. The upper floors would contain 14 residential units: four on each of the second through fourth floors and two on the fifth floor. There would be no cellar. The western part of the building (19 feet in width) would be recessed ten feet from the street line to align with the building on the adjacent property; the central portion (38 feet in width) would be built to the street line; and the eastern part (23 feet in width) would be recessed ten feet. Landscaping and seating would be located in front of the eastern part of the building, and a driveway would be located in front of the western part (where a 19-foot-wide curb cut onto Summit Street would be located).

The proposed project would satisfy MIH Option 1; that is, 25 percent of the net residential floor area would be in units affordable to households earning, on average, no more than 60 percent of the Area Median Income (AMI), and 75 percent would be in market rate units. Depending on bedroom counts, either three or four units would be income-restricted.

On the outparcel (Lot 48, the “projected development site”), the reasonable worst-case development scenario (RWCDs) assumes a 2.00 FAR, five-story, 55-foot tall building, with a 15-foot setback above the fourth floor (at a height of 45 feet). To achieve this height, the ground floor would be a 13-foot-tall “qualifying ground floor.” The building would have a footprint of 965 square feet (approximately 48 percent lot coverage). The street wall would be located ten feet from the front lot line, and the area in front of the building would be landscaped. The building would contain 4,165 gsf of above grade floor area; the lower four floors would each contain 965 gsf, and the partial fifth floor would contain 305 gsf. Including a 965 gsf cellar used for storage and mechanical space, the building would contain 5,130 gsf. The ground floor would contain a 450 square foot community facility use (presumed to be a medical office), as well as the residential lobby and circulation space. It is assumed that the upper four floors would contain three dwelling units (one each on the second and third floors and a duplex on the fourth and fifth floors). Because the development would be below the minimum size for the Inclusionary Housing Program to be mandatory, all residential units would be market rate. There would be no accessory off-street parking.

The total anticipated development within the proposed rezoning area would consist of 25,959 gsf: 17 dwelling units (25,059 gsf of Residential Use Group 2 (UG2) uses) and 900 gsf of Community Facility Use Group 3 (UG3) uses.

The project site is in Brooklyn Census Tract 51, in which the average household size was 2.19 in 2010. The 17 dwelling units would house approximately 37 residents.

## **PURPOSE AND NEED**

The proposed action would facilitate the redevelopment of what are now unutilized properties. The proposed action would also facilitate the development of both affordable and market rate housing.

## **REQUIRED APPROVALS**

The proposed project would require an amendment to zoning sectional map 16a, to extend an existing R6B district and to reduce an M1 district. The action would be subject to the Uniform Land Use Review Procedure (ULURP).

**BUILD YEAR**

Based on an estimated 12-month construction period, it is estimated that the project would be completed in 2020. This is the assumed "build year," which is used throughout this EAS for all future conditions, and which is the analysis year for the purpose of all assessments.

## **PART II: TECHNICAL ANALYSES**

### **INTRODUCTION**

Based on the criteria in Part II of the Environmental Assessment Statement Full Form, the following technical areas require further analysis: land use, zoning, and public policy; shadows; historic and cultural resources; urban design and visual resources; hazardous materials; transportation; air quality; and noise. These analyses, which follow the guidance in the *CEQR Technical Manual*, are presented below. The heading numbers correlate with the relevant chapters of the *CEQR Technical Manual*.



## **4. LAND USE, ZONING, AND PUBLIC POLICY**

### **Introduction**

A land use analysis characterizes the uses and development trends in the area that may be affected by an action and determines whether a proposed project is compatible with those conditions or whether it may adversely affect them. The analysis also considers the proposed project's compliance with, and effect on, the area's zoning and other applicable public policies.

According to the *CEQR Technical Manual*, a preliminary assessment that includes a basic description of existing and future land uses, as well as basic zoning information, is provided for most projects, regardless of their anticipated effects. Regarding public policy, the *CEQR Technical Manual* states, "Large, publicly-sponsored projects are assessed for their consistency with PlaNYC, the City's sustainability plan." An assessment of an action's consistency with the Waterfront Revitalization Program is required if an action would occur within the designated Coastal Zone. Public policy assessments are also appropriate if an action would occur within an area covered by an Urban Renewal Plan or a 197-A Plan.

### **Study Area**

According to the *CEQR Technical Manual*, the appropriate study area for land use, zoning, and public policy is related to the type and size of the proposed project, as well as the location and context of the area that could be affected by the project. Study area radii vary according to these factors, with suggested study areas ranging from 400 feet for a small project to 0.5 miles for a very large project.

Because of the modest size of the proposed project, the land use and zoning assessment for the proposed action considers a study area extending 400 feet around the proposed rezoning area. As shown in the Land Use Map, the study area extends approximately to President Street on the north, a point between Columbia and Hicks Streets on the east, the approach to the Brooklyn-Battery Tunnel on the south, and Van Brunt Street on the west.

### **Background**

Block 352, within which the proposed rezoning area is located, and Block 347, the block immediately to the north, have been the subjects of a series of actions to change manufacturing zoning districts to residential zoning districts, to permit residential development, or BSA variances to permit nonconforming residential uses.

The Columbia Street Urban Renewal Area (URA) is in close proximity to the project site and has defined the redevelopment of the surrounding area for the past two decades. In 2008 the Columbia Street Urban Renewal Plan was modified to remove a three-story height limit for residential buildings and to remove use restrictions applicable to private properties within the URA boundaries to reflect development trends in the surrounding area (C080115HUK).

In March 2007 the R6 zoning district along the north side of Carroll Street was extended from a line 200 feet west of Columbia Street to a line 240 feet west of Columbia Street (C060018ZMK) to permit residential development of property previously zoned M1-1 at 37-39 Carroll Street (Block 347, Lots 48 and 49). In October 2007 the zoning along the north side of Summit Street (Block 352, Lot 53) was changed from M1-1 to R6 (C060477ZKK), affecting a 150 foot by 100 foot area in the middle of the block,

200 feet west of Columbia Street, to facilitate development of a four-story, 35-unit residential building at 45 Summit Street.

In December 2007 the BSA granted a variance pursuant to ZR Section 72-21 (BSA Cal. No.: 33-07-BZ) to permit the conversion of the upper floors of an existing five-story manufacturing building in an M1-1 zoning district to residential use, affecting the building at 25 Carroll Street (Block 347, Lot 54). This property was later included within a 2011 rezoning of part of the north side of Carroll Street, discussed below.

In October 2009 the Carroll Gardens/Columbia Street Rezoning was approved (C090462ZMK), which rezoned an approximately 86-block area within the Carroll Gardens and Columbia Street neighborhoods, changing the existing residential zones within Blocks 347 and 352 from R6 to R6B. The purpose of the rezoning was to map contextual zoning districts that would better reflect the scale and character of the Carroll Gardens and Columbia Street neighborhoods and ensure that future development fit the prevailing context of mid-density residential development.

In April 2011 two zoning map amendments were approved, affecting both the northerly and southerly sides of Carroll Street: (1) an extension of the R6B district on the north side of Carroll Street from 240 feet west of Columbia Street to 375 feet west of Columbia Street (C090225ZMK) to facilitate development of new residential buildings and to bring an existing residential building into conformance; and (2) an extension of the R6B district along the south side of Carroll Street from a line 260 feet west of Columbia Street to a line 380 feet west of Columbia Street (C110118ZMK) to facilitate development of a residential building at Block 352, Lot 21, and to bring existing residential buildings along Carroll Street into conformance. The rezoning along the southerly side of Carroll Street brought the R6B zoning district boundary to the eastern edge of the project site.

### **Need for a Preliminary Assessment**

A land use and zoning assessment is appropriate for the proposed action, which include a zoning map amendment.

The proposed project is neither large nor publicly sponsored. No portion of the proposed rezoning area is within an urban renewal area or an area covered by a 197-a Plan. Part of the study area is within the Columbia Street URA, which was designated in 1979. The Urban Renewal Plan has been fully implemented, however, within the portion of the URA that is within the study area, through the construction of new housing during the 1980s. Furthermore, the goal of the Urban Renewal Plan was to encourage the upgrading of the housing stock along the Columbia Street corridor, and the proposed project, the construction of new housing, would be consistent with that goal.

The project site is within the Coastal Zone boundaries, as revised in December 2014. The preliminary assessment therefore focuses on land use, zoning, and consistency with the Waterfront Revitalization Program.

### **Land Use**

#### Existing Conditions within the Proposed Rezoning Area

The 8,000 sf project site consists of 55-61 Summit Street, Brooklyn Block 352, Lots 49, 50, 51, and 52 (all Applicant-owned). A vacant one-story building, last used as a kennel for boarding dogs and cats, is located on the eastern part of the project site (Lots 49 and 50). It is 15 feet tall and contains 2,160 square feet of floor area. The western half of the project site (Lots 51 and 52) is vacant.

Historically, the lots that constitute the project site were first developed as commercial properties, consisting of a series of street-level storefront uses prior to 1886. Four four-story residences occupied the site subsequently. These buildings remained through at least 1969 but were demolished sometime between 1969 and 1977, when the site was vacant. A 1978 Sanborn map shows the eastern portion of the site (55 and 57 Summit Street) as vacant and an automobile repair facility (the current building and paved surfaces) on the western portion (59 and 61 Summit Street). The auto repair shop operated through the mid 1980s. Subsequently, the building was used for various commercial purposes, including food services, furniture restoration, and small electronics manufacturing. Woofs 'n Whiskers was located at 59 Summit Street between 2007 and 2012.

The 2,000 sf Lot 48, which is outside the project site but within the proposed rezoning area, is located to the immediate east of the project site. It is occupied by a surface parking lot and a small, 700 square foot parking garage. There is no previous Certificate of Occupancy for the property, but available records appear to indicate prior development of the property with a small residential or mixed-use building similar to those common in this area.

#### Existing Conditions in the 400-Foot Study Area

The predominant land use on Block 352 is residential. Three-story residential buildings occupy Lots 47 and 7501 (the portion of the block within the Columbia Street URA), which comprise the eastern portion of the block along Columbia Street, a small portion (80 feet) of the Summit Street frontage, and a larger portion of the Carroll Street frontage (abutting the proposed rezoning area on its north). To the west of Lot 7501 along Carroll Street are three-story residential buildings (on Lots 22, 23, and 24), surface parking (on Lot 21), three-story buildings with dwelling units above stores (on Lot 20 and on Lot 19), a vacant lot (Lots 16, 17, and 18), and two-family homes (on Lots 13, 14, and 15). Along Summit Street, between Lot 7501 and Lot 48 within the proposed rezoning area, is the small Lot 47 (20 feet by 67 feet), which is in common ownership with Lot 48 and is used for surface parking. To the west of the project site along Summit Street are three-story buildings with dwelling units above stores (on Lots 151, 152, and 153), a vacant two-story former warehouse (on Lot 60), and a vacant one-story industrial building (on Lot 53). The western portion of the block contains a two-story bank and office building (on Lot 1, which has frontage along both Summit Street and Hamilton Avenue), a three-story building with dwelling units above a store (on Lot 3 fronting on Hamilton Avenue), a community garden (on Lots 4, 5, 6, 7, 8, 9, and 10, which comprise most of the block's Hamilton Avenue frontage), and three-story buildings with dwelling units above stores (on Lots 11 and 12 fronting on Van Brunt Street).

The block to the immediate north of the proposed rezoning area (Block 347, bounded by Carroll, Columbia, President, and Van Brunt Streets) is predominantly residential with some light industrial uses. Along the north side of Carroll Street, from Columbia Street to Van Brunt Street, are a row of low-rise residential buildings, two four-story multifamily walkups, a vacant lot, a five-story former warehouse that has been converted to residential use, a one-story light manufacturing building (extending through the block to President Street) that was originally a hosiery factory but that is now used for the fabrication and assembly of steel products, a three-story multifamily walkup building, a two-story warehouse, a three-story building with dwelling units above stores, a vacant lot, and another three-story building with dwelling units above stores. Three-story residential buildings occupy the Van Brunt Street midblock. On President Street, to the west of the through-block industrial building, is a one-story light manufacturing building that was originally part of the hosiery factory but that is also now used for the fabrication and assembly of steel products. Further east, the President Street side of the block is entirely residential, as is the Columbia Street frontage.

The portion of the study area to the east of Columbia Street is predominantly residential with some ground floor commercial uses, particularly along Columbia Street. On the northernmost block (Block 348, bounded by Columbia, President, Hicks, and Carroll Streets), the Columbia Street frontage is occupied by four three-story buildings with residences above commercial space, a seven-story residential apartment building, and a community garden at the corner of Columbia and Carroll Streets. Four-story multifamily walkups, one of which contains ground floor commercial space, occupy the President Street frontage within the study area. On Carroll Street, east of the community garden, are a large five-story building with residences above ground floor commercial space and a three-story multifamily walkup. To the south (on Block 353, bounded by Columbia, Carroll, Hicks, and Summit Streets), the Columbia Street frontage is occupied by a two-story multifamily residential building, a two-family home, five three-story buildings with residences above ground floor commercial space, and a community garden at the corner of Columbia and Summit Streets. Except for the Summit Street building adjoining the garden, which has residences above ground floor commercial space, three-story residential buildings occupy the block's Carroll and Summit Street frontages. Continuing south, the Columbia Street frontage on the next block (Block 358, bounded by Columbia, Summit, Hicks, and Woodhull Streets) consists of two- to five-story buildings, five of them entirely residential and three with residences above ground floor commercial space. A one-family home, a house of worship, and a row of three-story residential buildings occupy the Summit Street frontage, and three-story residential buildings line Woodhull Street. On the southernmost block (Block 363, bounded by Columbia, Woodhull, Hicks, and Rapelye Streets), two vacant lots flank a two-family home at the northern end of the Columbia Street frontage. On Woodhull Street, to the east of the vacant lot, is a building with ground floor warehouse space and offices on the partial second and third floors.

The block to the immediate south of Block 352 (Block 357, bounded by Summit, Columbia, and Woodhull Streets and Hamilton Avenue) has a mix of uses. A three-story residential building, two three-story buildings with dwellings above stores, and a three-story former industrial building that has been converted to offices occupy the Summit Street frontage. A tow pound and a five-story building with dwellings above ground floor commercial use occupy the Columbia Street frontage. A three-story building with dwellings above a store, a vacant one-story industrial building, and vacant land occupy the Woodhull Street frontage. An air intake structure for the Brooklyn Battery Tunnel and surface parking occupy the Hamilton Avenue frontage.

The remainder of the study area consists of two blocks occupied by single uses. A parking garage occupies Block 362 (the small, triangular block bounded by Woodhull and Columbia Streets and Hamilton Avenue). Harold Ickes Playground occupies the block at the southwest edge of the study area (Block 504, bounded by the two arms of Hamilton Avenue and by Woodhull and Van Brunt Streets).

#### Future Conditions without the Proposed Action

The proposed rezoning area consists of a site fronting on a local street that is not a commercial thoroughfare. Residential uses are located on most of the lots on Block 352, including those that flank the project site. According to the Applicant, this might make the project site less attractive for industrial and commercial uses. In the absence of the proposed action, it is assumed that no reuse or redevelopment would occur as of the build year of 2019.

Three new developments are anticipated within the study area. Two of them will be on the project site block, having been made possible by rezonings from M1-1 to R6B in recent years. According to the EAS for the 20-30 Carroll Street rezoning (11DCP038K), at 24 Carroll Street (Lot 21) a four-story, 50 foot tall, 4,400 square foot residential building with four dwelling units will replace the surface parking that now

occupies Lot 21 (although the build year for the project is not until 2020). According to the EAS for the 45 Summit Street rezoning (06DCP095K), at 45 Summit Street (Lot 53), located on the south side of the block 75 feet west of the project site, the existing vacant building will be demolished, and a four-story, 32,885 square foot residential building with 35 dwelling units will be constructed. (Although the EAS indicated a 2007 build year, demolition and reconstruction have not yet occurred.) The third development will be on the north side of Carroll Street, northeast of the site, at 29 Carroll Street (Block 347, Lot 50); according to information on the New York City Department of Buildings Building Information Search website, a building permit was issued on April 22, 2014, for construction of a four-story single-family home on what is now a vacant lot.

#### Future Conditions with the Proposed Action

If the proposed action is taken, the Applicant would redevelop the project site with a 20,829 gsf, five-story building with 14 dwelling units in 20,379 gsf of residential space and 450 gsf of community facility space. Of this total, 17,600 square feet would count for zoning purposes, for an FAR of 2.20, the maximum that would be permitted. The breakdown would be 17,150 zoning square feet (zsf) of residential floor area and 450 zsf of community facility floor area, for a residential FAR of 2.14, and a community facility FAR of 0.06. The building would have a footprint of 4,686 square feet, for a lot coverage of approximately 59 percent. The building would be 55 feet tall, with approximately two-thirds of the front façade setting back 15 feet above the fourth floor, at a height of 45 feet. The ground floor would contain a residential lobby, the community facility space (which would be for the use of a local organization), recreational space for the residents, mechanical space, bicycle parking, and five accessory off-street parking spaces. The upper floors would contain 14 residential units: four on each of the second through fourth floors and two on the fifth floor. There would be no cellar. The garage would be accessed via a curb cut at the western end of the site.

The proposed project would satisfy MIH Option 1; that is, 25 percent of the net residential floor area would be in units affordable to households earning, on average, no more than 60 percent of the Area Median Income (AMI), and 75 percent would be in market rate units. Depending on bedroom counts, either three or four units would be income-restricted.

The projected development site (Lot 48) would be redeveloped with a 2.00 FAR, five-story, 55-foot tall building, with a 15-foot setback above the fourth floor (at a height of 45 feet). To achieve this height, the ground floor would be a 13-foot-tall “qualifying ground floor.” The building would have a footprint of 965 square feet (approximately 48 percent lot coverage). The street wall would be located ten feet from the front lot line, and the area in front of the building would be landscaped. The building would contain 4,165 gsf of above grade floor area; the lower four floors would each contain 965 gsf, and the partial fifth floor would contain 305 gsf. Including a 965 gsf cellar used for storage and mechanical space, the building would contain 5,130 gsf. The ground floor would contain a 450 square foot community facility use (presumed to be a medical office), as well as the residential lobby and circulation space. It is assumed that the upper four floors would contain three dwelling units (one each on the second and third floors and a duplex on the fourth and fifth floors). Because the development would be below the minimum size for the Inclusionary Housing Program to be mandatory, all residential units would be market rate. There would be no accessory off-street parking.

The total anticipated development within the proposed rezoning area would consist of 25,959 gsf: 17 dwelling units (25,059 gsf of Residential Use Group 2 (UG2) uses) and 900 gsf of Community Facility Use Group 3 (UG3) uses.

Residential development within the proposed rezoning area would be consistent with existing land use patterns. Residential buildings occupy lots to the east, north, and west along both Summit and Carroll Streets. Residential uses predominate on the rest of the block on which the rezoning area is located and in general within the study area.

Residential development would also be consistent with current land use trends in the study area. The study area and the Columbia Street Waterfront neighborhood in general have been experiencing an ongoing transition from warehouse and manufacturing uses interspersed with older residential buildings to more consistent residential use along the side streets and a mix of residential and commercial uses along Columbia Street. The transition has been aided by a series of public actions, including the designation and redevelopment of the nearby urban renewal area and the rezonings described above under Background.

Small medical offices and local community facilities that serve the residential community are also appropriate from a land use perspective.

Finally, the proposed and projected developments would return the rezoning area to the land use pattern that existed there for much of the twentieth century. Residential and mixed-use buildings occupied the area until the 1970s, when the older buildings were demolished, and three of the five lots have been vacant or underutilized throughout the intervening decades.

The proposed action would therefore not have a significant adverse impact on land use.

## **Zoning**

### Existing Conditions

The proposed rezoning area is currently within an M1-1 light manufacturing district that permits most but not all commercial uses, light manufacturing uses listed in Use Group 17, and certain specified community facility uses but precludes all residential and most community facility uses. The maximum permitted floor area ratio (FAR) is 1.00 for commercial or manufacturing uses and 2.40 for community facility uses. The maximum street wall height is 30 feet or two stories, whichever is less. At that height a setback from the street line is required. On a narrow street such as Summit Street, the minimum required setback is 20 feet. The M1-1 regulations do not impose a maximum building height but instead require that the building not penetrate a sky exposure plane that begins at 30 feet above the front lot line and slopes upwards and rearwards at a 45 degree angle.

Block 352 is divided among M1-1, R6B, and R6B/C2-4 districts, and the proposed rezoning area abuts the R6B residential district on its north and west and the R6B/C2-4 district on its east. The eastern part of Block 352 along Columbia Street (Lot 47 and part of Lot 7501) is mapped R6B/C2-4 to a depth of 100 feet from Columbia Street. West of the C2-4 local commercial overlay, the R6B district extends another 280 feet along the northern half of the block (Lots 21, 22, 23, 24, and part of Lot 7501). On the southern half of the block, fronting on Summit Street, the proposed rezoning area is located to the west of the R6B/C2-4 district, and to its west the R6B district is mapped, extending 150 feet (Lots 53, 151, 152, and 153). The irregularly shaped western part of the block (Lots 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 60) is zoned M1-1; this portion of the block has 195 feet of frontage along Carroll Street on the north, 55.83 feet of frontage along Van Brunt Street on the west, 205.83 feet of frontage along Hamilton Avenue on the southwest, and 78.08 feet of frontage along Summit Street on the south. Except for the proposed rezoning area, the R6B district extends 380 feet from Columbia Street on the Carroll Street half of the block and 350 feet from Columbia Street on the Summit Street half of the block.

R6B is a medium density residential zone that permits the full range of residential and community facility uses listed in Use Groups 1, 2, 3, and 4 but precludes all commercial and manufacturing uses. (In contrast, the R6B/C2-4 district, which combines the residential district with a local commercial overlay, allows limited commercial use.) Except within an Inclusionary Housing designated area or a Mandatory Inclusionary Housing Area (MIHA), the maximum permitted FAR is 2.00 for either residential or community facility development. The maximum street wall height is 45 feet for a building with a qualifying ground floor (rising to a height of at least 13 feet). At that height a setback from the street line is required. The R6B regulations permit a building with a qualifying ground floor to rise to a maximum of five stories and a maximum building height of 55 feet. The maximum permitted lot coverage is 65 percent on an interior or through lot (such as the project site) and 80 percent on a corner lot. A 30-foot-deep rear yard is required.

The block to the immediate north, bounded by Columbia, Carroll, Van Brunt, and President Streets, is also divided between the M1-1 district on the west and the R6B district on the east, with a staggered boundary between the two, and with a C2-4 local commercial overlay mapped along Columbia Street. The portion of the study area south of Summit Street and west of Columbia Street is zoned M1-1. The eastern side of Columbia Street is zoned R6A/C2-4, to a depth of 100 feet from the Columbia Street frontage, and the midblocks between Columbia and Hicks Streets are zoned R6B.

#### Future Conditions without the Proposed Action

No zoning map changes are anticipated in the study area in the future without the proposed action.

#### Future Conditions with the Proposed Action

The proposed zoning map amendment would expand the existing R6B district onto the project site, which is now zoned M1-1. Along the southern portion of the block fronting Summit Street the R6B district (combined at its eastern end with a C2-4 commercial overlay) would extend uninterrupted 350 feet from Columbia Street.

The proposed zoning text amendment would establish an MIHA in which Options 1 and 2 would be available, coterminous with the rezoning area. Any development of more than ten dwelling units or more than 12,500 sf of residential floor area must comply with either Option 1 or Option 2 as set forth in ZR Section 23-154(d), which provide alternative minimum percentages of the residential square footage that must be within income-restricted affordable dwelling units and the income ranges applicable to those alternatives. Under Option 1, 25 percent of residential floor area must be in units that are affordable to households with an average annual income of no more than 60 percent of AMI, with a required minimum of 10 percent of the housing affordable at 40 percent of AMI. Under Option 2, 30 percent of residential floor area must be in units that are affordable to households with an average annual income of no more than 80 percent of AMI. For any development that would exceed the specified minimum, or for any smaller residential development that voluntarily satisfies the Option 1 or Option 2 requirements, the maximum permitted residential FAR would be 2.20.

The proposed action would adjust the boundaries between the existing M1-1 and R6B districts, which has already been adjusted twice within the past decade through expansions of the R6B district on Block 352. The action would expand the existing R6B district to include a 100 foot by 100 foot area fronting on Summit Street, which abuts an R6B district on three sides (along all four rear lot lines, the eastern side lot line of Lot 48, and the western side lot line of Lot 52). The proposed action would facilitate the redevelopment of what are now unutilized properties in a manner that is consistent with the adjacent and nearby land uses on the block. The creation of the new MIHA would be in accordance with the

City's Mandatory Inclusionary Housing policy (N 160051 ZRY). For these reasons, the proposed action would not have a significant adverse impact related to zoning.

**Public Policy (Waterfront Revitalization Program)**

As is noted above in the introduction to this section, the only public policy consideration pertinent to the proposed action is its consistency with the Waterfront Revitalization Program (WRP) policies. The project has been assigned WRP # 16-031. The proposed rezoning area is within the Coastal Zone, but it is actually several blocks inland, without waterfront access or even waterfront views, so only three of the ten WRP policies are relevant to the proposed action.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The proposed rezoning area is not within a Special Natural Waterfront Area or Significant Maritime and Industrial Area, and it is in a well developed area devoid of natural features. The properties within the proposed rezoning area are currently underutilized. The rezoning area is proximate to numerous residential uses and in an area where public facilities and infrastructure are adequate. The proposed action is therefore consistent with Policy 1.1.

Policy 6: Minimize loss of life, structures, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

The proposed rezoning area is within shaded zone X as designated on FEMA's preliminary flood map 3604970192G. That zone indicates a location that is within the 500-year-flood plain but not within the 100-year-flood plain. The nearest 100-year-flood plain has a height of 11.00 feet NAVD88, according to the New York City Flood Hazard Mapper, and the project site has an elevation of 13.6 feet NAVD88, according to a site survey (which is appended to this EAS). The NYC Building Code provides development restrictions in zone X only for uses within the institutional 'I' occupancy group (such as hospitals and nursing homes) and not for residential buildings. Restrictions relative to residential development are provided only for locations subject to a 100-year-flood. The proposed action would be consistent with Policy 6.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) into the planning and design of projects in the city's Coastal Zone.

The New York City Panel on Climate Change has projected that, relative to sea levels in the year 2000, sea levels at New York City will have risen 4 to 8 inches in the 2020s, 11 to 21 inches in the 2050s, 18 to 39 inches in the 2080s, and 22 to 50 inches by 2100. These changes will increase the frequency and severity of coastal flooding, expand existing flood zones, and increase base flood elevations at locations within existing flood zones.

As shown in the New York City Flood Hazard Mapper, the proposed rezoning area is expected to remain outside of the 100-year flood plain in the 2020s but be within the 100-year flood plain by the 2050s.

Under the current plans, the proposed project would not be fully compliant with the Building Code requirements for a project in the flood zone. Building utilities would be on the ground floor and thus not elevated above the anticipated future 100-year-flood height, and the ground floor would not be floodproofed. Also, there are no plans for the anticipated development on Lot 48.



Nevertheless, the proposed building design does incorporate elements that serve sustainability. There is no cellar or basement level. Mechanical equipment and accessory parking would be on the ground floor rather than in a subterranean level. The lowest residential level would be the second floor, which would be 13 feet above base elevation. (See the Flood Evaluation Worksheet.) Consideration of sea level rise has thus been integrated into the proposed project's planning and design. Furthermore, the Applicant is investigating means of further enhancing the resiliency of the project by elevating the building utilities to a higher elevation. The proposed action would be consistent with Policy 6.2.

Policy 7.2: Prevent and remediate discharge of petroleum products.

Liberty Environmental, Inc., performed a Combined Phase I and Phase II Environmental Site Assessment (ESA) for the project site in 2013. The Phase I research revealed that an automobile repair facility formerly operated on part of the project site. Historical site operations may have included tanks, drains, or other potential sources of impact, and likely included the use of fuel oils or other potential contaminants, which may have impacted site soil and/or groundwater. For these reasons Liberty Environmental identified the historical site operations as a recognized environmental concern. Soil, groundwater, and soil vapor samples were then collected from the project site and analyzed at an accredited laboratory. The results indicate that groundwater and soil vapor are not media of concern at the property. However, several semi-volatile organic compounds and metals were detected in soil above applicable New York State Department of Environmental Conservation action levels. Therefore, the report recommended remediation of these soils, by capping or removal and off-site disposal.

Because remediation is needed, an (E) designation will be placed on the project site. An (E) designation will also be placed on the one other property within the rezoning area (Lot 48, the projected development site). The (E) designation (E-466) requires that the following actions be taken before construction activities take place. Because soil, groundwater, and soil vapor testing have already been performed on the project site, the Office of Environmental Remediation (OER) will review the combined Phase I and Phase II ESA report and determine whether additional testing must be done or the sampling protocol phase may be omitted.

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 the (E) designation in place, a significant adverse impact related to hazardous materials would not occur as a result of the proposed action. The proposed action is therefore consistent with Policy 7.2.

In summary, the proposed action would be consistent with all applicable WRP policies, and a significant adverse impact regarding public policy is not anticipated.

## 8. SHADOWS

### Introduction

A shadow analysis is generally required if a proposed action would result in one or more buildings that would be (a) at least 50 feet in height and close enough to a sunlight-sensitive resource of concern to cast a shadow on it or (b) less than 50 feet in height but directly adjacent to or across from a sunlight-sensitive use. Such resources of concern are public open spaces, greenstreets, natural resources if the introduction of shadows might alter their condition or microclimate, and historic resources that depend on direct sunlight for their appreciation by the public.

The development resulting from the proposed action would be 55 feet in height. A shadow analysis is therefore appropriate.

### Tier 1 Assessment

Shadow lengths vary by time of day, being longest in the early morning and late afternoon and shortest at noon, and by time of year, being longest at the winter solstice and shortest at the summer solstice. According to the *CEQR Technical Manual*, the longest shadow cast by a building is 4.3 times the building's height. The development would consist of two adjacent buildings with a height of 55 feet (one on the project site, the other on the projected development site). The longest shadow cast by the proposed project would therefore be 238.7 feet in length.

The Tier 1 Screening Assessment figure shows the area within a 238.7 foot radius of the project site. Four sunlight-sensitive resources are partly within the radius: (1) Harold Ickes Playground, located to the southwest of the site across Hamilton Avenue; (2) the Backyard, a community garden that fronts on Hamilton Avenue and Van Brunt Street at the western end of the project site block; (3) the Summit Street Community Garden, to the east of the proposed rezoning area at the northeast corner of Summit and Columbia Streets; and (4) the Amazing Garden, a community garden at the northeast corner of Carroll and Columbia Streets, to the northeast of the proposed rezoning area. Additional assessment is therefore required.

### Tier 2 Assessment

The next step is to determine whether the sunlight-sensitive resources are within the arc in which shadows can be cast. That arc excludes the triangular area to the south of the action-induced development that extends from +108 degrees to -108 degrees from true north. As the Tier 2 Screening Assessment figure shows, all four sunlight-sensitive resources are located within the arc. Additional assessment is therefore required.

### Tier 3 Assessment

The next step is to use computer modeling software to plot the shifting shadows that would be cast by the buildings during the course of the day, as the sun travels from east to west in the sky, and as the shadows therefore travel from west to east. Modeling is performed for four days during the year: the winter solstice (December 21), the summer solstice (June 21), the spring or autumn equinox (March 21 or September 21), and the midpoint between the equinox and the summer solstice (May 6).

As the Tier 3 Screening Assessment figures and Table 8-1 show, the buildings' shadows would not reach Harold Ickes Playground, the Backyard, or the Amazing Garden, but the buildings would create a new shadow on the Summit Street Community Garden on one of the four analysis days. During the June

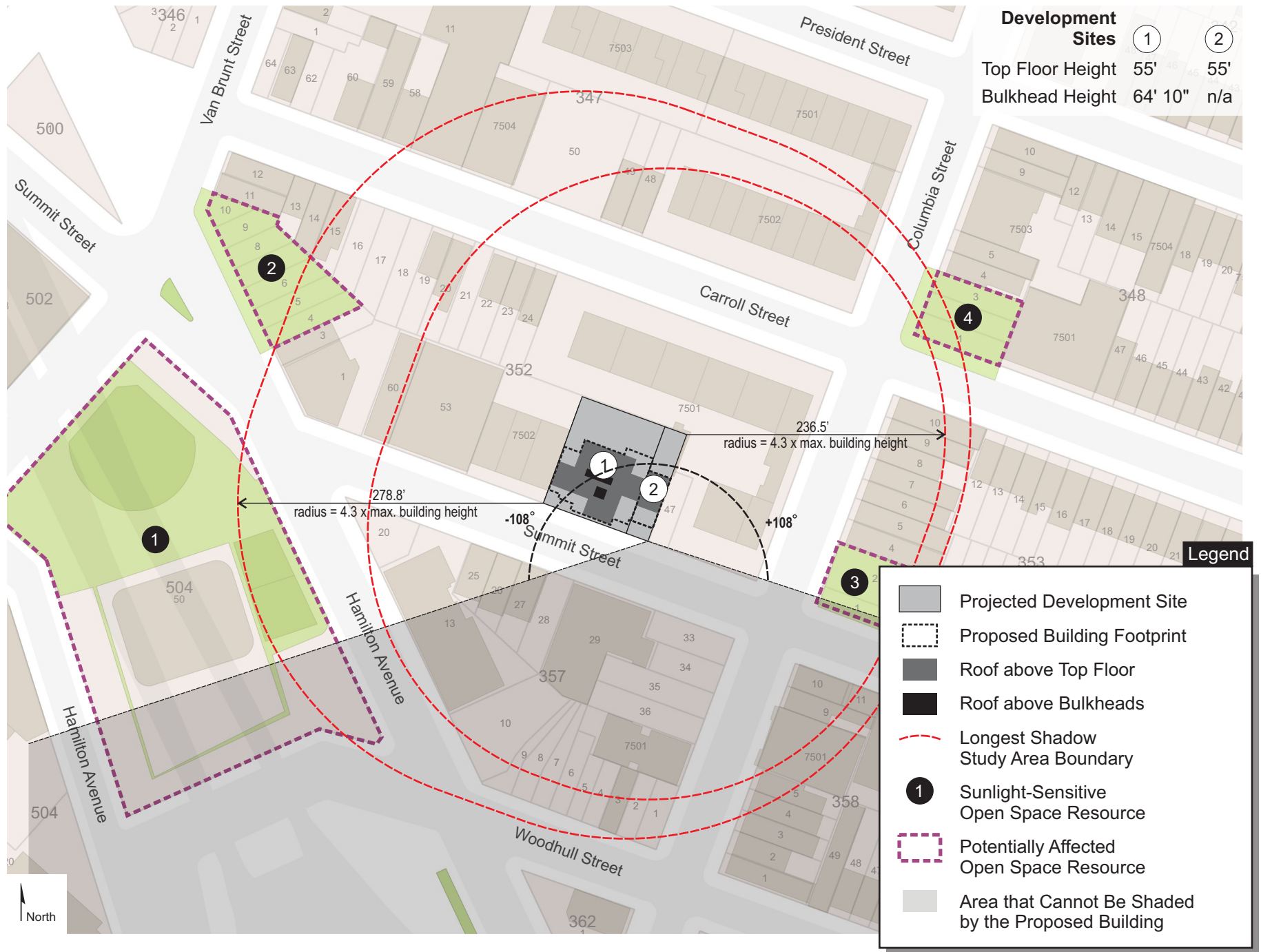
21st analysis day, a shadow would extend across approximately a quarter of the garden for a brief period during the late afternoon. As the Tier 3 Incremental Impact diagram shows, most of that area is already in shadow during that time as a result of two existing buildings to the east of the rezoning area. The new action-induced shadow would extend over a small area in the southwest corner of the park from 5:59 to 6:01 PM, a period of two minutes.

The action-induced shadow would affect a very small portion of the Summit Street Community Garden, would be of short duration (two minutes), and would occur during a brief period of the year, near the summer solstice. Even during the period when the shadow reaches the garden, most of the garden would be unaffected. The proposed action would therefore not cause a significant adverse shadow impact.

**Table 8-1  
Time and Duration of Shadows on the Backyard**

<b>December 21</b>	<b>March 21/ September 21</b>	<b>May 6/ August 6</b>	<b>June 21</b>
N/A	N/A	N/A	5:59 pm – 6:01 pm
N/A	N/A	N/A	2 minutes









Development Sites	①	②
Top Floor Height	55'	55'
Bulkhead Height	64' 10"	n/a

Legend

- Projected Development Site
- Proposed Building Footprint
- Roof above Top Floor
- Roof above Bulkheads
- Shadow Cast / Analysis Time
- 1 Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource











Development Sites	①	②
Top Floor Height	55'	55'
Bulkhead Height	64' 10"	n/a
Shadows Cast on Resource 1	5:59–	n/a
	6:01pm	

**Legend**

- Project Site
- Proposed Building Footprint
- Roof above Top Floor
- Roof above Bulkheads
- Shadow Cast / Analysis Time
- Footprint of Intervening Building
- Shadow of Intervening Building
- 1 Sunlight-Sensitive Open Space Resource
- Potentially Affected Open Space Resource



## **9. HISTORIC AND CULTURAL RESOURCES**

### **Introduction**

This section considers the proposed action's potential impact on archaeological and architectural resources. Archaeological resources are artifacts or other remains, from either the prehistoric (Native American) or the historic (colonial or post-colonial) period that might provide information about the period from which they date or the society that produced them. Architectural resources include designated New York City landmarks and buildings within a designated New York City historic district, properties calendared for consideration by the New York City Landmarks Preservation Commission (LPC), properties listed on or determined to be eligible for listing on the State or National Register of Historic Places, National Historic Landmarks, and other properties that meet the eligibility criteria for such designations.

The proposed action involves the rezoning of a 100-by-100-foot area from an M1-1 light manufacturing district to an R6B medium density residential district. The 8,000 sf project site consists of 55-61 Summit Street, Brooklyn Block 352, Lots 49, 50, 51, and 52 (all Applicant-owned). A vacant one-story building, last used as a kennel for boarding dogs and cats, is located on the eastern part of the project site (Lots 49 and 50). It is 15 feet tall and contains 2,160 square feet of floor area. The western half of the project site (Lots 51 and 52) is vacant. The 2,000 sf Lot 48, which is outside the project site but within the proposed rezoning area, is located to the immediate east of the project site. It is occupied by a surface parking lot and a small, 700 square foot parking garage. If the proposed action is taken, the five zoning lots would be redeveloped with five-story, 55-foot tall buildings. It is assumed that the development on the projected development site (Lot 48) would have a cellar; the development on the project site would not.

### **Archaeological Resources**

In correspondence dated March 10, 2016, and included in the Appendix, LPC staff stated that none of the properties to be rezoned are archaeologically sensitive. Excavation resulting from the proposed actions would therefore not have an adverse impact on archaeological resources.

### **Architectural Resources**

The project site is vacant except for a vacant one-story building that was originally an auto repair garage, and the other parcel within the proposed rezoning area is occupied by a surface parking lot and a small parking garage. The proposed rezoning area thus does not contain architectural resources. A search on NYCityMap for designated landmarks or historic districts did not reveal any known historic resource in the vicinity of the project site. The proposed action would therefore not have a significant adverse impact on architectural resources. This was confirmed by LPC staff in correspondence dated March 10, 2016.

### **Conclusion**

The proposed rezoning area has been determined by the LPC to have no archaeological or architectural significance. The proposed action would not have a significant adverse impact on historic and cultural resources.



## 10. URBAN DESIGN AND VISUAL RESOURCES

### Introduction

An assessment of urban design is needed when a project may have effects on any of the elements that contribute to the pedestrian experience of public space. A preliminary assessment is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning, including the following:

1. Projects that permit the modification of yard, height, and setback requirements;
2. Projects that result in an increase in built floor area beyond what would be allowed 'as-of-right' or in the future without the proposed project.

A preliminary urban design and visual resources assessment is required because the proposed action would include a zoning map change that would alter the rules regulating development within the proposed rezoning area, allowing the construction of buildings that are different in use and scale from those that would be allowed under existing zoning regulations. The proposed zoning map amendment would expand an existing R6B district by extending it to include a 10,000 sf, 100-foot-by-100-foot area fronting on Summit Street that is now zoned M1-1, and which abuts the existing R6B district on three sides (along all five rear lot lines and the side lot lines of the two outermost lots). The existing M1-1 district is a manufacturing district that permits most but not all commercial uses, light manufacturing uses listed in Use Group 17, and certain specified community facility uses but precludes all residential and most community facility uses. In contrast, the proposed R6B district is a residential zone that permits the full range of residential and community facility uses listed in Use Groups 1, 2, 3, and 4 but precludes all commercial and manufacturing uses. The maximum permitted floor area ratio (FAR) under M1-1 is 1.00 for commercial or manufacturing uses and 2.40 for community facility uses. The maximum FAR under R6B is generally 2.00 for either residential or community facility development but 2.20 for residential development within a Mandatory Inclusionary Housing Area (MIHA) or Inclusionary Housing designated area that satisfies the applicable Inclusionary Housing Program requirements. The proposed rezoning area would be coterminous with an MIHA. The maximum permitted street wall height would increase from 30 feet under M1-1 to 45 feet under R6B, but a maximum permitted building height of 55 feet would replace sky exposure plane regulations. If the proposed action is taken, the existing buildings within the proposed zoning area would be cleared and replaced by two five-story, 55-foot tall buildings.

### Pedestrian Wind Conditions

The *CEQR Technical Manual* calls for a separate preliminary assessment to determine whether an analysis of pedestrian wind conditions is appropriate, since the construction of large buildings at locations that experience high wind conditions may result in channelization or downwash effects that could affect pedestrian safety.

The proposed rezoning area is not subject to unusual wind conditions. It is not in an exposed area fronting on the waterfront, and it is not on high ground or on the upper portion of an exposed slope. It is within a fully developed area with a relatively flat topography that is several hundred feet inland.

The proposed development would consist of five five-story buildings that would form a continuous 100-foot-long street wall spanning the entire rezoning area. There would not be a freestanding tower that could cause pedestrian level vortex effects.

For these reasons, the proposed action would not have a significant adverse impact on pedestrian wind conditions, and a detailed wind conditions assessment is not required.

## **Existing Conditions**

### Urban Design

Located on the southern part of Block 352, the proposed rezoning area consists of five adjacent tax lots, each measuring 20 feet by 100 feet, with 20 feet of frontage along Summit Street. The 8,000 sf project site consists of 55-61 Summit Street, Brooklyn Block 352, Lots 49, 50, 51, and 52. A vacant one-story building, originally an automotive repair shop and last used as a kennel for boarding dogs and cats, is located on the eastern part of the project site (Lots 49 and 50). It is 15 feet tall and contains 2,160 square feet of floor area (0.54 FAR for both lots). The western half of the project site (Lots 51 and 52) is vacant. Block 352, Lot 48, which is outside the project site but within the proposed rezoning area, is developed with a single-story automotive-related use with 700 square feet of floor area (0.35 FAR). The remainder of the lot is currently utilized as accessory parking.

The area surrounding the proposed rezoning area, within the northern part of the Red Hook neighborhood, is a well developed urban area. It is a mixed use area that has been becoming increasingly residential in recent years, with a mix of older industrial buildings (mainly warehouses, some of which have been converted to residential or commercial use), older small scale residential buildings (some with ground floor commercial space), newer residential row houses, and a few apartment buildings of up to seven stories. The area contains community gardens and playgrounds but no significant natural features.

There are also no significant topographic features. The topography is fairly flat.

Streets are laid out in a grid pattern. Between Van Brunt and Columbia Streets, block dimensions are 200 feet north to south and 575 feet east to west; in the narrower corridor between Columbia and Hicks Streets, block dimensions are 200 feet by 340 feet. The grid is interrupted by Hamilton Avenue and the approach to the Brooklyn-Battery Tunnel, which cut a broad swath diagonally through the regular street system.

The project site is on a block that fits within this pattern, with 575 feet of frontage along Carroll Street to the north, 200 feet of frontage along Columbia Street to the east, 428 feet of frontage along Summit Street to the south, 206 feet of frontage along Hamilton Avenue to the southwest, and 56 feet of frontage along Van Brunt Street to the west. (See the aerial photograph.)

North of the tunnel approach, buildings are arranged linearly along blockfronts. In general, they form continuous street walls with few setbacks or side yards (as can be seen from the photographs, which are keyed to the accompanying maps). In the corridor between Columbia and Van Brunt Streets, older buildings on the western parts of the blocks are built mostly to the street lines, whereas the more recent attached row houses on the eastern parts of the blocks form continuous walls that are deeply recessed from the street, behind lawns, shrubbery, and walkways leading to building entrances that are continuations of the public sidewalk.





1. View of the sidewalk along the north side of Summit Street facing west (Project Area at right).



2. View of Summit Street facing west (Project Area at right).



3. View of the Project Area facing northwest from Summit Street.







4. View of the Project Area facing northeast from Summit Street.



5. View of Summit Street facing east (Project Area at left).



6. View of the sidewalk along the north side of Summit Street facing east (Project Area at left).







7. View of the Project Area facing north from Summit Street.



8. View of the side of Summit Street facing southwest from the Project Area.



9. View of the side of Summit Street facing southeast from the Project Area.







10. View of Summit Street facing west from Columbia Street.



11. View of Summit Street facing east from Hamilton Avenue.



The attached row houses are all three stories tall. The older buildings vary in height from one to seven stories.

The predominant façade material is red brick.

### Visual Resources

According to the *CEQR Technical Manual*, “A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources.” The marine terminal blocks views of the waterfront from the study area. As noted above, there are no significant topographical features. The area is fully developed, with no natural resources. The study area contains small, functional parks and playgrounds but no large or distinctive landscapes. There are no designated architectural resources; as the photographs show, the area is characterized by undistinguished working class homes, purely functional industrial buildings, and 1980s urban renewal housing. There are no significant visual resources or view corridors in the vicinity of the proposed rezoning area.

### **Future Conditions without the Proposed Action**

In the absence of the proposed action, it is assumed that no reuse or redevelopment would occur within the proposed rezoning area. The existing vacant lots, vacant building, parking lot, and parking garage would remain.

Three new developments are anticipated within the study area. Two of them will be on the project site block, having been made possible by rezonings from M1-1 to R6B in recent years. According to the EAS for the 20-30 Carroll Street rezoning (11DCP038K), at 24 Carroll Street (Lot 21), located 40 feet east of the project site, a four-story, 50-foot-tall, 4,400 square foot residential building with four dwelling units will replace the surface parking that now occupies the lot (although the build year for the project is not until 2020). According to the EAS for the 45 Summit Street rezoning (06DCP095K), at 45 Summit Street (Lot 53), located on the south side of the block 30 feet east of the project site, the existing vacant building will be demolished, and a four-story, 32,885 square foot residential building with 35 dwelling units will be constructed. (Although the EAS indicated a 2007 build year, demolition and reconstruction have not yet occurred.) The third development will be on the opposite side of Carroll Street, northeast of the site, at 29 Carroll Street (Block 347, Lot 50); according to information on the New York City Department of Buildings Building Information Search website, a building permit was issued on April 22, 2014, for construction of a four-story single-family home on what is now a vacant lot.

No other changes that would affect urban design and visual resources are anticipated.

### **Future Conditions with the Proposed Action**

#### Zoning Map and Text Amendments

The proposed zoning map amendment would rezone a 10,000 square foot area consisting of five 20-foot-wide by 100-foot-deep lots fronting on Summit Street (Block 352, Lots 48, 49, 50, 51, and 52) from M1-1 to R6B. The proposed amendment would expand an existing R6B district to include a 100-foot-by-100-foot area fronting on Summit Street, which abuts an R6B district on three sides (along all five rear lot lines, the eastern side lot line of Lot 48, and the western side lot line of Lot 52).

The existing M1-1 district is a manufacturing district that permits most but not all commercial uses, light manufacturing uses listed in Use Group 17, and certain specified community facility uses but

precludes all residential and most community facility uses. In contrast, the proposed R6B district is a residential zone that permits the full range of residential and community facility uses listed in Use Groups 1, 2, 3, and 4 but precludes all commercial and manufacturing uses.

The two districts also differ in terms of bulk regulations. The maximum permitted floor area ratio (FAR) under M1-1 is 1.00 for commercial or manufacturing uses and 2.40 for community facility uses, and the maximum FAR under R6B is generally 2.00 for either residential or community facility development, but 2.20 for residential development within an MIHA or Inclusionary Housing designated area that satisfies the applicable Inclusionary Housing Program requirements. The proposed rezoning area would be coterminous with an MIHA in which under any development of more than ten dwelling units or more than 12,500 sf of residential floor area must comply with either Option 1 or Option 2 as set forth in ZR Section 23-154(d), which provide alternative minimum percentages of the residential square footage that must be within income-restricted affordable dwelling units and the income ranges applicable to those alternatives. For any development that would exceed the specified minimum, or for any smaller residential development that voluntarily satisfies the Option 1 or Option 2 requirements, the maximum permitted residential FAR would be 2.20.

The maximum street wall height under M1-1 is 30 feet or two stories, whichever is less, and the maximum under R6B is 45 feet. At that height a setback from the street line is required. On a narrow street such as Carroll Street, the minimum required setback is 20 feet. The two districts regulate additional building height in different ways. The M1-1 regulations do not impose a maximum building height but instead require that the building not penetrate a sky exposure plane that begins at 30 feet above the front lot line and slopes upwards and rearwards at a 45 degree angle. The R6B regulations impose a maximum building height, for buildings with qualifying ground floors (minimum 13 feet in height), of 55 feet (capped at 5 stories).

No lot coverage restrictions apply under M1-1. Under R6B the maximum permitted lot coverage is 65 percent on an interior or through lot (such as the project site) and 80 percent on a corner lot.

### Development Scenario

In the future with the proposed actions, it is assumed that redevelopment would occur on all five lots within the rezoning area. The existing buildings and uses on the lots would be cleared, and new mixed-use buildings would be constructed, as described below.

On the project site, the Applicant would construct a 20,829 gross square foot (gsf), five-story building with 14 dwelling units in 20,379 gsf of residential space and 450 gsf of community facility space. Of this total, 17,600 square feet would count for zoning purposes, for an FAR of 2.20, the maximum that would be permitted. The building would have a footprint of 4,686 square feet, for a lot coverage of approximately 59 percent. The building would be 55 feet tall, with approximately two-thirds of the front façade setting back 15 feet above the fourth floor, at a height of 45 feet. Of the 80-foot-wide street wall, 52'6" would be 45 feet tall, and 27'6" would be 55 feet tall. The ground floor would have a height of 13 feet; the top story would have a height of 10 feet, and the three middle stories would each be 10'8" tall. The ground floor would contain a residential lobby, the community facility space (which would be for the use of a local organization), recreational space for the residents, mechanical space, bicycle parking, and five accessory off-street parking spaces. The upper floors would contain 14 residential units: four on each of the second through fourth floors and two on the fifth floor. There would be no cellar. The western part of the building (19 feet in width) would be recessed ten feet from the street line to align with the building on the adjacent property; the central portion (38 feet in width) would be built to the



street line; and the eastern part (23 feet in width) would be recessed ten feet. Landscaping and seating would be located in front of the eastern part of the building, and a driveway would be located in front of the western part (where a 19-foot-wide curb cut onto Summit Street would be located).

The projected development site (Lot 48) would be redeveloped with a five-story, 55-foot tall building, with a 15-foot setback above the fourth floor (at a height of 45 feet). The building would contain 4,165 gsf of above grade floor area, of which 4,000 square feet would count as zoning floor area, to achieve an FAR of 2.00. The building would have a footprint of 965 square feet (approximately 48 percent lot coverage). The street wall would be located ten feet from the front lot line, and the area in front of the building would be landscaped. Including a cellar used for storage and mechanical space, the building would contain 5,130 gsf. The ground floor would contain a 450 square foot community facility use (presumed to be a medical office), as well as the residential lobby and circulation space. It is assumed that the upper four floors would contain three dwelling units (two full-floor units and a duplex). There would be no accessory off-street parking.

The total anticipated development within the proposed rezoning area would consist of 25,959 gsf: 17 dwelling units (25,059 gsf of Residential Use Group 2 (UG2) uses) and 900 gsf of Community Facility Use Group 3 (UG3) uses.

Table 10-1 compares the proposed rezoning area development characteristics under existing, future no-action, and future with-action conditions.

**Table 10-1  
Comparison of Existing, No-Action, and With-Action Conditions**

<b>Item</b>	<b>Existing Conditions</b>	<b>No-Action Conditions</b>	<b>With-Action Conditions</b>
<b>Development Scenario</b>	Vacant lot, vacant 1-story commercial building, surface parking lot and parking garage	Vacant lot, vacant 1-story commercial building, surface parking lot and parking garage	Two buildings, one with 14 DUs and a small community facility, one with three DUs and a small medical office
<b>Gross/(Net) Bldg. Floor Area</b>	2,860 gsf/(2,860 zsf 0.29 FAR)	2,860 gsf/(2,860 zsf 0.29 FAR)	25,959 gsf/(21,600 zsf, 2.16 FAR)
<b>Lot Coverage</b>	2,860 sf (29%)	2,860 (29%)	5,651 sf (57%)
<b>Building Height</b>	One story (15 feet)	One story (15 feet)	5 stories (55 feet)

Urban Design

As discussed above under Existing Conditions, the principal urban design elements of the study area consist of a mix of building types and styles, constructed during various time periods; a grid street pattern; rows of buildings with consistent street wall locations; and building heights of one to seven stories. The proposed action would not affect the topography, street system, block forms, or building arrangements within the area including and surrounding the proposed rezoning area. The new buildings comprising the development would have a varying street wall but would both align with their neighbors. Building heights would be within the range of existing building heights. The accompanying sketches show the existing streetscape along Summit Street and the same views with the new buildings' massing superimposed. As those figures show, the development's predominant street wall would be approximately the same height as the buildings directly across the street and slightly taller than the adjacent building to the west. The figures show that the development's overall height would be somewhat greater than that of nearby buildings, but the difference would not be great enough to alter the block's urban design qualities or the experience of a pedestrian walking along the block.



Like most nearby buildings, the development would be a predominantly residential in character. In summary, the proposed action would not result in a significant adverse urban design impact, and further analysis is not warranted.

#### Visual Resources

No visual resources have been identified in the vicinity of the project site, so the proposed action would not result in a significant adverse impact to visual resources.

Summit Street facing east (Site at left)



No-Action Conditions

Summit Street facing east (Site at left)



With-Action Conditions

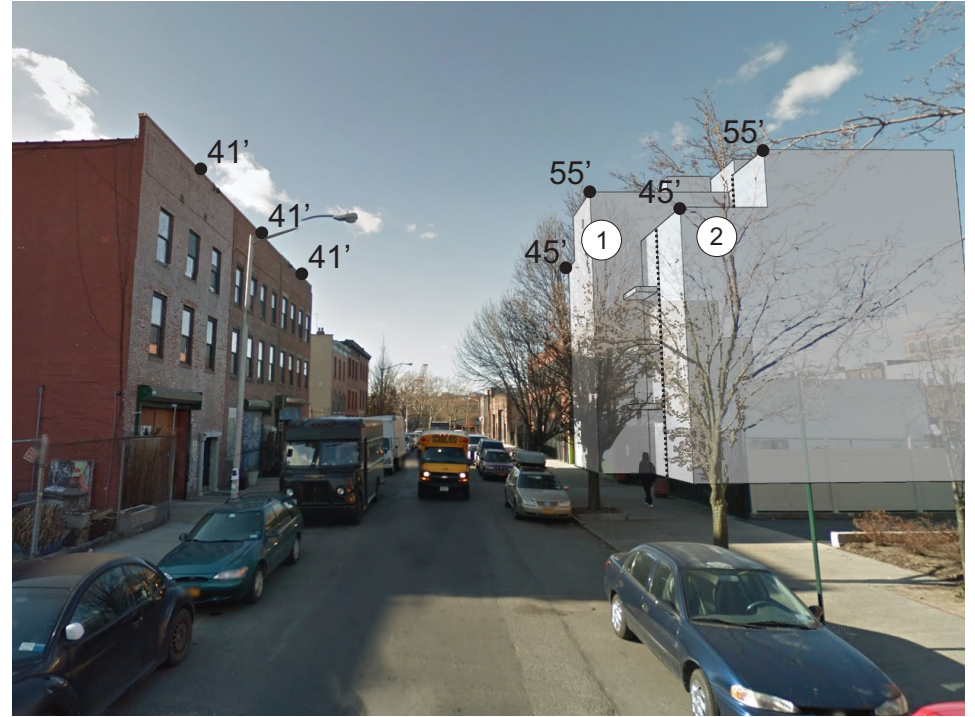


Summit Street facing west (Site at right)



No-Action Conditions

Summit Street facing west (Site at right)



With-Action Conditions





## **12. HAZARDOUS MATERIALS**

### **Introduction**

Liberty Environmental, Inc., performed a Combined Phase I and Phase II Environmental Site Assessment (ESA) for the project site in 2013. The Phase I ESA was performed in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-05). The primary purpose of this study was to identify conditions indicative of releases or threatened releases of hazardous substances, as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or petroleum products on, at, in, or to the subject property. These conditions are collectively defined as “recognized environmental conditions.” Recognized environmental conditions are identified through research into the history and uses of the site and surrounding area, an inspection of the subject property and a survey of adjoining and nearby uses, and a review of available regulatory agency records and environmental databases.

The Phase II activities were conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance for Site Investigation and Remediation (DER-10), as well as a Phase II Work Plan approved by the New York City Department of Environmental Protection (NYCDEP). The activities were performed to supplement the standard Phase I ESA scope, address recognized environmental concerns and historical fill, and to provide general horizontal/vertical characterization across the site for development purposes.

The following summarizes the findings, conclusions, and recommendations of the combined Phase I and Phase II ESA and describes additional actions that will be taken to ensure that the proposed action does not result in any significant adverse environmental impact related to hazardous materials.

### **Phase I ESA**

#### Site Description

The project site consists of a single rectangular-shaped parcel located along the north side of Summit Street, between Columbia Street, and Hamilton Avenue, and is improved with a one-story commercial building. The commercial building, which was vacant at the time of the site inspection, was most recently occupied by Woofs ‘n Whiskers (western bay), and provided pet grooming, general care, and boarding services. The remainder of the property is enclosed by a fence which lines the property boundary on all sides. A paved parking lot followed by residential development borders the site to the east, Summit Street borders the site to the south, and residential apartment complexes border the site to the west and north. The surrounding area consists of mixed commercial and residential properties located within a highly urbanized area of Brooklyn.

Situated on the southeastern portion of the property, the commercial building consists of a one-story slab-on-grade structure constructed of masonry block and brick walls, concrete and linoleum tile flooring. The commercial building was divided into eastern and western bays by a masonry block wall. The western portion of the commercial building consisted of the main building entrance, a large vacant room containing three wash bays (related to former dog grooming operations), a restroom, and a utility closet containing electric paneling and the sprinkler system. Water and sewer lines were observed entering the commercial building beneath a steel grate within a pit located adjacent to the main entrance. The eastern portion of the building was divided into a large vacant room, a smaller masonry block room located in the southwestern corner housing the building entrance way, and a rest room. Heat was formerly supplied to the building by a 250-gallon heating oil aboveground storage tank (AST), located

in the southern portion of the eastern bay, and powered oil-fired heaters observed throughout the building. Hot water was provided to the building by an electric hot water heater. Floor drains observed throughout the commercial building discharge to the sanitary sewer system.

The surface of the project site consisted of concrete paving north and west of the building, and exposed soil to the west and southwest of the building. Trees lined the property along the northern and southern property boundaries. Two cargo containers were observed along the western portion of the building, and stored miscellaneous parts, and/or equipment, including automobile axels. No visible evidence of surface spills or stressed vegetation was noted. Various manholes for utilities, including public water and sewer, are present along Summit Street, located south of the subject property.

### Site History

According to site contact interviews, deed records, historical maps, and historical aerial photographs, the subject property was first developed as commercial properties, consisting of a series of street-level storefront properties prior to 1886. Four four-story residences occupied the site subsequently. These buildings remained through at least 1969 but were demolished by 1977, when the site was vacant. A 1978 Sanborn map shows the eastern portion of the site (55 and 57 Summit Street) as vacant and an automobile repair facility (the current building and paved surfaces) on the western portion (59 and 61 Summit Street). The auto repair shop operated through the mid 1980s. Subsequently, the building was used for various commercial purposes, including food services, furniture restoration, and small electronics manufacturing. Woofs 'n Whiskers was located at 59 Summit Street between 2007 and 2012.

### Regulatory Agency Database Findings

Numerous nearby facilities are listed in state and federal databases, including Resource Conservation and Recovery Act (RCRA) generators, leaking underground storage tank (UST) sites, and cleanup sites. A detailed review of the listed facilities, as well as the physiographic setting of the property, reveals that the listed sites are generally located greater than 0.15 mile of the subject property, and none at this time are believed to pose a risk of impact to the subject site. The subject property was listed in the New York State Historical Auto Stations database, identified as "C & J Auto Repair Service" (59 Summit Street), and "Auto Work-Autobody" (61 Summit Street).

### Conclusions

An automobile repair facility formerly operated on part of the project site. Historical site operations may have included tanks, drains, or other potential sources of impact, and likely included the use of fuel oils or other potential contaminants, which may have impacted site soil and/or groundwater. For these reasons the historical site operations have been identified as a recognized environmental concern.

## **Phase II ESA**

### Geophysical Survey

A geophysical survey, utilizing a combination of remote sensing techniques including ground-penetrating radar (GPR) and magnetic (MAG) methods, was performed to screen the areas around the proposed boring locations for underground storage tanks, subsurface utilities, or other features. The survey identified two cylindrical, metallic anomalies. The first anomaly was identified beneath a concrete slab located east of the site building. The second anomaly was identified in the northeastern portion of the property at approximately two feet below grade surface (bgs). The noted subsurface anomalies are indicative of potential underground storage tanks, and thus borings were advanced in the vicinity of both anomalies. The survey did not delineate any public utilities.



## Soil, Groundwater, and Soil Vapor Investigation

A Geoprobe direct-push apparatus was used to mechanically advance six borings in selected locations surrounding the site building. Soils were field-screened for the presence of volatile organic vapors using a photoionization detector (PID). Two soil samples were collected from each boring: a shallow sample from a depth no greater than two feet bgs and a deep sample from below the maximum excavation depth, or at a lesser depth where clearly contaminated soils were encountered.

Soils were generally found to consist of brown and gray sandy silts with little gravel and brick debris noted throughout. Shallow groundwater was encountered between 5 and 8 feet bgs. Volatile organic vapors were not detected in any of the borings.

To evaluate site groundwater, temporary groundwater monitoring wells were installed at three of the soil boring locations. Groundwater samples were collected from the temporary well points utilizing a peristaltic pump and tubing in accordance with NYSDEC *Technical Guidance for Site Investigation and Remediation*, and *Sampling Guidelines and Protocols*, dated March 1991.

Four vapor points were installed, and soil gas samples were collected in laboratory-supplied six-liter Summa canisters.

All samples were analyzed at a certified laboratory. Soils were analyzed for target compound list (TCL) volatile organic compounds (VOCs) by Environmental Protection Agency (EPA) Method 8260, TCL semi-volatile organic compounds (SVOCs) by EPA Method 8270, pesticides/polychlorinated biphenyls (PCBs) by EPA Method 8081/808, and target analyte list (TAL) for metals by EPA Method 6010. Groundwater samples were analyzed for filtered (dissolved) and unfiltered (total) metals. Gas samples were analyzed for VOCs by EPA Method TO-15.

Acetone was detected above NYSDEC groundwater protection criteria but below residential direct contact soil cleanup objectives in several soil samples. Acetone is a common laboratory contaminant. No other VOCs were detected above NYSDEC soil cleanup objectives.

Several SVOCs were detected above NYSDEC residential and groundwater protection soil cleanup objectives. The compounds detected above soil cleanup objectives are limited to polycyclic aromatic hydrocarbons (PAHs) including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.

Total PCBs were detected in two of the soil samples. PCBs were detected in soil sample SB-1-1 at 53.1 milligrams per kilogram (mg/kg), which exceeds both the residential direct contact and groundwater protection soil cleanup objectives. PCBs were detected in soil sample SB-6-2 at 1.7 milligrams per kilogram (mg/kg), which only exceeds the groundwater protection soil cleanup objective.

Pesticides were detected in soil sample SB-3-7 above the groundwater protection soil cleanup objective. No other pesticides were detected above NYSDEC soil cleanup objectives.

Several metals were detected above NYSDEC residential and groundwater protection soil cleanup objectives, including arsenic, barium, cadmium, chromium, lead, and mercury.

The pesticides alpha-chlordane and gamma-chlordane were detected in one groundwater sample, but below the concentrations listed in NYSDEC groundwater quality standards. The pesticide 4,4'-DDT was detected in the same groundwater sample at a concentration of 0.59 micrograms per liter ( $\mu\text{g/L}$ ), which

exceeds the NYSDEC groundwater quality standard of 0.20 µg/L. No other pesticides were detected in the groundwater samples.

Several total and dissolved metals were detected in groundwater samples above the NYSDEC groundwater quality standards and/or NYS ambient water quality, including antimony, barium, iron, lead, magnesium, manganese, iron and manganese, mercury, sodium, and thallium.

No VOCs were detected in the soil vapor samples.

### Conclusions and Recommendations

The investigation results indicate that groundwater and soil vapor are not media of concern at the property. However, several semi-volatile organic compounds and metals were detected in soil above applicable NYSDEC action levels. Therefore, the report recommended remediation of these soils, by capping or removal and off-site disposal.

### **(E) Designation**

Because remediation is needed, an (E) designation will be placed on the project site. An (E) designation will also be placed on the one other property within the rezoning area (Lot 48, the projected development site). The (E) designation (E-466) requires that the following actions be taken before construction activities take place. Because soil, groundwater, and soil vapor testing have already been performed on the project site, the Office of Environmental Remediation (OER) will review the combined Phase I and Phase II ESA report and determine whether additional testing must be done or the sampling protocol phase may be omitted.

#### 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.

### **Conclusion**

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

## 16. TRANSPORTATION

### Introduction

In order to determine the potential for the proposed action to result in significant adverse transportation impacts, a trip generation screening analysis was performed pursuant to the methodologies identified in the *CEQR Technical Manual*.

If the proposed action is taken, the Applicant would redevelop the project site with a 20,829 gsf, five-story building with 14 dwelling units and 450 gsf of community facility space (which would be for the use of a local organization). It is also projected that an adjacent site would be redeveloped with a five-story building with three dwelling units and 450 zsf of community facility floor area (presumed to be a medical office). There would thus be a total of 17 dwelling units, 450 sf of space for a local community organization, and a 450 sf medical office.

### Trip Generation

A preliminary Level 1 trip generation was performed for the three anticipated land uses. For the residential units and the medical office, the trip generation assumptions are from Table 16-2 of the *CEQR Technical Manual*. They are shown in Table 16-1 below. As the table shows, the dwelling units would generate 14, 7, and 15 person trips respectively during the weekday morning, midday, and late afternoon peak hours, and the medical office would generate 2, 6, and 7 person trips during those same hours. The trip generation assumptions for the other 450 sf of community facility space were derived from the August 2017 Jerome Avenue Rezoning DEIS (CEQR # 17DCP019X). According to these assumptions, the space would generate two person trips during each peak hour.

**Table 16-1: Trip Generation**

	<u>Residential</u>	<u>Community Center</u>	<u>Medical Office</u>	<u>Total</u>
<u>Planning Factors</u>	(1)	(2)	(2)	
Weekday daily person trips	8.075 per du	48 per 1,000 gsf	127 per 1,000 gsf	
Morning peak hour	10.0%	7.1%	4.0%	
Midday peak hour	5.0%	10.0%	11.0%	
Evening peak hour	11.0%	7.2%	12.0%	
RWCDS	17 dus	450 gsf	450 gsf	
<u>Person Trips</u>				
Daily	137.28	21.60	57.15	216.03
Morning peak hour	14	2	2	18
Midday peak hour	7	2	6	15
Evening peak hour	15	2	7	24

1. *CEQR Technical Manual* (2014), Table 16-2.  
 2. Jerome Avenue Rezoning DEIS (CEQR # 17DCP019X), August 18, 2017, Table 13-8.



The total action-generated peak hour person trip generation would be 18 during the weekday morning peak hour, 15 during the weekday midday peak hour, and 24 during the weekday late afternoon peak hour. A modal split breakdown is not needed to conclude that the number of action-generated trips would not equal or exceed the CEQR thresholds of 200 trip ends for transit and pedestrians and 50 vehicle trip ends during any peak hour. No further transportation analysis would be warranted.

### **Conclusion**

The proposed action would not result in 50 or more vehicle trips, 200 or more transit trips, or 200 or more pedestrian trips during any single hour. A significant adverse transportation impact is not anticipated.

## 17. AIR QUALITY

### Introduction

Ambient air quality describes pollutant levels in the surrounding environment to which the public has access. To assess potential health hazards due to ambient air quality, the impact of air pollutants emitted by motor vehicles (mobile source) and by fixed facilities (stationary source) are analyzed, 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 frame work, as mandated by the State Environmental Review Act, follows the *New York City Environmental Quality Review 2014 Technical Manual (CEQR Technical Manual)*. The potential air quality impacts of the following emissions are estimated following the procedures and methodologies prescribed in the *CEQR TECHNICAL MANUAL*:

- 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 emissions from the heating, ventilation and air conditioning (HVAC) systems of the proposed development to significantly impact nearby 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 “major” existing emission sources (i.e., HVAC systems with 20 or more million Btu/hour heat input) located within 400 feet of the proposed development as well as large (e.g., power generating) facilities located within 1,000 feet of the proposed development.

The proposed action involves the rezoning of a 100-by-100-foot area within the Columbia Avenue Waterfront neighborhood in Brooklyn from an M1-1 light manufacturing district to an R6B medium density residential district. Five adjacent lots would be affected by the proposed action: the project site (Block 352, Lots: 49, 50, 51, and 52) and a separately owned lot (Block 352, Lot 48). In the future with the proposed action, it is assumed that both the project site and the other lot would be redeveloped with mixed-use, primarily residential, buildings. Both buildings would have a base height of 45 feet and would rise to a height of 55 feet after a 15-foot setback above the fourth floor. The building on the project site would contain 20,829 gsf of floor area, and the other building would contain 5,530 gsf of floor area.

### Air Pollutants and Applicable Standards and 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<sub>2</sub>) is a main concern related to the burning of natural gas. Emitted NO<sub>x</sub> from the burning of fossil fuel gradually convert to NO<sub>2</sub> in a chemical reaction that is effected by ozone concentration and the presence of sunlight. In a micro scale analysis, buildings HVAC systems are analyzed for NO<sub>2</sub> impact.
- Ozone (O<sub>3</sub>) 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<sub>10</sub>) and Fine Particulate Matter (PM<sub>2.5</sub>), where the subscript number refers to the diameter of the particulate matter in micrometers.
- Sulfur Dioxide (SO<sub>2</sub>) emission is principally associated with stationary sources that burn oil or coal.

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 relevant standards together with their health-related averaging periods are presented in Table 17-1.

**Table 17-1. National and New York States Ambient Air Quality**

Pollutant	Averaging Period	National and State Standards
NO <sub>2</sub>	Maximum 1-Hour Concentration	0.10 ppm (188 µg/m <sup>3</sup> )
	Annual Arithmetic Average	0.053 ppm (100 µg/m <sup>3</sup> )
PM <sub>2.5</sub>	24-Hour Concentration	35 µg/m <sup>3</sup>
	Average of 3 Consecutive Annual Means	12 µg/m <sup>3</sup>
	Maximum 1-Hour	35 ppm

### NO<sub>2</sub> NAAQS

Nitrogen oxide (NO<sub>x</sub>) emissions from gas combustion consist predominantly of nitric oxide (NO) at the source. The NO<sub>x</sub> in these emissions are then gradually converted to NO<sub>2</sub>, 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<sub>2</sub> NAAQS standard of 0.100 ppm (188 ug/m<sup>3</sup>) is the 3-year average of the 98<sup>th</sup> 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<sub>2</sub> concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO<sub>x</sub> to NO<sub>2</sub>; Tier 2 applies a conservative ambient NO<sub>x</sub>/NO<sub>2</sub> ratio of 80% to the NO<sub>x</sub> 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<sub>2</sub> within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8<sup>th</sup> highest daily maximum 1-hour NO<sub>2</sub> concentrations or total 1-hour NO<sub>2</sub> concentrations if hourly NO<sub>2</sub> background concentrations are added within the model.

Per the *CEQR TECHNICAL MANUAL*, a Tier 1 approach is initially applied, followed by a Tier 2 application of NO<sub>x</sub>/NO<sub>2</sub> ratio of 80% to the NO<sub>x</sub> modeled concentration to determine whether violation

of the NAAQS is likely to occur. A less conservative Tier 3 approach is then applied if exceedances of the 1-hour NO<sub>2</sub> NAAQS were estimated.

The annual NO<sub>2</sub> standard is 0.053 ppm (100 ug/m<sup>3</sup>). In order to conservatively estimate annual NO<sub>2</sub> impacts, a NO<sub>2</sub> to NO<sub>x</sub> ratio of 0.75 percent, which is recommended by the NYCDEP for an annual NO<sub>2</sub> 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 Technical Manual* requires that projects subject to CEQR apply a PM<sub>2.5</sub> significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards as the criteria 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 Technical Manual*, PM<sub>2.5</sub> significant impacts are evaluated as follow:

- Predicted 24-hour maximum PM<sub>2.5</sub> concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or
- Predicted annual average PM<sub>2.5</sub> concentration increments greater than 0.3 µg/m<sup>3</sup> at any receptor location for stationary sources.

### **Background Concentrations**

Determination of significant impact criteria is effected by adding the background concentrations at the nearest NYSDEC monitoring station to the concentrations of criteria pollutants in the ambient air of the project area.

Background concentrations of relevant criteria pollutants were obtained from the NYSDEC’s annual report for 2016 at the nearest monitoring stations. Table 17-2 shows the background concentrations.



**Table 17-2. Background Concentration at the Queens College and JHS 126 Monitoring Stations (NYSDEC 2016 Report)**

Pollutant	Averaging Period	Background Concentration	Monitoring Station
NO <sub>2</sub>	Maximum 1-Hour Concentration	120.9 µg/m <sup>3</sup>	Queens College
	Annual Arithmetic Average	40.8 µg/m <sup>3</sup>	
PM <sub>2.5</sub>	24-Hour Concentration	20.5 µg/m <sup>3</sup>	JHS 126
	Average of 3 Consecutive Annual Means	8.6 µg/m <sup>3</sup>	

The *de minimis* criteria for PM<sub>2.5</sub> was evaluated as described in the NYC Interim Guidelines and the concentration increment are presented below:

- 24-hour PM<sub>2.5</sub> 7.25 µg/m<sup>3</sup>
- Annual PM<sub>2.5</sub> 0.3 µg/m<sup>3</sup>

### Mobile Source Analysis

According to the *CEQR Technical Manual*, in this part of New York City, a project generating fewer than 170 vehicular trips in any given hour is not expected to have a significant adverse air quality impact, and a detailed analysis, using MOVES2014 and CAL3QHC/R, is required only if more than 170 vehicular trips are predicted in any given hour.

A trip generation analysis of the projected development (17 residential units, 900 gs of community facility, and five off-street accessory parking spaces) indicates that the development would generate no more than 24 person trips within any peak hour, with some fraction of those trips being made by car or taxi. That is below the threshold of 170 vehicular trips; therefore, no detailed air quality analysis is required and no significant mobile source air quality impacts are expected as a result of the proposed action.

### Project-on-Existing Stationary Source Analysis

Per the *CEQR Technical Manual*, the HVAC analysis considers the potential for emissions from the HVAC systems of the RWCDs developments to significantly impact existing land uses (project-on-existing) within 400 feet, and the potential of the developments to significantly impact each other (project-on-project).

As outlined in the *CEQR Technical Manual*, the analysis of buildings' HVAC systems follows stationary sources methodology, and based on CEQR recommendations, 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 would include two buildings on adjacent lots. A dispersion modeling analysis was therefore conducted to estimate impacts from the stack emissions of the project-on-project scenario, and a screening analysis was conducted on the project-on-existing scenario.

As outlined in the *CEQR Technical Manual*, the potential for stationary source emissions from heat and hot water systems to have a significant adverse impact on nearby receptors depends on the type of fuel that would be used, the height of the stack venting the emissions, the distance to the nearest building whose height is at least as great as the venting stack height, the building residential or non-residential use, and the square footage of the development that would be served by the system. The *CEQR Technical Manual* provides a screening analysis based on these factors, which was utilized to determine the potential for significant impacts from the proposed buildings' HVAC systems.

The anticipated development within the proposed rezoning area would consist of 2 buildings, each with its own separate natural gas fueled heat and hot water system. For purposes of a conservative analysis, the exhaust plumes from the 2 buildings were combined as if they were from a single 26,359 gsf building.

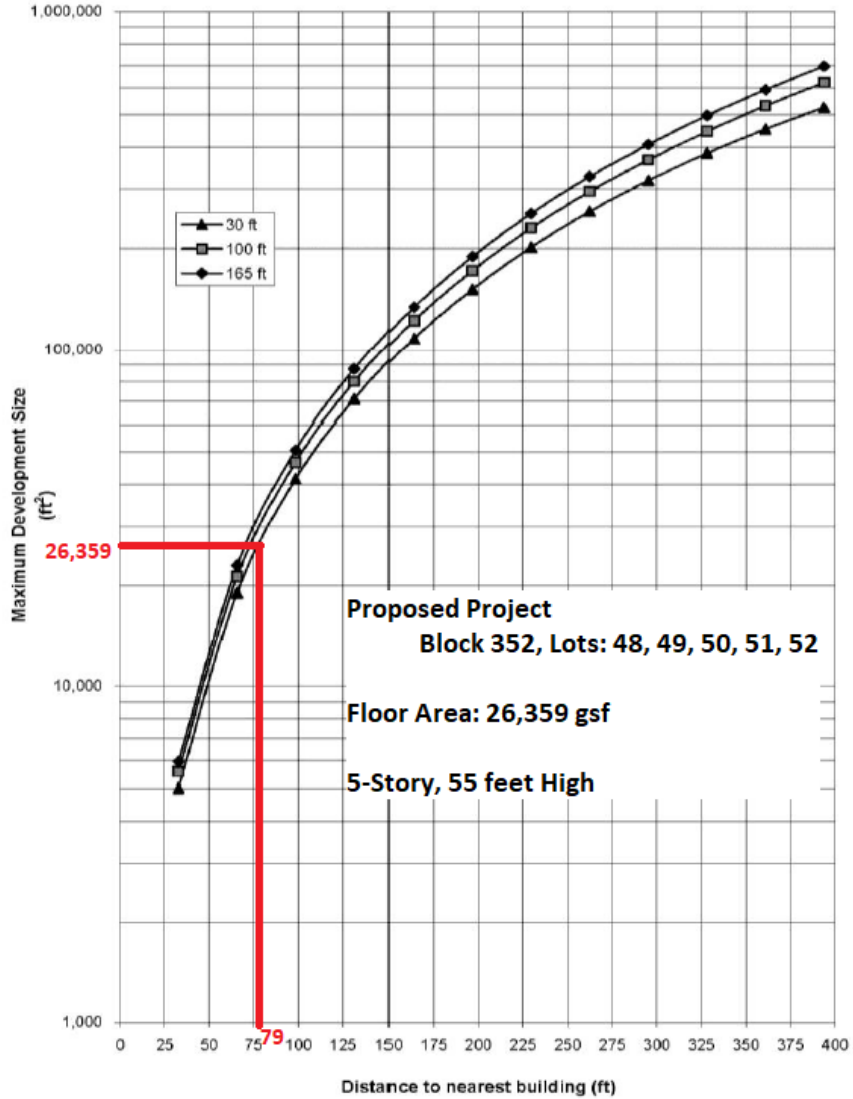
Per the *CEQR Technical Manual*, the total square footage of the proposed project was used in the analysis and the CEQR natural gas nomograph depicted on Figure 17-3 of the *CEQR Technical Manual Appendix* for a 30-foot stack height was applied (as the 30 feet curve height is closest to but not higher than the proposed stack height, as the CEQR screening procedure requires). This nomograph depicts the size of the development versus distance below which the potential impact can occur, and provides a conservative estimate of the threshold distance.

If the actual distance between a stack and the affected building is greater than the threshold distance for a building size, then that building passes the screening analysis (and no significant impact is predicted). However, if the actual distance is less than the threshold distance for a building, then there is a potential for a significant impact and a detailed analysis would be required.

Figure 17-1 depicts the screening analysis of the proposed project on existing land uses, where the square footage of the proposed project is 26,359 gsf.

Figure 17-1. The Affected Area Minimum Distance - HVAC Screen All Fuels Nomograph

Figure 17-3:  
Stationary Source Screen



The screening analysis nomograph shows that a detailed analysis would be required if any existing building with a height of at least 55 feet is located within 79 feet of the proposed rezoning area.

A review of existing and planned land uses within 400 feet of the proposed rezoning area shows that the nearest building of equal or greater height would be the five-story mixed residential commercial building at 296 Columbia Street (Block 357, Lot 7501, on the west side of the street between Summit and Woodhull Streets), 172 feet southeast of the rezoning area. Figure 17-2 shows the vicinity of the rezoning area plotted in Google Earth.

Figure 17-2. The Proposed Rezoning Area Plotted in Google Earth



As seen in Figure 17-2, the buildings within 79-foot of the rezoning area are generally three stories tall and are all lower than the proposed and projected developments would be. Therefore, the emissions from the proposed project HVAC systems would not significantly impact any existing land use.

### **Project-on-Existing Stationary Source Analysis**

#### Methodology

Two dispersion analyses were conducted: for the proposed project's potential to have an adverse impact on the adjacent projected development and vice versa. These dispersion modeling analyses were conducted using the latest version of the EPA's AERMOD dispersion model version 16216r. In accordance with CEQR guidance, these analyses were conducted assuming stack tip downwash, urban dispersion surface roughness length of 1.0 meter, elimination of calms, and with and without downwash effect on plume dispersion. AERMOD's Tier 1 module was utilized for the 1-hour NO<sub>2</sub> analysis – to account for a full NO<sub>x</sub> to NO<sub>2</sub>.

#### HVAC Emissions

Emission rates were estimated as follows:

- The developments are expected to be heated by natural gas, emission rates of NO<sub>x</sub> and PM<sub>2.5</sub> were calculated based on annual natural gas usage corresponding to the gross floor area of the buildings, EPA AP-42 emission factors for natural gas combustion in small boilers, and gross heating values of natural gas (1,020 Btu per million cubic feet).



- PM<sub>2.5</sub> emissions from natural gas combustion accounted for both filterable and condensable particulate matter.
- The natural gas fuel usage factor (59.1 cubic foot per square foot per year) was used to estimate annual natural gas usage for residential use and was calculated by dividing the energy consumption rate of 60.3 thousand Btu/ft<sup>2</sup> by natural gas heating value of 1,020 Btu/ft<sup>3</sup>.

Table 17-3 shows the developments' NO<sub>2</sub> and PM<sub>2.5</sub> emission rates, both short-term and annual. The diameter of the stack and the exhaust's exit velocity were estimated based on values obtained from the NYCDEP "CA Permit" database for the corresponding boiler sizes (i.e., rated heat input or million Btu per hour). Boiler sizes were estimated based on the assumption that all fuel was consumed during the 100 day (or 2,400 hour) heating season. The stack exit temperature was assumed to be 300°F (423°K), which is appropriate for boilers.

**Table 17-3. Estimated Short-term and Annual Emission Rates of Each Building**

Development ID	Floor Area ft <sup>2</sup>	NO <sub>2</sub> Emission factor <sup>(2)</sup> g/sec		PM <sub>2.5</sub> Emission factor <sup>(1)</sup> g/sec	
		1-hour	Annual	24-hour	Annual
Proposed Development	20,829	6.46E-03	1.77E-03	4.91E-04	1.35E-04
Projected Development	5,530	1.72E-03	4.70E-04	1.30E-04	3.57E-05

Notes:

1. PM<sub>2.5</sub> emission factor for natural gas combustion of 7.6 lb/106 cubic feet included filterable and condensable particulate matter, filterable PM<sub>2.5</sub>=1.9 lb/100 cubic feet and condensable PM<sub>2.5</sub>=5.7 lb/106 cubic feet (AP-42, Table 1.4-2).
2. NO<sub>x</sub> emission factor for natural gas of 100 lb/100 cubic feet for uncontrolled boilers with <100MMBtu/hr (AP-42, Table 1.4-1).
3. Boiler size was estimated based on a fuel consumption rate of 1,020 Btu/ft<sup>3</sup> and the assumption that all fuel is consumed in a 100 day (2,400 hours) heating season using the following equation: MMBtu/hr = X ft<sup>3</sup>/yr / 2,400hrs/yr \* 1020 Btu/ft<sup>3</sup>/106 MMBtu/Btu.

### HVAC Meteorological Data

All analyses were conducted using the latest five consecutive years of meteorological data (2012-2016). Surface data was obtained from La Guardia Airport and upper air data was obtained from Brookhaven station, New York. Data were processed by Lakes Environmental Software, Inc. using the current EPA AERMET version (14134) and EPA procedures. These meteorological data provide hour-by-hour wind speeds and directions, stability states, and temperature inversion elevations over the 5-year period.

Meteorological data were combined to develop a 5-year set of meteorological conditions, which was used for the AERMOD modeling runs and Anemometer height of 9.4 meters was specified per Lakes Environmental Software Inc.

Per Lakes Environmental Inc., PM<sub>2.5</sub> special procedure which is incorporated into AERMOD calculates concentrations at each receptor for each year modeled, averages those concentrations across the number of years of data, and then selects the highest values across all receptors of the 5-year averaged highest values.

### HVAC AERMOD Setting

AERMOD calculates concentrations according to the dispersion option, pollutant and averaging time, and output specified in the model, where the model is capable of handling multiple sources in a single run. As such, each pollutant was modeled separately and two stacks, one for the short-term and the other for annual averaging times were created. Each stack was placed in a different source group and AERMOD outputs concentration for each group is read from the Results Summary file or for the short term as follows:

PM<sub>2.5</sub>: The Summary of Maximum 1st-Highest 24-Hr Results Averaged Over 5 years; Group ID 24Hour.

NO<sub>2</sub>: The Summary of Maximum 8th-Highest Max Daily 1-Hr Results Averaged Over 5 years; Group ID 1\_Hour.

In addition, all dispersion analyses used the calculated emission factors, Building Profile Input Program (BPIP) was run with the downwash effect enabled, and all models specified flat terrain and the default urban roughness coefficient of 1.0 meter with a population of 2,000,000. The other parameters of each pollutant corresponding to the scenario modeled were:

1-hour NO<sub>2</sub>: NAAQS option enabled, Tier I conversion method and 8<sup>th</sup> highest value output.

Annual NO<sub>2</sub>: NO<sub>2</sub> pollutant selected and Report Maximum Annual Average for Each Met Year enabled.

24-hour PM<sub>2.5</sub> NAAQS: Based on a multi-year average of ranked maximum daily values enabled and 1<sup>st</sup> highest value output.

Annual PM<sub>2.5</sub>: PM<sub>2.5</sub> pollutant selected and Report Maximum Annual Average for Each Met Year enabled.

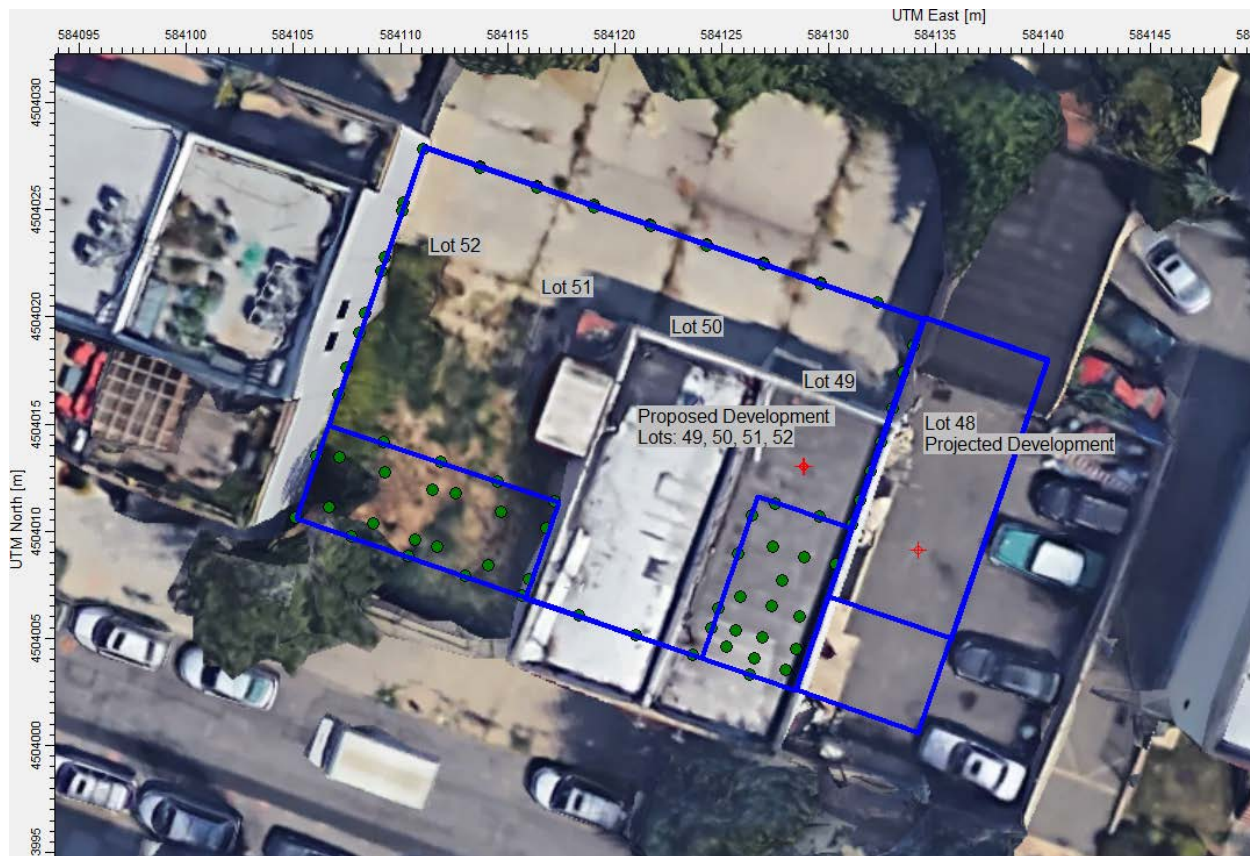
### HVAC Stack and Receptor Locations

The New York City Building Code (Building Code) requires that a rooftop stack should be at least 10 feet away from the edge of the roof and at least 3 feet higher than the roofline. As such, the HVAC stacks of each building were located on the buildings' highest tiers, 10 feet from the edge of the roof, and as close as possible to the receiving building. In addition, stacks were located 10 feet from the roofline facing the 5<sup>th</sup> floors' roof terraces.

Figure 17-3 displays AERMOD's buildings configuration as modeled in AERMOD to illustrate the stacks' locations. As illustrated, the stack was reasonably located on the buildings' highest tiers, 3 feet above the roofline, and 10 feet from the rooflines facing the receiving building.

Receptors were placed at 10-foot increments, 6 feet above each floor level, including the ground floor level. In addition, receptors were placed on the 5<sup>th</sup> floor roof terraces and 3 feet below the roofline where buildings are contiguous. Figure 17-3 shows the two development sites as modeled in AERMOD.

Figure 17-3. The Proposed Project as Modeled in AERMOD, With the Receptors Shaded in Green and the Buildings' Stacks in Red



### Results of Dispersion Analyses

As discussed in the AERMOD Setting section, the concentrations of the dispersion models were retrieved from the AERMOD Results Summary file. In total, 4 models were run, one for each pollutant, one with building wake effect enabled and another with the building wake effect disabled. Result of the project-on-project HVAC NO<sub>2</sub> and PM<sub>2.5</sub> analyses are shown in Table 17-4, where the modeled Tier 1 NO<sub>2</sub> concentrations were added to the background concentrations.

Table 17-4. Detailed HVAC Analyses Results

Development Source Site	Development Receptor Site	24-hr PM <sub>2.5</sub> Impact	Annual PM <sub>2.5</sub> Impact	1-hr NO <sub>2</sub> Impact <sup>(1)</sup>	Annual NO <sub>2</sub> Impact <sup>(1)</sup>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Proposed	Projected	0.12	0.012	124	41.0
Projected	Proposed	0.05	0.004	122	40.8
<b>Threshold</b>		<b>7.25</b>	<b>0.3</b>	<b>188</b>	<b>100</b>

The results are compared with the 24-hour and annual PM<sub>2.5</sub> significant impact criteria, and the 1-hour and annual NO<sub>2</sub> NAAQS.

The PM<sub>2.5</sub> impacts are less than the significant impact criteria for PM<sub>2.5</sub> of 7.25 µg/m<sup>3</sup> and 0.3 µg/m<sup>3</sup>, respectively, and both the 1-hour and annual NO<sub>2</sub> concentrations estimated are less than the 1-hour and annual NO<sub>2</sub> NAAQS of 188 µg/m<sup>3</sup> and 100 µg/m<sup>3</sup>, respectively.

Therefore, with (E) Designations in place, the emissions of the proposed project HVAC systems would not significantly impact any of the other proposed project buildings.

### **(E) Designation**

The HVAC analysis for the Proposed Action concluded that fuel would need to be restricted to the exclusive use of natural gas in its HVAC system.

The (E-466) Designation language for air quality is as follows:

Block 352, Lots: 49, 50, 51, 52 (Projected Development Site 1): Any new residential and/or community facility development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water system and ensure that the HVAC stack is located at the highest tier, or at a minimum of 58 feet above grade, to avoid any potential significant adverse air quality impacts.

Block 352, Lot 48 (Projected Development Site 2): Any new residential and/or community facility development on the above-referenced property must exclusively use natural gas as the type of fuel for heating, ventilating, air conditioning (HVAC) and hot water system and ensure that the HVAC stack is located at the highest tier, or at a minimum of 58 feet above grade, to avoid any potential significant adverse air quality impacts.

### **Industrial and Major Source Analysis**

#### Introduction

As outlined in the *CEQR Technical Manual*, projects that would introduce new uses near industrial sources, major sources, large sources, and odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers industrial sources within 400 feet of the Affected Area and major sources, large sources, and odor producing facilities within 1,000 feet of the Affected Area. These sources are categorized as follows:

Industrial sources are identified as commercial, industrial, or processing facilities that are likely to have NYC operational permits.

Major emission sources are identified as those sources located at Title V facilities that require Prevention of Significant Deterioration permits. In addition, and as outlined in the *CEQR TECHNICAL MANUAL*, HVAC systems with a 20 or more million Btu per hour (MMBtu/hr) design capacity are considered major sources.

Large emission sources are identified as sources located at facilities which require a State facility permit, such as solid waste or medical waste incinerators, co-generation facilities, and asphalt and concrete plants, or power generating plants.

Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

### Methodology

Information regarding potential emissions of toxic air pollutants from existing industrial sources within 400 feet of the Affected Area, and emissions of air pollutants from existing major and large sources within 1,000 feet of the Affected Area were developed using the following procedure:

A study area was developed that includes all industrial facilities with potential air toxic emissions located within 400 feet of the Project Site using ZoLa;

New York City's Open Accessible Space Information System Cooperative (OASIS), Google Street View, on-line searches, and land surveys were used to identify and categorize facilities;

A search was performed to identify permits listed in the EPA Envirofacts database in this study area; and

The New York City Department of Environmental Protection (DEP) online Clean Air Tracking System (CATS) was consulted to determine whether air emissions permits had been issued for any of the 4 lots with nonresidential uses.

### Study Result - Major and Large Sources and Odor Producing Facilities

No existing large combustion sources, such as power plants, cogeneration facilities, etc., located within 1,000 feet of the rezoning area were identified. In addition, no odor producing facility was identified within 1,000 feet of the rezoning area. As such, no analysis was warranted.

One of the four ventilation buildings for the Brooklyn Battery Tunnel is located approximately 290 feet to the southwest of the project site. Exhaust from the tunnel is vented through four 92 foot tall emissions stacks. Because the emissions vent at a height considerably greater than the roof of the proposed building, the exhaust would not have a significant adverse impact on the residents of the proposed project.

### Study Result - Industrial Sources Toxic Air Emissions

Eight lots within 400 feet of the proposed rezoning area were identified as supporting nonresidential uses, and a search of the NYCDEP CATS database showed that two of these had operational permits, but both had been cancelled. In addition, a search of the EPA Envirofacts identified two lots as previously having operational permit certificates. A list of these facilities and the NYCDEP record search are presented in Table 17-9.



**Table 17-9. Land Survey Results of Industrial Sources Within 400 Feet of the Affected Area**

Block	Lot	Address	CATS Database/ Permit Number	
347	4	129 Van Brunt Street	No Record	
	11	42 Van Brunt Street	No Record	
352	1	79 Hamilton Avenue	No Record	
	60	41 Summit Street	Cancelled	PA013783
			Cancelled	PA013683
357	4	13 Woodhull Street	No Record	
	13	101 Hamilton Avenue	No Record	
	29	68 Summit Street	No Record	
362	1	113 Hamilton Avenue	Expired	GA012989
Block	Lot	Address	CATS Database (for Envirofacts)/ Permit Number	
335	7501	115 Union Street	Current	CB131402
	59	67 Union Street	Auto body shop 750 feet distance	
504	1	70 Hamilton Avenue	Expired	CA069276

The only industrial uses in the vicinity of the rezoning area are warehouses, two steel fabrication and assembly operations without roof or street wall vents for air emissions, a TV production set, and an auto repair shop. In addition, the facilities identified in the EPA Envirofact database were determined either to no longer exist or to be more than 400 feet from the nearest edge of the rezoning area. As such, no analysis was warranted and no significant air quality impacts are predicted from these sites.

**Conclusion**

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 with (E) - Designations in place.
- 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 proposed rezoning area, emissions from existing stationary sources would not cause a significant air quality impact to the proposed project.

## 19. NOISE

### Introduction

The purpose of a noise assessment under CEQR is to determine whether an action would (1) raise noise levels significantly at existing or anticipated sensitive noise receptors (such as residences or schools) or (2) introduce new sensitive uses (such residential buildings or schools) at locations subject to unacceptably high ambient noise levels.

The assessment is concerned with both mobile and stationary noise sources. Mobile sources are those that move in relation to a noise-sensitive receptor. They include automobiles, buses, trucks, aircraft, and trains. Stationary sources of noise do not move in relation to a noise-sensitive receptor. Typical stationary noise sources of concern include machinery or mechanical equipment associated with industrial and manufacturing operations; building heating, ventilating, and air conditioning (HVAC) systems; speakers for public address and concert systems; playground noise; and spectators at concerts or sporting events. An action could raise noise levels either by introducing new stationary noise sources (such as outdoor playgrounds or rooftop air conditioning compressors) or by increasing mobile source noise (generally by generating additional traffic). Similarly, an action could introduce new residences or other sensitive receptors that would be subject to noise from either stationary or mobile sources.

The proposed action would consist of a zoning map amendment and a zoning text amendment, which would extend an existing R6B zoning district onto an area that is now zoned M1-1 and would establish the rezoning area as a Mandatory Inclusionary Housing area. The action would result in new residential and medical office development, which could potentially generate either stationary or mobile source noise, and that would include noise-sensitive uses.

### Noise Fundamentals

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 “dBA.” 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, and the threshold of pain is about 140. Table 19-1 shows the range of noise levels for a variety of indoor and outdoor noise levels.

**Table 19-1**

**Sound Pressure Level and Loudness of Typical Noises in Indoor and Outdoor Environments**

Noise Level (dBA)	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 dBA)
60-70	Moderately Loud	Residential air conditioner at 100 feet Gas lawn mower at 100 feet Waves breaking on beach at 65 feet	Cash register Dishwasher Theater lobby Normal speech at 3 feet	2 as loud
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.

Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure level that is 10 times higher. However, humans don't perceive a 10 dBA increase as 10 times or louder; they perceive it as twice as loud. The following is typical of human response to relative changes in noise level:

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

The sound pressure level (SPL) that humans experience typically varies from moment to moment. Therefore, a variety of descriptors are used to evaluate environmental noise levels over time. Some typical descriptors are defined below:

- $L_{eq}$  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 monitoring period will have greater effect on the  $L_{eq}$  than low noise levels. The  $L_{eq}$  has an advantage over other descriptors because  $L_{eq}$  values from different noise sources can be added and subtracted to determine cumulative noise levels.
- $L_{max}$  is the highest SPL measured during a given period of time. It is useful in evaluating  $L_{eq}$ s for time periods that have an especially wide range of noise levels. Similarly,  $L_{min}$  is the lowest SPL measured during a given period of time.
- $L_{10}$  is the SPL exceeded 10 percent of the time. Similar descriptors are the  $L_{50}$ ,  $L_{01}$ , and  $L_{90}$ .
- $L_{eq(24)}$  is the continuous equivalent sound level over a 24-hour time period.
- $L_{dn}$  is the day-night equivalent sound level. It is similar to a 24-hour  $L_{eq}$ , but with 10 dBA added to SPL measurements between 10 pm and 7 am to reflect the greater intrusiveness of noise experienced during these hours.  $L_{dn}$  is also termed DNL.

Although the SPL heard in the environment typically is composed of many different frequencies, it can be broken down into the numerous individual frequencies. These frequencies are grouped into octave bands. An octave band is a group of frequencies in the interval between a given frequency (such as 350 Hz) and twice that frequency (e.g., 710 Hz). The standard octave bands are each named by their center frequencies. Thus, each octave band will be represented by a single SPL. When the representative SPLs from the individual octave bands are added together, they are weighted so that the resulting total SPL will represent dBA. Octave bands are used in some noise models because the different components of a noise source will have different frequencies. For example, a truck traveling downhill will have a different set of frequencies than a truck traveling uphill.

For mobile source noise from vehicular traffic, passenger car equivalents (PCEs) are the number of autos that would generate the same noise level as the observed vehicular mix of autos, medium trucks, and heavy trucks. PCEs are useful for comparing the effects of traffic noise on different roadways or for different future scenarios. The *CEQR Technical Manual* uses the following formulas for converting motor vehicles into PCEs:

- auto and light trucks = 1 passenger car;
- medium trucks = 13 passenger cars;
- heavy trucks = 47 passenger cars; and
- buses = 18 passenger cars.

### **Impact Determination and Noise Standards and Guidelines**

In 1983 the New York City Department of Environmental Protection (DEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEQR) noise standards for



exterior noise levels. These standards are the basis for classifying noise exposure into four categories based on the L<sub>10</sub>: Acceptable, Marginally Acceptable, Marginally Unacceptable, and Clearly Unacceptable, as shown in Table 19-2.

**Table 19-2  
CEQR Noise Exposure Guidelines for use in City Environmental Impact Review<sup>1</sup>**

Receptor Type	Time Period	Acceptable General External Exposure	Airport <sup>3</sup> Exposure	Marginally Acceptable General External Exposure	Airport <sup>3</sup> Exposure	Marginally Unacceptable General External Exposure	Airport <sup>3</sup> Exposure	Clearly Unacceptable General External Exposure	Airport <sup>3</sup> Exposure
1. Outdoor area requiring serenity and quiet <sup>2</sup>		L <sub>10</sub> ≤ 55 dBA	L <sub>dn</sub> ≤ 60 dBA		L <sub>dn</sub> ≤ 60 dBA		L <sub>dn</sub> ≤ 60 dBA		L <sub>dn</sub> ≤ 75 dBA
2. Hospital, Nursing Home		L <sub>10</sub> ≤ 55 dBA		55 < L <sub>10</sub> ≤ 65 dBA		65 < L <sub>10</sub> ≤ 80 dBA		L <sub>10</sub> > 80 dBA	
3. Residence, residential hotel or motel	7 am to 10 pm	L <sub>10</sub> ≤ 65dBA		65 < L <sub>10</sub> ≤ 70dBA		70 < L <sub>10</sub> ≤ 80 dBA		L <sub>10</sub> > 80 dBA	
	10 pm to 7 am	L <sub>10</sub> ≤ 55dBA		55 < L <sub>10</sub> ≤ 70dBA		70 < L <sub>10</sub> ≤ 80 dBA		L <sub>10</sub> > 80 dBA	
4. School, museum, library, court house of worship, transient hotel or motel, public meeting room, auditorium, outpatient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM- 10 PM)		Same as Residential Day (7 AM –10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM –10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only <sup>4</sup>	Note 4	Note 4	Note 4	Note 4	Note 4				

**Notes:**

- ) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more;
- 1 Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
- 2 Tracts of land where serenity and quiet are extraordinarily important and serve an important public need and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheatres, particular parks or portions of parks or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet. Examples are grounds for ambulatory hospital patients and patients and residents of sanitariums and nursing homes.
- 3 One may use the FAA-approved L<sub>dn</sub> contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
- 4 External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

Source: New York City Department of Environmental Protection (adopted policy 1983).

For sensitive receptors introduced by the proposed action, with-action condition noise levels in dB(A) L<sub>10(1)</sub> are compared with the values contained in the Noise Exposure Guidelines. If these noise levels would exceed the Marginally Acceptable levels, a significant impact would occur unless the building design provides a composite building attenuation that would be sufficient to reduce these levels to an acceptable interior noise level. These values are shown in Table 19-3.

**Table 19-3  
Required Attenuation Values to Achieve Acceptable Interior Noise Levels**

	Marginally Unacceptable				Clearly Unacceptable
Noise level with proposed action	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation <sup>A</sup>	(I) 28 dBA	(II) 31 dBA	(III) 33 dBA	(IV) 35 dBA	$36 + (L_{10} - 80)^B$ dBA

Note: <sup>A</sup>The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dBA less in each category. All the above categories require a closed window situation and hence alternate means of ventilation.

<sup>B</sup>Required attenuation values increase by 1 dBA increments for  $L_{10}$  values greater than 80 dBA.

Source: New York City Department of Environmental Protection, 2012.

For noise increases caused by project-induced traffic, or for stationary noise sources introduced by the proposed action, if the no-action levels are less than 60 dB(A)  $L_{eq(1)}$  and the analysis period is not at nighttime, an increase of 5 dB(A)  $L_{eq(1)}$  or more in the future with the project would be considered a significant impact. In order for the 5 dB(A) threshold to be valid, the resultant action condition noise level would have to be equal to or less than 65 dB(A). If the No-Action noise level is equal to or greater than 62 dB(A)  $L_{eq(1)}$ , or if the analysis period is a nighttime analysis period, the incremental significant impact threshold would be 3 dB(A)  $L_{eq(1)}$ . If the No-Action noise level is 61dB(A)  $L_{eq(1)}$ , the maximum incremental increase would be 4 dB(A), since an increase higher than this would result in a noise level higher than the 65 dB(A)  $L_{eq(1)}$  threshold and be considered significant.

#### **Potential for Additional Stationary Source Noise**

The proposed action would result in the development of buildings containing residential apartments, a small medical office, and a small community facility office. Unlike playgrounds, truck loading docks, loudspeaker systems, car washes, stationary diesel engines, or similar uses, residential apartments and doctors' offices are not substantial stationary noise sources. All rooftop mechanical equipment, including air conditioner compressors, would be enclosed and would comply with New York City Noise Code requirements, which limit noise levels generated by such equipment to 65 dBA during the daytime (7AM to 10 PM) and 55 dBA during the nighttime. The proposed action would therefore not have the potential to cause a significant adverse stationary source noise impact.

#### **Potential for Additional Mobile Source Noise**

The anticipated action-induced development is expected to generate 18, 15, and 24 person trips during morning, midday, and late afternoon peak travel hours respectively, with only a fraction of those trips being made by car or taxi. (See Section 16 Transportation.) The existing PCE-equivalent traffic volumes along Summit Street during those hours (three times the 20-minute counts shown in Table 19-5 below) are 120, 225, and 333 respectively. It can therefore be assumed that the additional traffic volumes would be too low to cause a 3 dBA increase in  $L_{eq(1)}$  noise levels, which would require a doubling of PCE traffic volumes along an adjacent street. The proposed action would therefore not have the potential to cause a significant adverse mobile source noise impact.

**Potential for Existing Noise Levels to Adversely Affect New Residents**

As part of the environmental review for another proposed action on the same block as the project site (the 41 Summit Street Rezoning), noise monitoring was performed in March 2016. The noise monitoring location was approximately 230 feet west of the project site.

Noise monitoring was conducted during typical midweek conditions, on Wednesday, March 16, 2016. The weather was dry, and wind speeds were moderate throughout the day. Because the predominant noise source for properties on this block is vehicular traffic, noise monitoring was conducted during peak vehicular travel periods: 8:00-10:00 am, 12:00 pm-1:00 pm, and 5:00-6:00 pm. Pursuant to *CEQR Technical Manual* methodology, readings were conducted for 20-minute periods during each peak hour. Noise monitoring was conducted using a Type 2 Larson-Davis LxT2 sound meter, with wind screen. The monitor was placed on a tripod at a height of approximately five feet above the ground, away from any other surfaces. The monitor was calibrated prior to and following each monitoring session.

Table 19-4 shows the noise monitoring results, and Table 19-5 shows the traffic counts and classifications. The results were all between 65 and 70 dBA L<sub>10</sub>, and thus within the Marginally Acceptable CEQR category. The highest result, 69.9 dBA (during the late afternoon peak hour), is at the uppermost limit of the Marginally Acceptable range.

**Table 19-4  
Project Site Noise Levels**

	Wednesday, March 16, 2016		
	8:32 - 8:54 am	12:02 - 12:24 pm	5:23 - 5:45 pm
Lmax	90.0	87.5	86.2
L5	71.1	70.9	72.2
<b>L10</b>	<b>68.7</b>	<b>68.5</b>	<b>69.9</b>
Leq	66.7	66.6	67.8
L50	63.8	63.3	63.6
L90	59.4	59.1	60.1
Lmin	55.5	55.5	57.1

**Table 19-5  
Vehicle Counts and Classifications**

	AM	Midday	PM
Car/Taxi	9	15	17
Medium Truck	1	1	0
Heavy Truck	0	1	2
Bus	1	0	0

In anticipation of rising traffic volumes resulting from background growth, nearby development, and the proposed project itself, it has been determined that peak ambient noise levels will be in the

Marginally Unacceptable category as of the Build Year. In accordance with *CEQR Technical Manual* Table 19-3, a composite window-wall attenuation of 28 dBA will therefore be provided on all facades.

**(E) Designation**

To avoid any potential impacts associated with noise, an (E) designation (E-466) for noise would be placed on all lots within the proposed rezoning area (Block 352, Lots 48, 49, 50, 51, and 52). The text of the (E) designation is as follows:

In order to ensure an acceptable interior noise environment, future residential and/or community facility development at this location must provide a closed window condition with a minimum of 28 dBA window/wall attenuation on all façades in order to maintain an interior noise level of 45 dBA. In order to maintain a closed-window condition, an alternate means of ventilation must also be provided. Alternate means of ventilation include, but are not limited to, air conditioning.

**Conclusion**

With the (E) designation in place, the proposed actions would not result in a significant adverse noise impact.



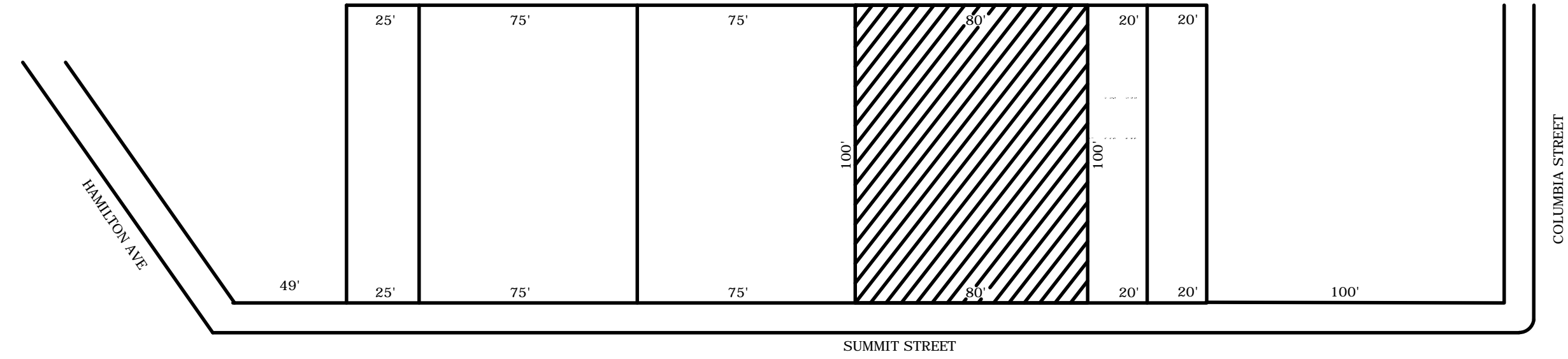
## Appendix

**ZONING ANALYSIS:**

LOT AREA: 80.00'X100.00'=8,000 SF ZONING DISTRICT: PROPOSED R6B(MH) PURSUANT TO QUALITY HOUSING PROJECT. BLOCK: 352, LOT 49, 50, 51, 52, MAP 16A CONSTRUCTION CLASS COM BD	
ZR 22-12	PERMITTED USES PROPOSED USE GROUP 2
ZR 23-12	PERMITTED OBSTRUCTION- BALCONIES AGGREGATE WIDTH OF BALCONIES AT THE LEVEL OF ANY STORY .NOT EXCEEDING 50% OF THE WIDTH AT THAT LEVEL OF THE PLANE SURFACE STREET OF THE BUILDING WALL FROM WHICH IT PROJECTS 14' WIDTH X 2 BALCONIES= 28'-0"
ZR 23-13	80' WIDTH OF BUILDING AT EACH LEVEL 50% OF 80' = 40'-0". 28'-0"<40'-0" THEREFORE OK
ZR 23-154	RESIDENTIAL FLOOR AREA PURSUANT TO INCLUSIONARY HOUSING MAX F.A.R.: 2.2 LOT AREA IS 80FT X 100 FT= 8,000 SF F.A.R. 2.2 X 8,000 SQ.FT= 17,600 SF PROPOSED F.A.R.: SEE DIAGRAMS 17,599.83 SF THEREFORE OK
ZR 23-153	MAXIMUM LOT COVERAGE FOR AN INTERIOR LOT 60% LOT SIZE 80'-0"X100'-0"= 8,000 SQ.FT. 60% OF 80'-0"= 4,800 SF
ZR 23-14	BUILDING SIZE AT FIRST FLOOR 4,686 SF THEREFORE OK DENSITY FACTOR: 680 17,600/680=25.88= 26 DWELLING UNITS ALLOWED 14 DWELLING UNITS PROPOSED-THEREFORE OK
ZR 23-22	MINIMUM LOT AREA: 1,700 SF PROPOSED LOT AREA: 8,000 SF MINIMUM LOT WIDTH: 18FT. PROPOSED LOT WIDTH: 80 FT (OK)
ZR 23-32	FRONT YARD NO FRONT YARD REQUIRED PROPOSED FRONT YARD: NONE
ZR 23-45	SIDE YARD NO SIDE YARD IS REQUIRED IF PROVIDED, MIN. 8FT PROPOSED SIDE YARD: NONE
ZR 23-462(C)	MIN. REAR YARD 30 FT MIN. REAR YARD REQUIRED PROPOSED REAR YARD: 30 FT (OK)
ZR23-621 (CO(1))	DORMER PROPOSED DORMER HEIGHT ABOVE MAX. BASE HEIGHT: 10FT PERMITTED AGGREGATE WIDTH OF DORMER: 60% PERMITTED AGGREGATE WIDTH OF DORMER= 60%X80 FT= 48FT DORMER IS 10' ABOVE BASE THEREFORE WIDTH IS DECREASED BY 1% OF THE STREET WALL WIDTH (8'-0") 48FT-8FT= 40FT PERMITTED PROPOSED DORMER IS 27'-6" THEREFORE OK
ZR 23-62(G) (3)(II)	BULKHEAD AND MECHANICAL EQUIPMENT AREA ABOVE MAX. BUILDING HGT. PERMITTED 20% X LOT COVERAGE 20% OF 4,315 SF IS 863 SF 500 SF PROPOSED THEREFORE OK
ZR 23-633	STREET WALL LOCATION MINIMUM BASE HEIGHT: 30 FT MAXIMUM BASE HEIGHT: 40 FT PROPOSED BASE HEIGHT: 40 FT MAXIMUM BUILDING HEIGHT: 50 FT PROPOSED BUILDING HEIGHT: 50FT SETBACK IN NARROW STREET: 15 FT PROPOSED SETBACK: 15 FT (OK)
ZR 25-23	PARKING REQUIREMENT 50% OF DWELLING SPACES= 14 DWELLING UNITS = 7 PARKING SPACES PARKING SPACES THAT MAYBE WAIVED: 2 SPACES THEREFORE 5 PARKING SPACES ARE REQUIRED AND 5 SPACES ARE PROVIDED (OK)
ZR 25-261	PARKING REQUIREMENT WAIVER IN R6 RESIDENTIAL: 5 PARKING SPACES MAYBE WAIVED PROPOSED VOLUNTARY PARKING: 5 SPACES
ZR 25-811	BICYCLE PARKING- RESIDENTIAL 1 PER 2 DWELLING UNITS 14 UNITS/2= 7 REQUIRED SPACES
ZR 25-83, 25-80, 36-70	15 SF PER SPACE X 7 SPACES = 105 SF REQUIRED 108.87 SF PROVIDED THEREFORE OK
ZR 23-03 33-03 26-41	STREET TREES 1 TREE PER 25' SUMMIT STREET FRONTAGE = 80' 80/25= 3.2 THEREFORE 3 TREES REQUIRED AND PROPOSED

**QUALITY HOUSING REGULATION**

ZR 28-21	SIZE OF DWELLING UNIT DWELLING UNIT SHALL BE A MIN. OF 400 SF PROPOSED SMALLEST UNIT: 620 SF (OK)
ZR 28-12	REFUSE STORAGE AND DISPOSAL NINE OR MORE DWELLING UNITS PER VERTICAL CIRCULATION CORE SHALL COMPLY. BUILDING HAS 14 UNITS THEREFORE MUST COMPLY REMOVAL LOCATIONS SHALL BE PROVIDED AT THE RATE OF 2.9 CUBIC FEET PER DWELLING UNIT. 14 UNITS X 2.9 CUBIC FT= 40.6 CUBIC FT. A REFUSE DISPOSAL ROOM OF NOT LESS THEN 12 SQUARE FEET WITH NO DIMENSION LESS THEN 3 FEET SHALL BE PROVIDED ON EACH STORY THAT HAS ENTRANCES TO DWELLING UNITS. 12 SF SHALL OF FLOOR SPACE ALLOCATED TO SUCH REFUSE DISPOSAL ROOM SHALL BE EXCLUDED FROM THE FLOOR AREA PER STORY.
ZR 28-13	LAUNDRY FACILITIES AT LEAST ONE WASHING MACHINE PER 20 DWELLING UNITS AND AT LEAST 1 DRYER PER 40 DWELLING UNITS. THEREFORE 1 WASHING MACHINE AND 1 DRYER IS REQUIRED FOR THE 14 UNITS. 14 WASHING MACHINES AND 14 DRYERS PROVIDED (OK)
ZR 28-21	RECREATION SPACE NINE OR MORE UNITS MUST COMPLY. 14 UNITS PROPOSED THEREFORE RECREATION SPACE IS REQUIRED 3.3% OF FLOOR AREA IS REQUIRED 17,600SF X 3.3%= 581 SF 581 SF IS PROVIDED THEREFORE OK
ZR 28-33	PLANTING AREAS AREA BETWEEN STREET WALL AND STREET WALL SHALL BE PLANTED
ZR 28-43	LOCATION OF ACCESSORY PARKING ON SITE ACCESSORY PARKING SHALL NOT BE PERMITTED BETWEEN STREET LINE AND THE STREET WALL OF A BUILDING PROLONGATION ACCESSORY PARKING LOCATED AT REAR OF PROPERTY
ZR 25-66	SCREENING SCREENING REQUIRED FOR 10 OR MORE PARKING SPACES. FIVE (5) SPACES PROVIDED THEREFORE NO SCREENING REQUIRED.
ZR 28-31	DENSITY PER CORRIDOR 11 UNITS PER STORY 4 UNITS PER STORY PROVIDED AT MAXIMUM



HORRIGAN O'MALLEY  
 ARCHITECTS  
 511 4TH STREET  
 BROOKLYN, NY 11215

© 2015 CHRISTA HORRIGAN. THESE DRAWINGS, DESIGNS, & IDEAS EMBODIED THEREIN ARE PROPERTY OF HORRIGAN O'MALLEY ARCHITECTS. THEY SHALL NOT BE REPRODUCED, COPIED, DISCLOSED TO OTHERS, OR USED IN CONNECTION WITH OTHER PROJECTS THAN FOR WHICH THEY HAVE BEEN PREPARED IN WHOLE OR PART WITHOUT PRIOR WRITTEN AUTHORIZATION.

ISSUE

1. ISSUED CITY PLANNING REVIEW 7.11.17

SEAL

FILE NAME  
 SUMMIT ZONING.DWG  
 PROJECT

51-61 SUMMIT STREET  
 BROOKLYN, NY

SHEET  
 ZONING NOTES

PROJECT FILE  
 SUMMIT ZONING.DWG

SHEET NUMBER

**ZD-001.00**

SHEET 11 OF 64

BARCODE



©2016 CHRISTA HORRIGAN.  
THESE DRAWINGS, DESIGNS, & IDEAS EMBODIED THEREIN  
ARE PROPERTY OF HORRIGAN O'MALLEY ARCHITECTS.  
THEY SHALL NOT BE REPRODUCED, COPIED, DISCLOSED  
TO OTHERS, OR USED IN CONNECTION WITH OTHER  
PROJECTS THAN FOR WHICH THEY HAVE BEEN PREPARED  
IN WHOLE OR PART WITHOUT PRIOR WRITTEN AUTHORIZATION.

ISSUE

SEAL

FILE NAME  
SUMMIT ST B01.DWG  
PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
PROPOSED PLAN-FIRST  
FLOOR

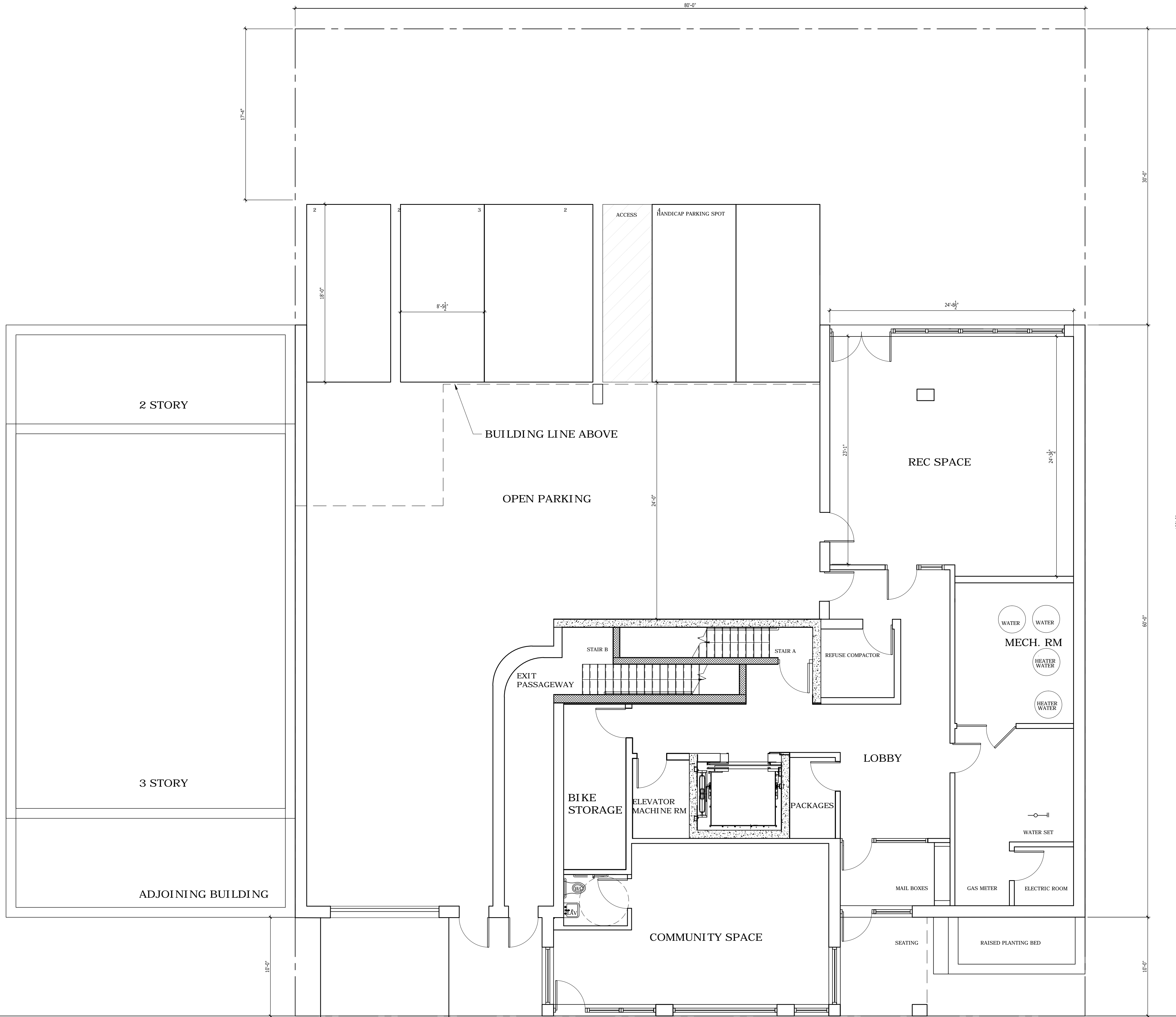
PROJECT FILE

SHEET NUMBER

A-121.00

SHEET-OF -

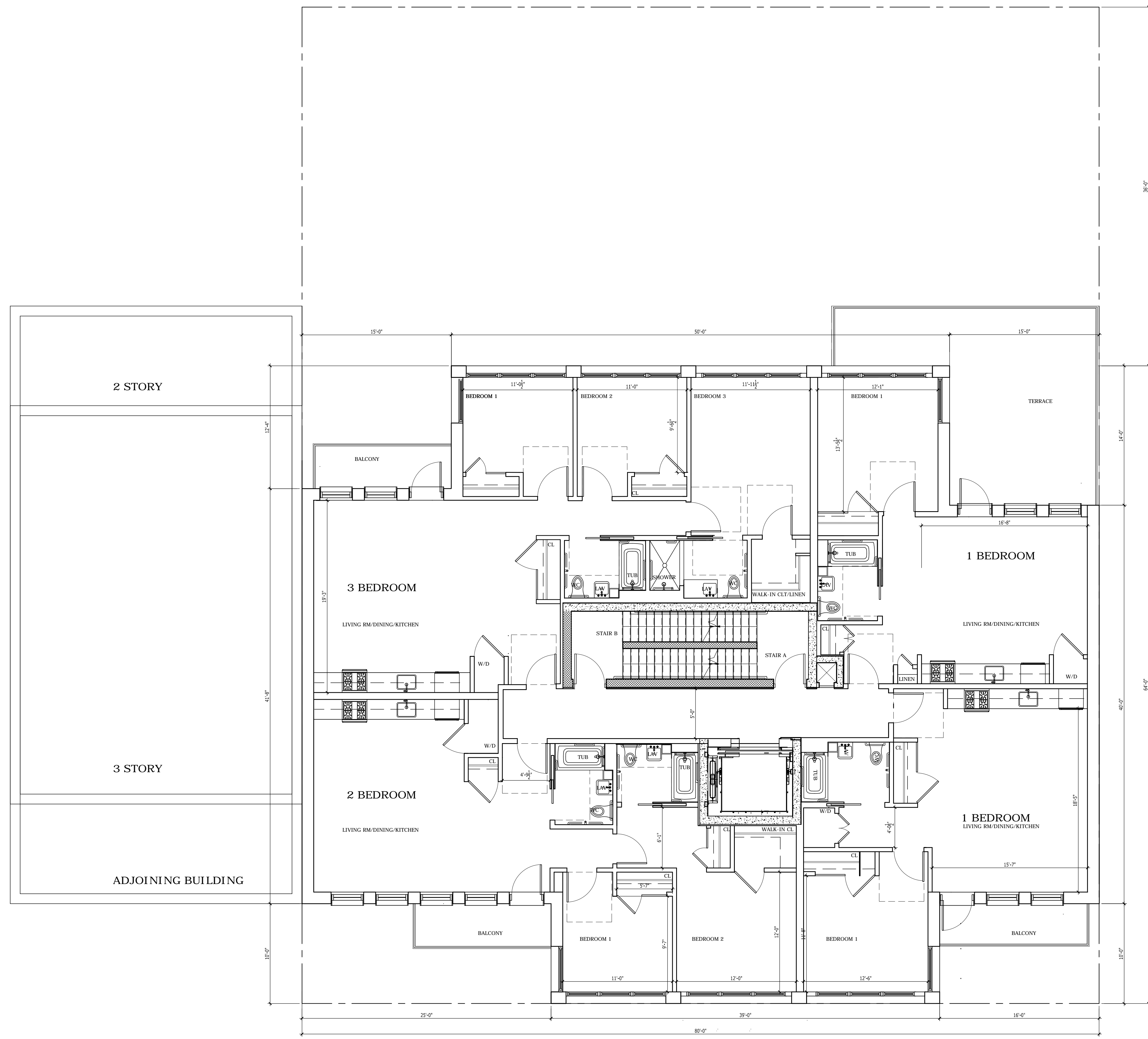
BARCODE



**1** PROPOSED FIRST FLOOR PLAN  
3/16"=1'-0"



©2016 CHRISTA HORRIGAN.  
THESE DRAWINGS, DESIGNS, & IDEAS EMBODIED THEREIN  
ARE PROPERTY OF HORRIGAN O'MALLEY ARCHITECTS.  
THEY SHALL NOT BE REPRODUCED, COPIED, DISCLOSED  
TO OTHERS, OR USED IN CONNECTION WITH OTHER  
PROJECTS THAN FOR WHICH THEY HAVE BEEN PREPARED  
IN WHOLE OR PART WITHOUT PRIOR WRITTEN AUTHORIZATION.



ISSUE

1. ISSUED FOR DOB REVIEW 10.11.16

SEAL

FILE NAME  
SUMMIT ST B01.DWG

PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
PROPOSED PLAN- FLOOR 2

PROJECT FILE

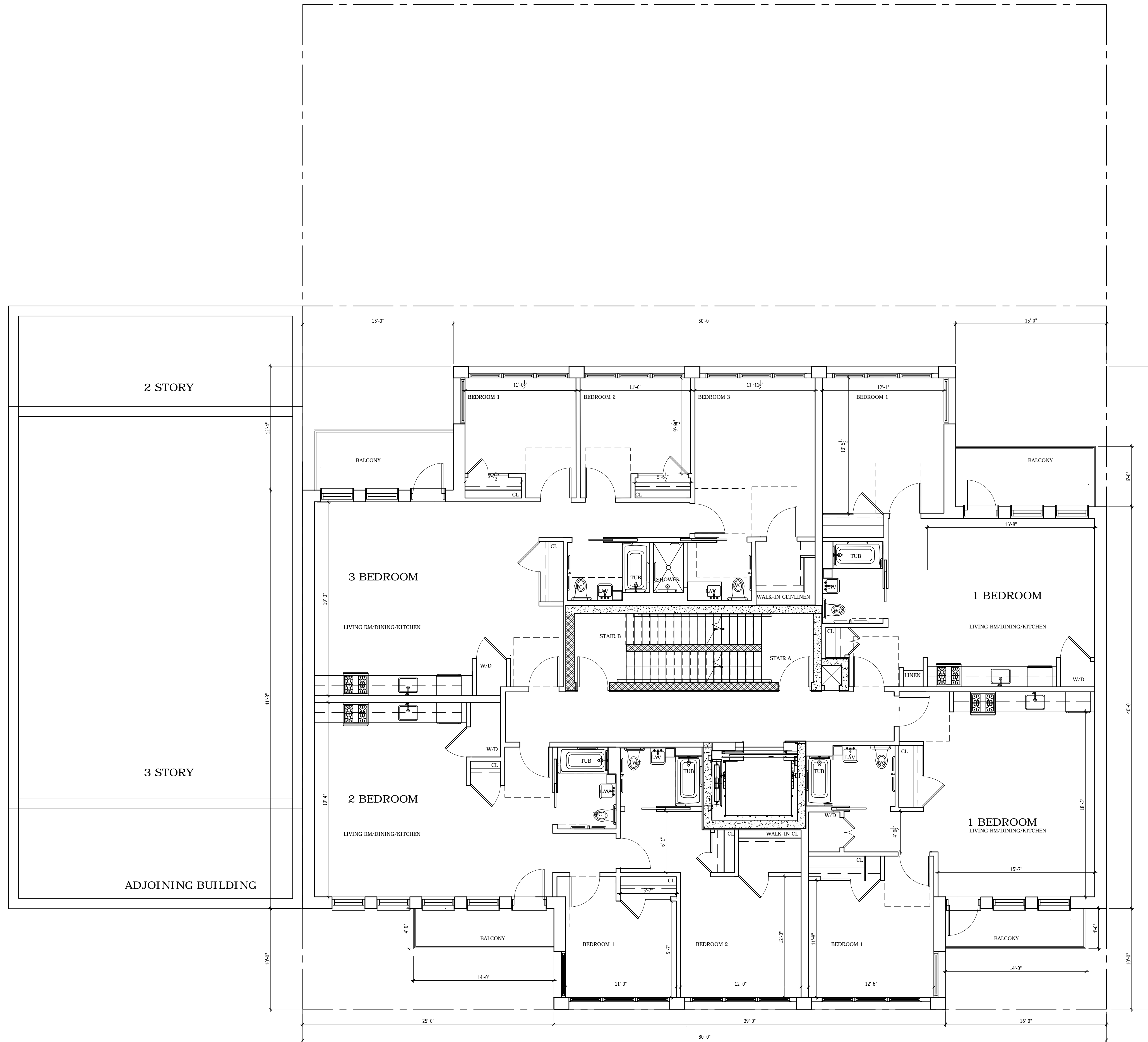
SHEET NUMBER

A-122.00

SHEET 31 OF 64

BARCODE

**1** FLOOR PLAN: PROPOSED FLOOR 2  
3/16"=1'-0"



**1** PROPOSED PLAN - FLOOR 3-4  
3/16"=1'-0"

ISSUE

SEAL

FILE NAME  
SUMMIT ST B01.DWG  
PROJECT  
55-61 SUMMIT ST  
BROOKLYN, NY  
11231

SHEET  
PROPOSED PLAN-  
FLOORS 3 & 4

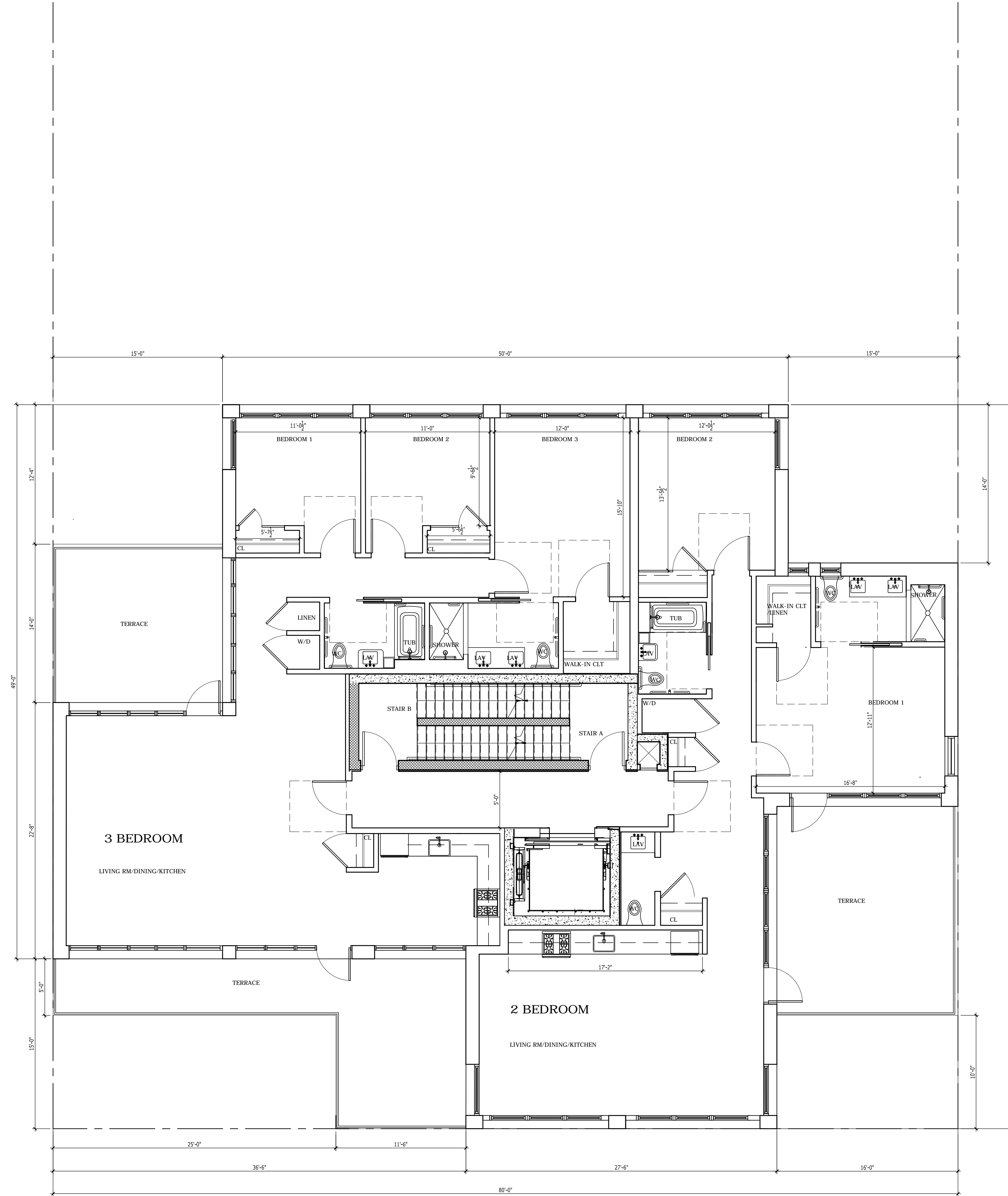
PROJECT FILE  
SUMMIT

SHEET NUMBER

**A-123.00**

SHEET 32 OF 64

BARCODE



**1** FLOOR PLAN- FLOOR 5  
3/16"=1'-0"

ISSUE

SEAL

SUMMIT ST BOT.DWG

PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
PROPOSED PLAN- FLOOR 5

PROJECT FILE  
SUMMIT

SHEET NUMBER

**A-124.00**

SHEET 33 OF 64

BARCODE

©2016 CHRISTA HORRIGAN.  
THESE DRAWINGS, DESIGNS, & IDEAS EMBODIED THEREIN  
ARE PROPERTY OF HORRIGAN O'MALLEY ARCHITECTS.  
THEY SHALL NOT BE REPRODUCED, COPIED, DISCLOSED  
TO OTHERS, OR USED IN CONNECTION WITH OTHER  
PROJECTS THAN FOR WHICH THEY HAVE BEEN PREPARED  
IN WHOLE OR PART WITHOUT PRIOR WRITTEN AUTHORIZATION.



ISSUE

SEAL

FILE NAME  
SUMMIT ST B01.DWG  
PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
SUMMIT STREET-  
FRONT ELEVATION

PROJECT FILE  
SUMMIT

SHEET NUMBER

A-125.00

SHEET 34 OF 64

BARCODE

1 FRONT / SUMMIT STREET ELEVATION  
1/4"=1'-0"





1 REAR/ NORTH ELEVATION  
1/4" = 1'-0"

ISSUE

SEAL

FILE NAME  
SUMMIT ST B01.DWG  
PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
REAR ELEVATION

PROJECT FILE  
SUMMIT  
SHEET NUMBER

A-126.00

©2016 CHRISTA HORRIGAN.  
THESE DRAWINGS, DESIGNS, & IDEAS EMBODIED THEREIN  
ARE PROPERTY OF HORRIGAN O'MALLEY ARCHITECTS.  
THEY SHALL NOT BE REPRODUCED, COPIED, DISCLOSED  
TO OTHERS, OR USED IN CONNECTION WITH OTHER  
PROJECTS THAN FOR WHICH THEY HAVE BEEN PREPARED  
IN WHOLE OR PART WITHOUT PRIOR WRITTEN AUTHORIZATION.



ISSUE

1. ISSUED FOR DOB REVIEW 10.11.16

SEAL

FILE NAME  
SUMMITST B01.DWG

PROJECT  
55-61 SUMMIT STREET  
BROOKLYN, NY  
11231

SHEET  
EAST ELEVATION

PROJECT FILE  
SUMMIT

SHEET NUMBER

A-127.00

SHEET 36 OF 64

BARCODE

1 EAST ELEVATION  
1/4"=1'-0"

## 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: \_\_\_\_\_

Name of Applicant Representative: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Project site owner (if different than above): \_\_\_\_\_

### B. PROPOSED ACTIVITY

*If more space is needed, include as an attachment.*

1. Brief description of activity

2. Purpose of activity

**C. PROJECT LOCATION**

Borough: \_\_\_\_\_ Tax Block/Lot(s): \_\_\_\_\_

Street Address: \_\_\_\_\_

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

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> City Map Amendment               | <input type="checkbox"/> Zoning Certification        | <input type="checkbox"/> Concession        |
| <input type="checkbox"/> Zoning Map Amendment             | <input type="checkbox"/> Zoning Authorizations       | <input type="checkbox"/> UDAAP             |
| <input type="checkbox"/> Zoning Text Amendment            | <input type="checkbox"/> Acquisition – Real Property | <input type="checkbox"/> Revocable Consent |
| <input type="checkbox"/> Site Selection – Public Facility | <input type="checkbox"/> Disposition – Real Property | <input type="checkbox"/> Franchise         |
| <input type="checkbox"/> Housing Plan & Project           | <input type="checkbox"/> Other, explain: _____       |  |
| <input type="checkbox"/> Special Permit                   |  |  |
- (if appropriate, specify type:  Modification  Renewal  other) Expiration Date: \_\_\_\_\_

**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**

- |  |   |
|--|---|
| <input type="checkbox"/> Legislation                       | <input type="checkbox"/> Funding for Construction, specify: _____ |
| <input type="checkbox"/> Rulemaking                        | <input type="checkbox"/> Policy or Plan, specify: _____           |
| <input type="checkbox"/> Construction of Public Facilities | <input type="checkbox"/> Funding of Program, specify: _____       |
| <input type="checkbox"/> 384 (b) (4) Approval              | <input type="checkbox"/> Permits, specify: _____                  |
| <input type="checkbox"/> Other, explain: _____             |   |

**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).
  - 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
<b>I</b>	<b>Support and facilitate commercial and residential redevelopment in areas well-suited to such development.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4	In areas adjacent to SMIA's, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	

		Promote	Hinder	N/A
<b>2</b>	<b>Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3</b>	<b>Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.1.	Support and encourage in-water recreational activities in suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3	Minimize conflicts between recreational boating and commercial ship operations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>4</b>	<b>Protect and restore the quality and function of ecological systems within the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5	Protect and restore tidal and freshwater wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8	Maintain and protect living aquatic resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Promote	Hinder	N/A
<b>5</b>	<b>Protect and improve water quality in the New York City coastal area.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.1	Manage direct or indirect discharges to waterbodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6</b>	<b>Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in <i>New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms</i> ) into the planning and design of projects in the city's Coastal Zone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>7</b>	<b>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.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.2	Prevent and remediate discharge of petroleum products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>8</b>	<b>Provide public access to, from, and along New York City's coastal waters.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Provide visual access to the waterfront where physically practical.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





## 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, 31<sup>st</sup> Floor  
New York, New York 10271  
212-720-3696  
[wrp@planning.nyc.gov](mailto:wrp@planning.nyc.gov)  
[www.nyc.gov/wrp](http://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](http://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](http://www.nyc.gov/wrp)

## **Attachment to Consistency Assessment Form for 55-63 Summit Street**

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The proposed rezoning area is not within a Special Natural Waterfront Area or Significant Maritime and Industrial Area, and it is in a well developed area devoid of natural features. The properties within the proposed rezoning area are currently underutilized. The rezoning area is proximate to numerous residential uses and in an area where public facilities and infrastructure are adequate. The proposed action is therefore consistent with Policy 1.1.

Policy 6: Minimize loss of life, structures, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.

The proposed rezoning area is within shaded zone X as designated on FEMA's preliminary flood map 3604970192G. That zone indicates a location that is within the 500-year-flood plain but not within the 100-year-flood plain. The nearest 100-year-flood plain has a height of 11.00 feet NAVD88, according to the New York City Flood Hazard Mapper, and the project site has an elevation of 13.6 feet NAVD88, according to a site survey (which is appended to this EAS). The NYC Building Code provides development restrictions in zone X only for uses within the institutional 'I' occupancy group (such as hospitals and nursing homes) and not for residential buildings. Restrictions relative to residential development are provided only for locations subject to a 100-year-flood. The proposed action would be consistent with Policy 6.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published by the NPCC, or any successor thereof) into the planning and design of projects in the city's Coastal Zone.

The New York City Panel on Climate Change has projected that, relative to sea levels in the year 2000, sea levels at New York City will have risen 4 to 8 inches in the 2020s, 11 to 21 inches in the 2050s, 18 to 39 inches in the 2080s, and 22 to 50 inches by 2100. These changes will increase the frequency and severity of coastal flooding, expand existing flood zones, and increase base flood elevations at locations within existing flood zones.

As shown in the New York City Flood Hazard Mapper, the proposed rezoning area is expected to remain outside of the 100-year flood plain in the 2020s but be within the 100-year flood plain by the 2050s.

Under the current plans, the proposed project would not be fully compliant with the Building Code requirements for a project in the flood zone. Building utilities would be on the ground floor and thus not elevated above the anticipated future 100-year-flood height, and the ground floor would not be floodproofed. Also, there are no plans for the anticipated development on Lot 48.

Nevertheless, the proposed building design does incorporate elements that serve sustainability. There is no cellar or basement level. Mechanical equipment and accessory parking would be on the ground floor rather than in a subterranean level. The lowest residential level would be the second floor, which would be 13 feet above base elevation. (See the Flood Evaluation Worksheet.) Consideration of sea level rise has thus been integrated into the proposed project's planning and design. Furthermore, the Applicant is investigating means of further enhancing the resiliency of

the project by elevating the building utilities to a higher elevation. The proposed action would be consistent with Policy 6.2.

Policy 7.2: Prevent and remediate discharge of petroleum products.

Liberty Environmental, Inc., performed a Combined Phase I and Phase II Environmental Site Assessment (ESA) for the project site in 2013. The Phase I research revealed that an automobile repair facility formerly operated on part of the project site. Historical site operations may have included tanks, drains, or other potential sources of impact, and likely included the use of fuel oils or other potential contaminants, which may have impacted site soil and/or groundwater. For these reasons Liberty Environmental identified the historical site operations as a recognized environmental concern. Soil, groundwater, and soil vapor samples were then collected from the project site and analyzed at an accredited laboratory. The results indicate that groundwater and soil vapor are not media of concern at the property. However, several semi-volatile organic compounds and metals were detected in soil above applicable New York State Department of Environmental Conservation action levels. Therefore, the report recommended remediation of these soils, by capping or removal and off-site disposal.

Because remediation is needed, an (E) designation will be placed on the project site. An (E) designation will also be placed on the one other property within the rezoning area (Lot 48, the projected development site). The (E) designation (E-466) requires that the following actions be taken before construction activities take place. Because soil, groundwater, and soil vapor testing have already been performed on the project site, the Office of Environmental Remediation (OER) will review the combined Phase I and Phase II ESA report and determine whether additional testing must be done or the sampling protocol phase may be omitted.

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 the (E) designation in place, a significant adverse impact related to hazardous materials would not occur as a result of the proposed action. The proposed action is therefore consistent with Policy 7.2.

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Worksheet

COMPLETE INSTRUCTIONS ON HOW TO USE THIS WORKSHEET ARE PROVIDED IN THE "CLIMATE CHANGE ADAPTATION GUIDANCE" DOCUMENT AVAILABLE AT [www.nyc.gov/wrp](http://www.nyc.gov/wrp)

Enter information about the project and site in highlighted cells in Tabs 1-3. HighTab 4 contains primary results. Tab 5, "Future Flood Level Projections" contains background computations. The remaining tabs contain additional results, to be used as relevant. Non-highlighted cells have been locked.

Background Information	
Project Name	55-63 Summit Street Rezoning
Location	Brooklyn Block 352, Lots 48, 49, 50, 51, and 52
Type(s)	<input checked="" type="checkbox"/> Residential, Commercial, Community Facility <input type="checkbox"/> Parkland, Open Space, and Natural Areas <input type="checkbox"/> Tidal Wetland Restoration <input type="checkbox"/> Critical Infrastructure or Facility <input type="checkbox"/> Industrial Uses <input type="checkbox"/> Over-water Structures <input type="checkbox"/> Shoreline Structures <input type="checkbox"/> Transportation <input type="checkbox"/> Wastewater Treatment/Drainage <input type="checkbox"/> Coastal Protection
Description	The proposed action would facilitate a proposal to construct 14 dwelling units and 450 sf of community facility space in a 20,829 gsf, 5-story building with no cellar or basement, on Block 352, Lots 49-52. The RWCDs also projects a 5,530 gsf, 5-story-and-cellar building with 4 dwelling units and a 450 sf medical office on Lot 48.
Planned Completion date	2020

The New York City Waterfront Revitalization Program Climate Change Adaptation Guidance document was developed by the NYC Department of City Planning. It is a guidance document only and is not intended to serve as a substitute for actual regulations. The City disclaims any liability for errors that may be contained herein and shall not be responsible for any damages, consequential or actual, arising out of or in connection with the use of this information. The City reserves the right to update or correct information in this guidance document at any time and without notice.

For technical assistance on using this worksheet, email [wrp@planning.nyc.gov](mailto:wrp@planning.nyc.gov), using the message subject "Policy 6.2 Worksheet Error."

Last update: June 7, 2017



**Establish current tidal and flood heights.**

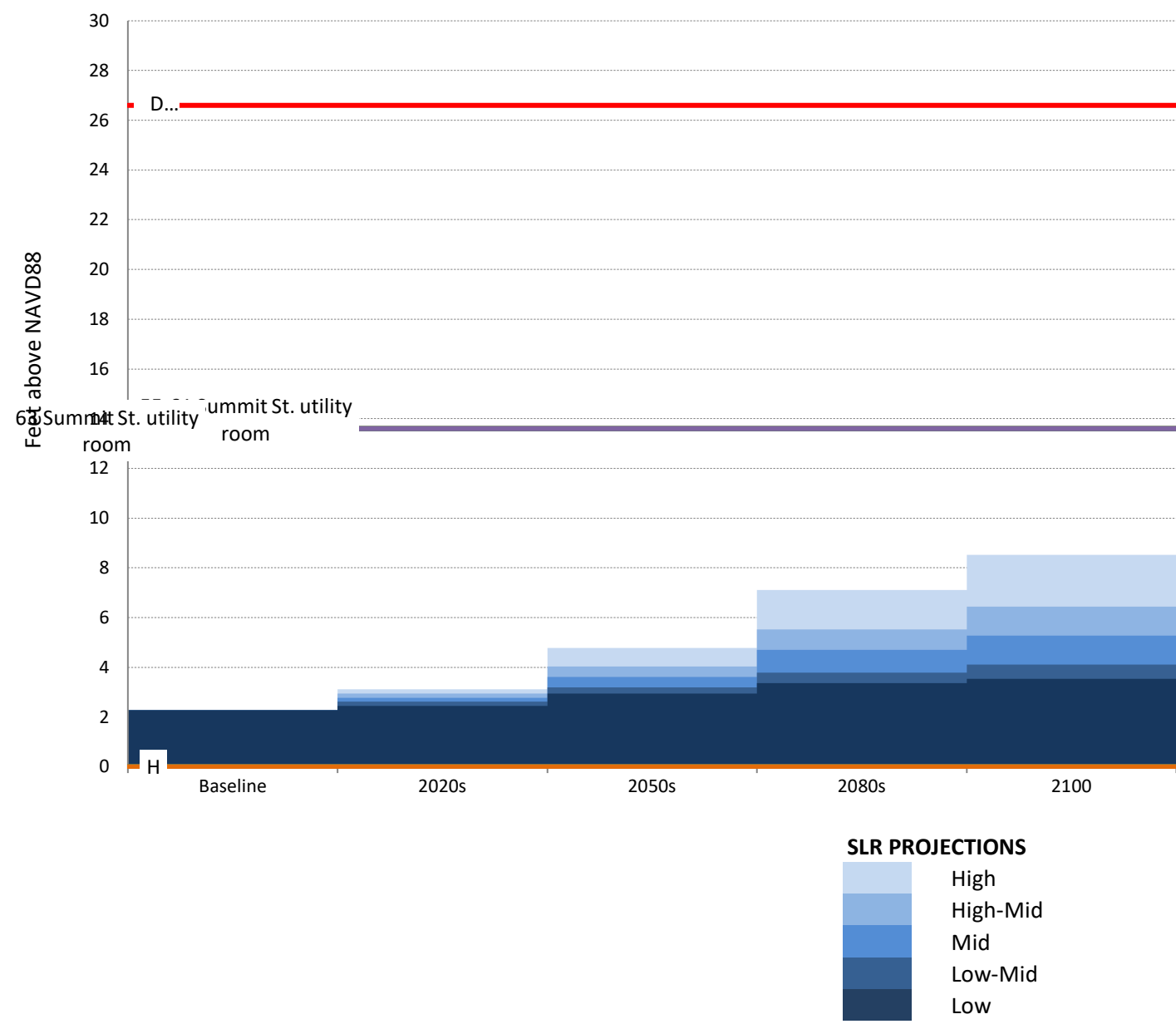
	FT (NAVD88)	Feet	Datum	Source
MHHW	2.28	<b>2.28</b>	<b>NAVD88</b>	<i>NOAA data for Battery Station</i>
1% flood height	11.00	<b>11.00</b>	<b>NAVD88</b>	<i>NYC Flood Hazard Mapper</i>
<i>As relevant:</i>				
0.2% flood height	-->		<b>NAVD88</b>	
MHW	1.96	<b>1.96</b>	<b>NAVD88</b>	<i>NOAA data for Battery Station</i>
MSL	-0.20	<b>-0.20</b>	<b>NAVD88</b>	<i>NOAA data dfor Battery Station</i>
MLLW	-2.77	<b>-2.77</b>	<b>NAVD88</b>	<i>NOAA data for Battery Station</i>

*Data will be converted based on the following datums:*

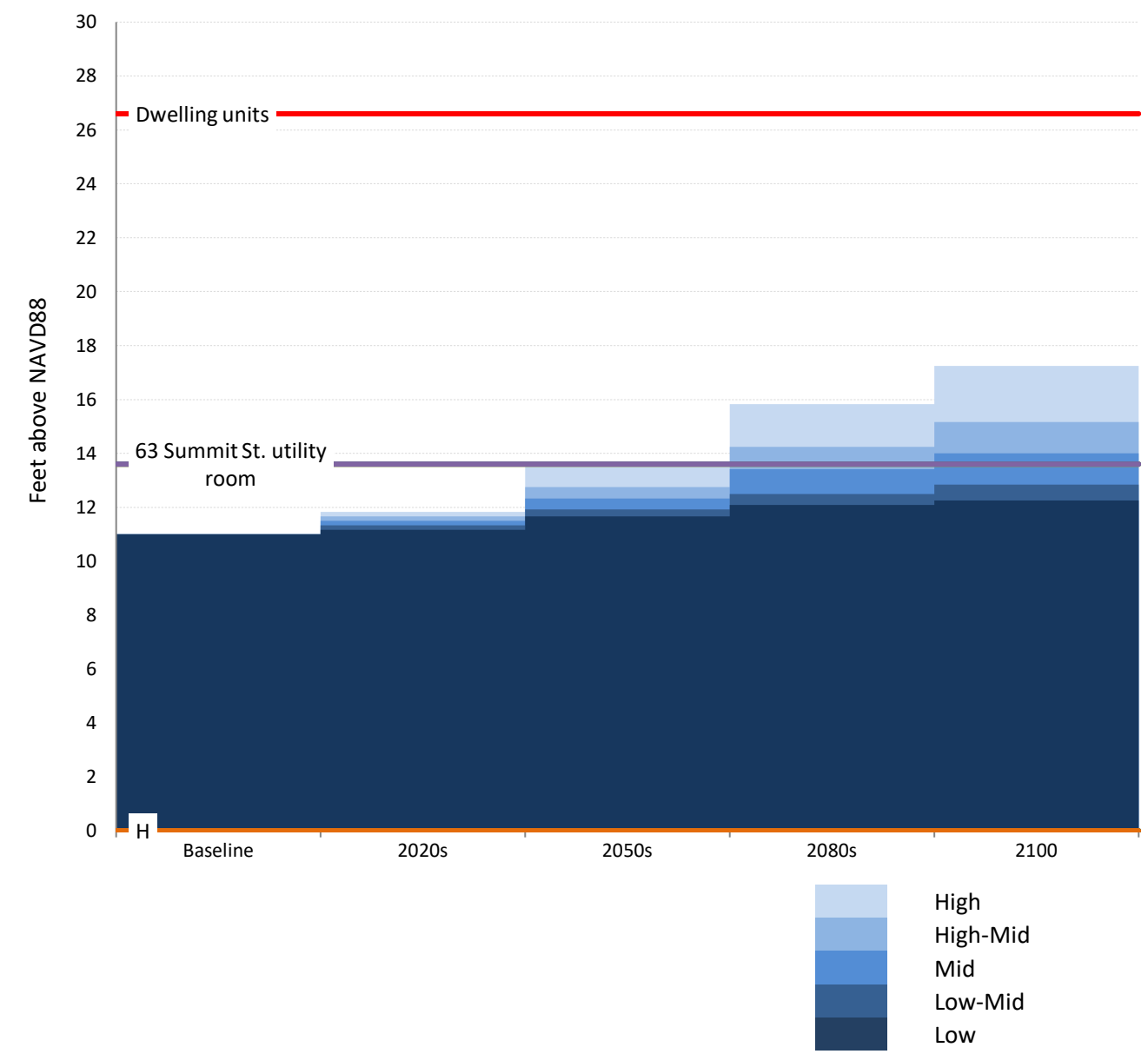
Datum	FT (NAVD88)
NAVD88	0.00
NGVD29	-1.10
Manhattan Datum	1.65
Bronx Datum	1.51
Brooklyn Datum (Sewer)	0.61
Brooklyn Datum (Highway)	1.45
Queens Datum	1.63
Richmond Datum	2.09
Station	<b>Battery</b>
MLLW	<b>-2.77</b>



Mean Higher High Water + Sea Level Rise



1% Flood Elevation + Sea Level Rise



	SLR (ft)					
	Low	Low-Mid	Mid	High-Mid	High	
Baseline	0.00	0.00	0.00	0.00	0.00	2014
2020s	0.17	0.33	0.50	0.67	0.83	2020s
2050s	0.67	0.92	1.33	1.75	2.50	2050s
2080s	1.08	1.50	2.42	3.25	4.83	2080s
2100	1.25	1.83	3.00	4.17	6.25	2100

**MHHW+SLR (ft above NAVD88)**

	Low	Low-Mid	Mid	High-Mid	High	
Baseline	2.28	2.28	2.28	2.28	2.28	Baseline
2020s	2.45	2.61	2.78	2.95	3.11	2020s
2050s	2.95	3.20	3.61	4.03	4.78	2050s
2080s	3.36	3.78	4.70	5.53	7.11	2080s
2100	3.53	4.11	5.28	6.45	8.53	2100

**1%+SLR (ft above NAVD88)**

	Low	Low-Mid	Mid	High-Mid	High	
Baseline	11.00	11.00	11.00	11.00	11.00	Baseline
2020s	11.17	11.33	11.50	11.67	11.83	2020s
2050s	11.67	11.92	12.33	12.75	13.50	2050s
2080s	12.08	12.50	13.42	14.25	15.83	2080s
2100	12.25	12.83	14.00	15.17	17.25	2100

**0.2%+SLR (ft above NAVD88)**

	Low	Low-Mid	Mid	High-Mid	High
Baseline	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2020s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2050s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2080s	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
2100	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

	0	1
Dwelling units	27	26.6
Community facility	14	13.6
Parking	13.6	13.6
55-61 Summit St. utility room	13.6	13.6
63 Summit St. utility room	13.6	13.6
F	0	0
G	0	0
H	0	0

**SLR (in)**

<b>Low</b>	<b>Low-Mid</b>	<b>Mid</b>	<b>High-Mid</b>	<b>High</b>
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

**MLLW+SLR (ft above NAVD88)**

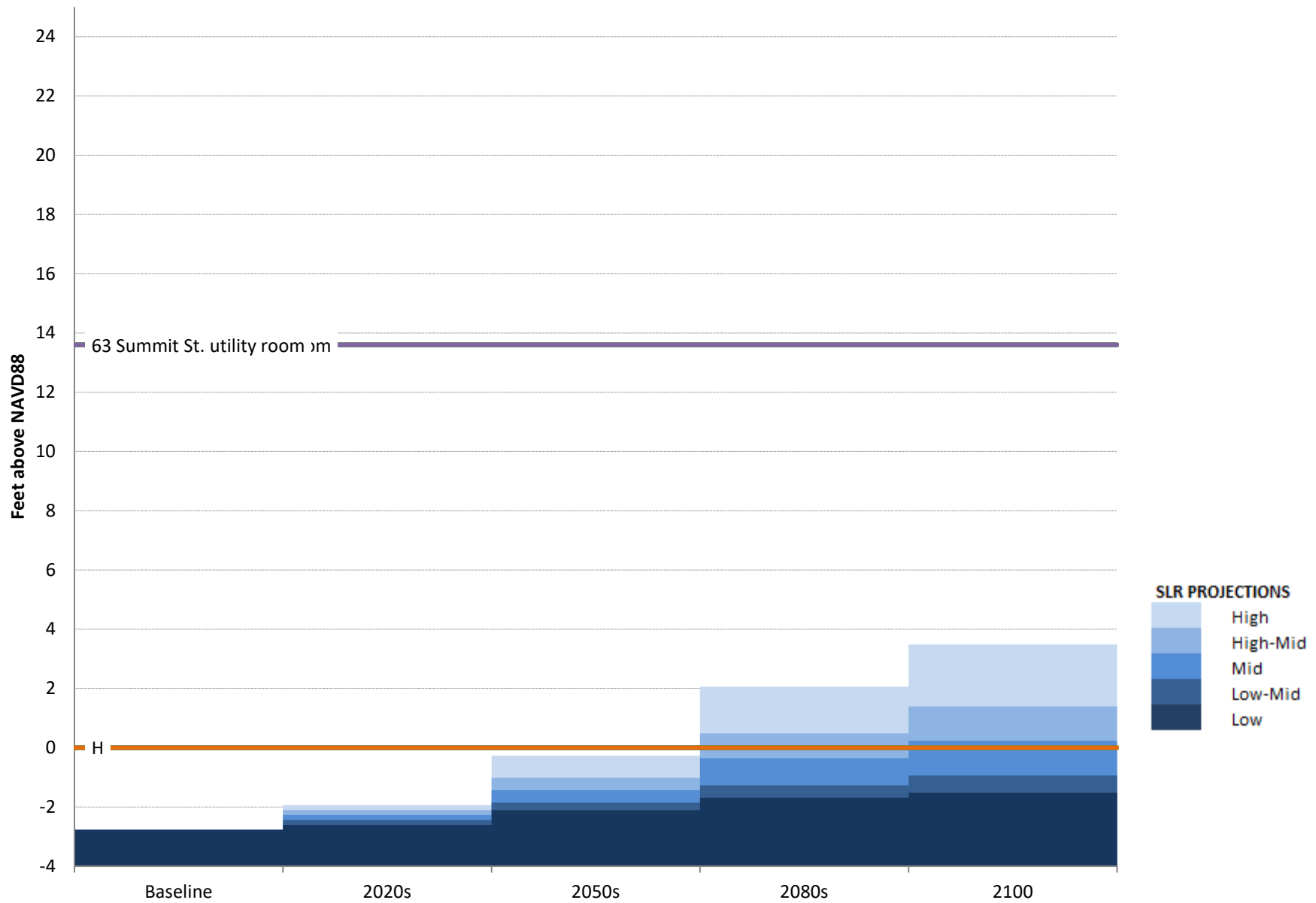
<b>Low</b>	<b>Low-Mid</b>	<b>Mid</b>	<b>High-Mid</b>	<b>High</b>
-2.77	-2.77	-2.77	-2.77	-2.77
-2.60	-2.44	-2.27	-2.10	-1.94
-2.10	-1.85	-1.44	-1.02	-0.27
-1.69	-1.27	-0.35	0.48	2.06
-1.52	-0.94	0.23	1.40	3.48

**MSL+SLR (ft above NAVD88)**

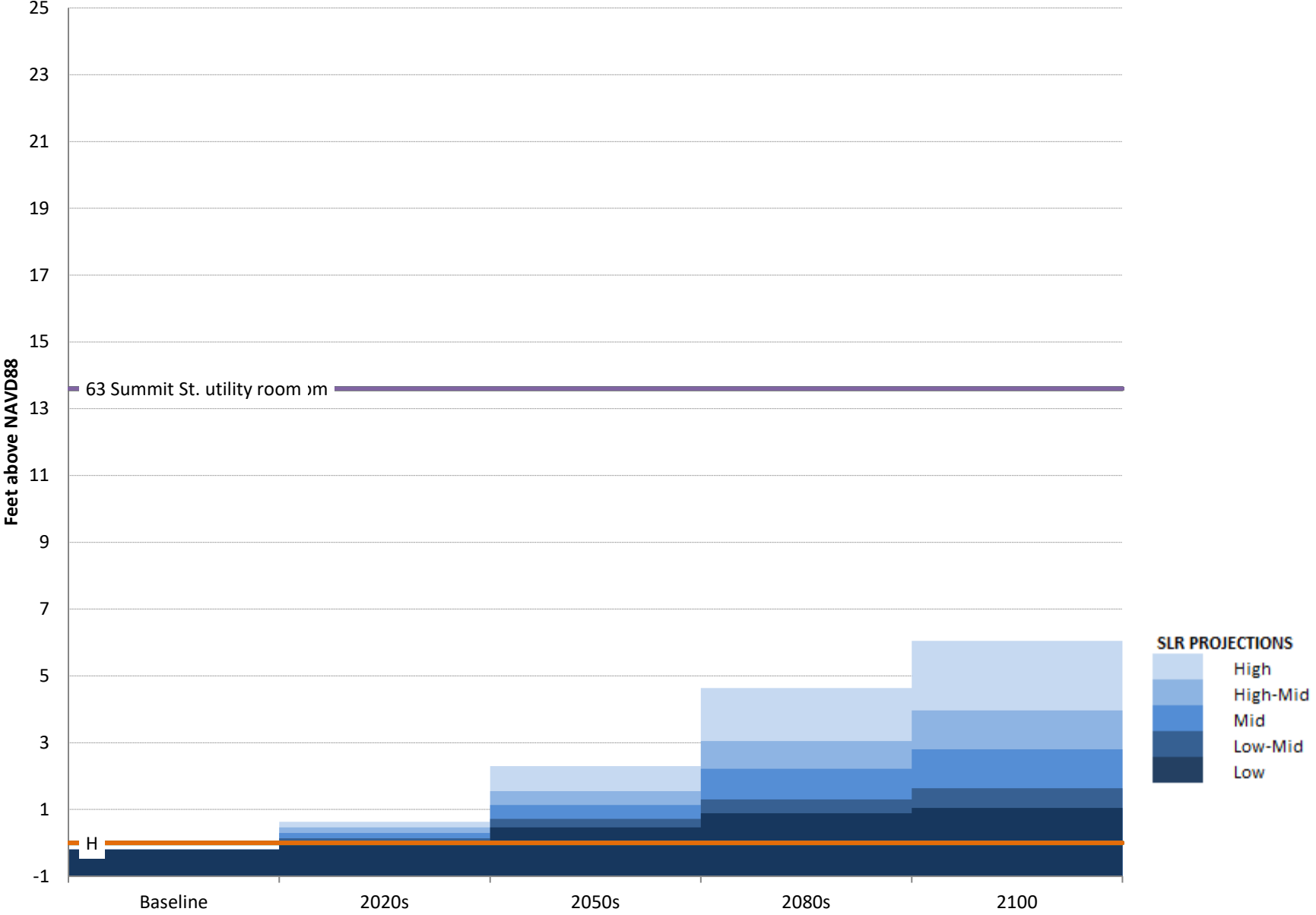
<b>Low</b>	<b>Low-Mid</b>	<b>Mid</b>	<b>High-Mid</b>	<b>High</b>
-0.20	-0.20	-0.20	-0.20	-0.20
-0.03	0.13	0.30	0.47	0.63
0.47	0.72	1.13	1.55	2.30
0.88	1.30	2.22	3.05	4.63
1.05	1.63	2.80	3.97	6.05



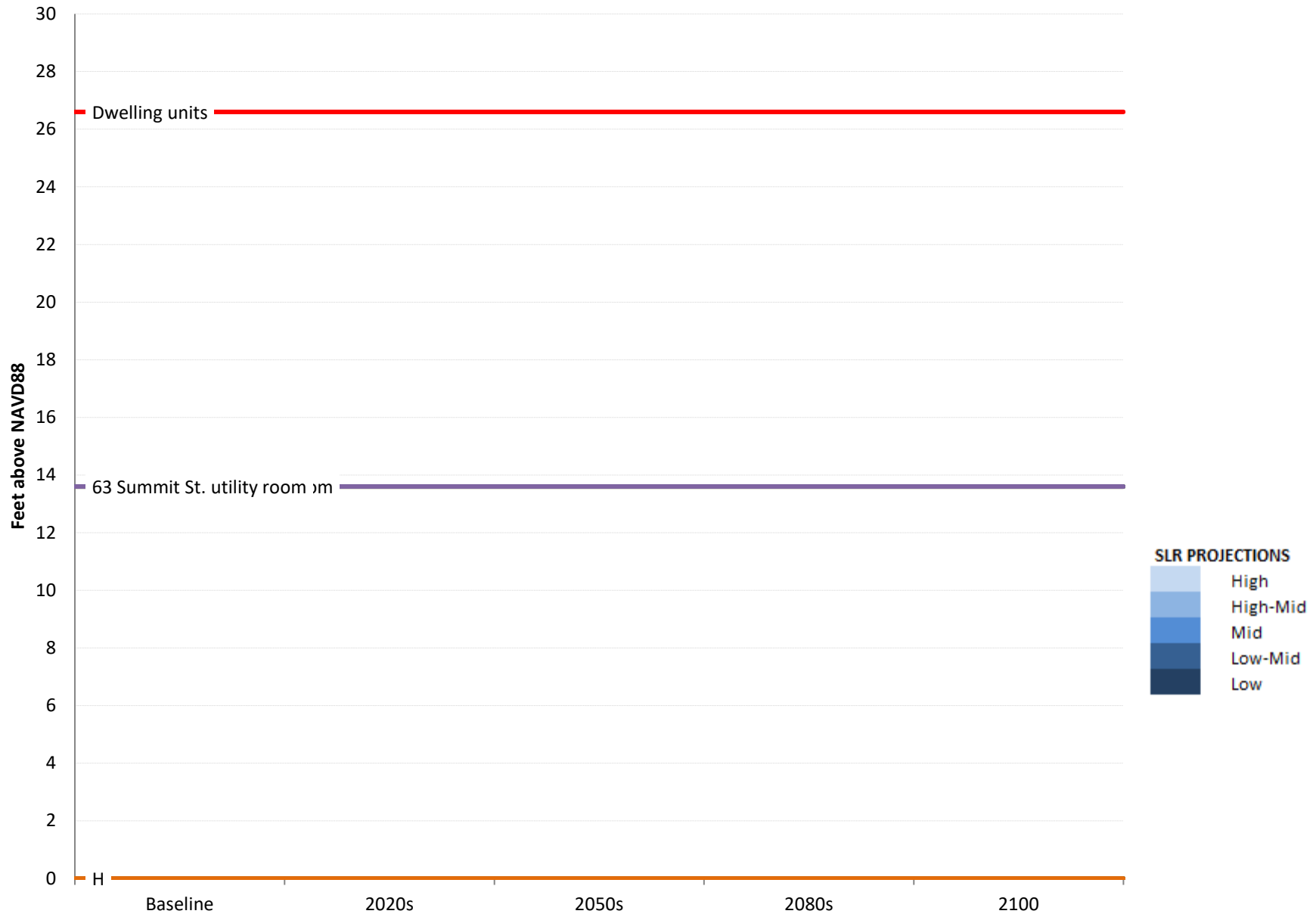
# Mean Lower Low Water + Sea Level Rise



# Mean Sea Level + Sea Level Rise



# 0.2% Flood Elevation + Sea Level Rise



## ENVIRONMENTAL REVIEW

**Project number:** DEPARTMENT OF CITY PLANNING / 06DCP095K  
**Project:** 55-61 SUMMIT STREET  
**Date received:** 3/8/2016

**Comments:** as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

---

**Properties with no Architectural or Archaeological significance:**

- 1) ADDRESS: 63 SUMMIT STREET, BBL: 3003520048
- 2) ADDRESS: 61 SUMMIT STREET, BBL: 3003520049
- 3) ADDRESS: 59 SUMMIT STREET, BBL: 3003520050
- 4) ADDRESS: 57 SUMMIT STREET, BBL: 3003520051
- 5) ADDRESS: 55 SUMMIT STREET, BBL: 3003520052
- 6) ADDRESS: 45 SUMMIT STREET, BBL: 3003520053
- 7) ADDRESS: 41 SUMMIT STREET, BBL: 3003520060

*Gina Santucci*

3/10/2016

---

SIGNATURE  
Gina Santucci, Environmental Review Coordinator

DATE

**File Name:** 7245\_FSO\_GS\_03102016.doc