Pitkin Avenue Rezoning EAS
Environmental Assessment Statement

CEQR No. 13DCP067K

ULURP No. 130161ZMK



Prepared for:
Pitkin-Berriman Housing Development Fund Corporation/
Cypress Hills Local Development Corporation

Prepared by:
Philip Habib & Associates

February 1, 2013

Pitkin Avenue Rezoning EAS

ENVIRONMENTAL ASSESSMENT STATEMENT

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ENVIRONMENTAL ASSESSMENT STATEMENT FORM

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT SHORT FORM • FOR UNLISTED ACTIONS ONLY

Please fill out, print and submit to the appropriate agency (see instructions)

PART I: GENERAL INFORMATION

1. ***Does 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**

2. ***Project Name*** **Pitkin Avenue Rezoning EAS**

3. ***Reference Numbers***

CEQR REFERENCE NUMBER (To Be Assigned by Lead Agency)	BSA REFERENCE NUMBER (If Applicable)
13DCP067K	
ULURP REFERENCE NUMBER (If Applicable))	OTHER REFERENCE NUMBER(S) (If Applicable) (e.g. Legislative Intro, CAPA, etc)
130161ZMK	

4a. ***Lead Agency Information***			4b. ***Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC Dept. of City Planning, Environmental Assessment and Review			**Pitkin-Berriman Housing Development Fund Corporation (HDFC)**		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Robert Dobruskin			**Abdulla Darrat**		
ADDRESS **22 Reade Street, Room 4E**			ADDRESS **625 Jamaica Avenue**		
CITY **New York**	STATE **NY**	ZIP **10007**	CITY **Brooklyn**	STATE **NY**	ZIP **11208**
TELEPHONE **212-720-3423**	FAX **212-720-3495**		TELEPHONE **718-235-1013**	FAX **718-647-2805**	
EMAIL ADDRESS **rdobrus@planning.nyc.gov**			EMAIL ADDRESS **abdullad@cypresshills.org**		

5. ***Project Description***: **This application is for zoning map amendments of a portion of a City tax block in the East New York area of Brooklyn to facilitate a new mixed-use development at 2501 Pitkin Avenue. The proposed zoning map changes would affect an area of approximately 30,000 sf and would change the existing R5/C1-3 zoning to R7A/C2-4 in the majority of the rezoning area, and remove the C1-3 commercial overlay from the remaining portion. The applicant proposes to develop a 7-story mixed-use residential and commercial building on the development site, which will be located within two different zoning districts as a result of the proposed rezoning. The proposed building would include a total of 69,413 gsf. Refer to Attachment A, "Project Description" for more details.**

6a. ***Project Location: Single Site*** *(for a project at a single site, complete all the information below)*

ADDRESS **2481, 2485, 2501 Pitkin Avenue, 405, 409 Shepherd Avenue**	NEIGHBORHOOD NAME **East New York**	
TAX BLOCK AND LOT **Rezoning Area: Block 4005, Lots 1, 2, 28, 35, and 38***	BOROUGH **Brooklyn**	COMMUNITY DISTRICT **5**
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS **The development site is located on a block bounded by Pitkin Avenue to the south, Berriman Street to the east, Glenmore Avenue to the north, and Shepherd Avenue to the west.**		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION IF ANY: **R5/C1-3**		ZONING SECTIONAL MAP NO: **17c**

6b. ***Project Location: Multiple Sites*** *(Provide a description of the size of the project area in both City Blocks and Lots. If the project would apply to the entire city or to areas that are so extensive that a site-specific description is not appropriate or practicable, describe the area of the project, including bounding streets, etc.)*

7. ***REQUIRED ACTIONS OR APPROVALS*** *(check all that apply)*

City Planning Commission: YES ☑ NO ☐

- ☐ CITY MAP AMENDMENT
- ☑ ZONING MAP AMENDMENT
- ☐ ZONING TEXT AMENDMENT
- ☑ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)
- ☐ CONCESSION
- ☐ UDAAP
- ☐ REVOCABLE CONSENT
- ☐ ZONING CERTIFICATION
- ☐ ZONING AUTHORIZATION
- ☐ HOUSING PLAN & PROJECT
- ☐ SITE SELECTION — PUBLIC FACILITY
- ☐ FRANCHISE
- ☐ DISPOSITION — REAL PROPERTY

ZONING SPECIAL PERMIT, SPECIFY TYPE:

- ☐ MODIFICATION OF
- ☐ RENEWAL OF
- ☐ OTHER

Board of Standards and Appeals: YES ☐ NO ☑

- ☐ SPECIAL PERMIT

EXPIRATION DATE MONTH DAY YEAR

- ☐ VARIANCE (USE)
- ☐ VARIANCE (BULK)

SPECIFY AFFECTED SECTION(S) OF THE ZONING RESOLUTION

*** Development Site: Block 4005, Lot 28 (2501 Pitkin Avenue).**

Department of Environmental Protection: YES ☐ NO ☑ IF YES, IDENTIFY:

Other City Approvals: YES ☑ NO ☐

- ☐ LEGISLATION
- ☐ FUNDING OF CONSTRUCTION; SPECIFY:
- ☐ POLICY OR PLAN; SPECIFY:
- ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL *(not subject to CEQR)*
- ☐ 384(b)(4) APPROVAL
- ☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) *(not subject to CEQR)*
- ☐ RULEMAKING
- ☐ CONSTRUCTION OF PUBLIC FACILITIES
- ☐ FUNDING OF PROGRAMS; SPECIFY:
- ☑ PERMITS; SPECIFY: **Department of Buildings Permit**
- ☐ OTHER; EXPLAIN

State or Federal Actions/Approvals/Funding: YES ☐ NO ☑ IF "YES," IDENTIFY:

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

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 11×17 inches in size and must be folded to 8.5 ×11 inches for submission*

☑ Site location map ☑ Zoning map ☑ Photographs of the project site taken within 6 months of EAS submission and keyed to the site location map

☑ Sanborn or other land use map ☑ Tax map ☐ For large areas or multiple sites, a GIS shape file that defines the project sites

PHYSICAL SETTING *(both developed and undeveloped areas)*

Total directly affected area (sq. ft.):	Type of Waterbody and surface area (sq. ft.):	Roads, building and other paved surfaces (sq. ft.)
Development Site: 20,625 sf, Rezoning Area: 30,000 sf	**N/A**	**Development Site: 20,625 sf, Rezoning Area: 30,000 sf**

Other, describe (sq. ft.): **N/A**

9. *Physical Dimensions and Scale of Project* *(if the project affects multiple sites, provide the total development below facilitated by the action)*

Size of project to be developed: **69,413 gsf** (gross sq. ft.) **(Maximum allowable zoning sf: 68,751 zsf)**

Does the proposed project involve changes in zoning on one or more sites? YES ☑ NO ☐

If 'Yes,' identify the total square feet owned or controlled by the applicant: **20,625 sf** Total square feet of non-applicant owned development: **9,375 sf**

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 disturbance (if known):

Area: **Approximately 10,300 sf** sq. ft. (width × length) Volume: **Approximately 5,350 cubic yards**

DESCRIPTION OF PROPOSED USES *(please complete the following information as appropriate)*

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	**60,113 gsf**	**9,300 gsf**	**N/A**	**N/A**
Type (e.g. retail, office, school)	**60 Dwelling Units** units	**Local Retail**	**N/A**	**N/A**

Does the proposed project increase the population of residents and/or on-site workers? YES ☑ NO ☐ Number of additional residents? **179*** Number of additional workers? **28****

Provide a brief explanation of how these numbers were determined: **Residents: 2.99 residents per household x 60 dwelling units = 179 residents***

Does the project create new open space? YES ☑ NO ☐ if Yes **10,175 sf of private accessory open space**

Using Table 14-1, estimate the project's projected operational solid waste generation, if applicable: **4,672 pounds per week** (pounds per week)

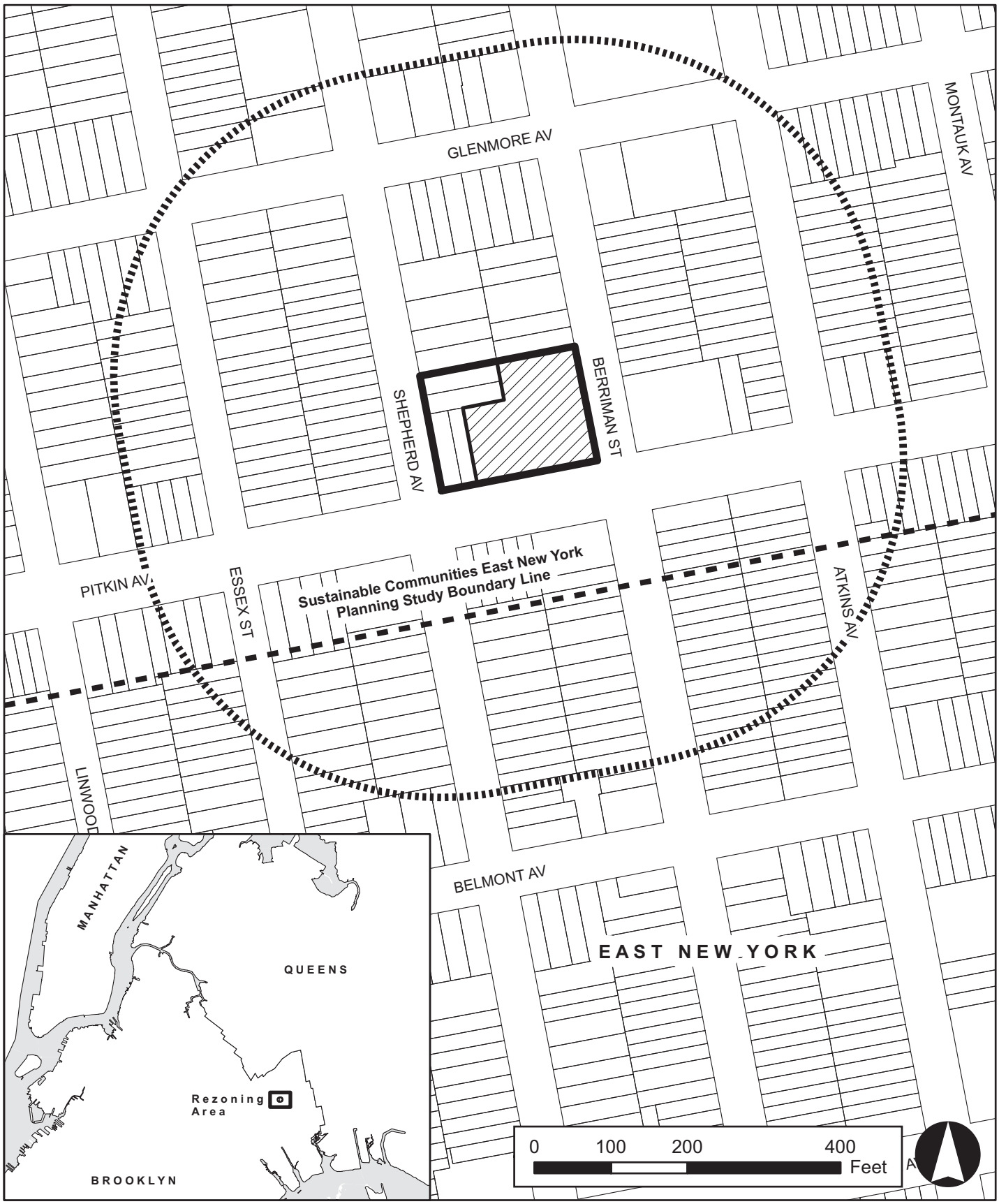
Using energy modeling or Table 15-1, estimate the project's projected energy use: **Approximately 9.6 billion annual BTUs** (annual BTUs)

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:

The No-Action scenario would include a 4-story as-of-right development with 5,000 sf of retail and 10,000 sf of community facility on the ground floor, and 34 DUs on the upper floors. The as-of-right development would also include 43 parking spaces in an underground parking garage with a size of approximately 15,050 sf. This as-of-right development would add approximately 102 residents and 37 employees to the proposed development site (refer to Attachment A, "Project Description" for details).

*** Source: New York City Department of City Planning, 2011 (Community District Demographic Profile Tables; Source: Census 2010).**
**** Local retail employees: Assumption 3 employees per 1,000 sf (= 28 employees/9,300sf).**

Location Map



Legend

Rezoning Area

Development Site

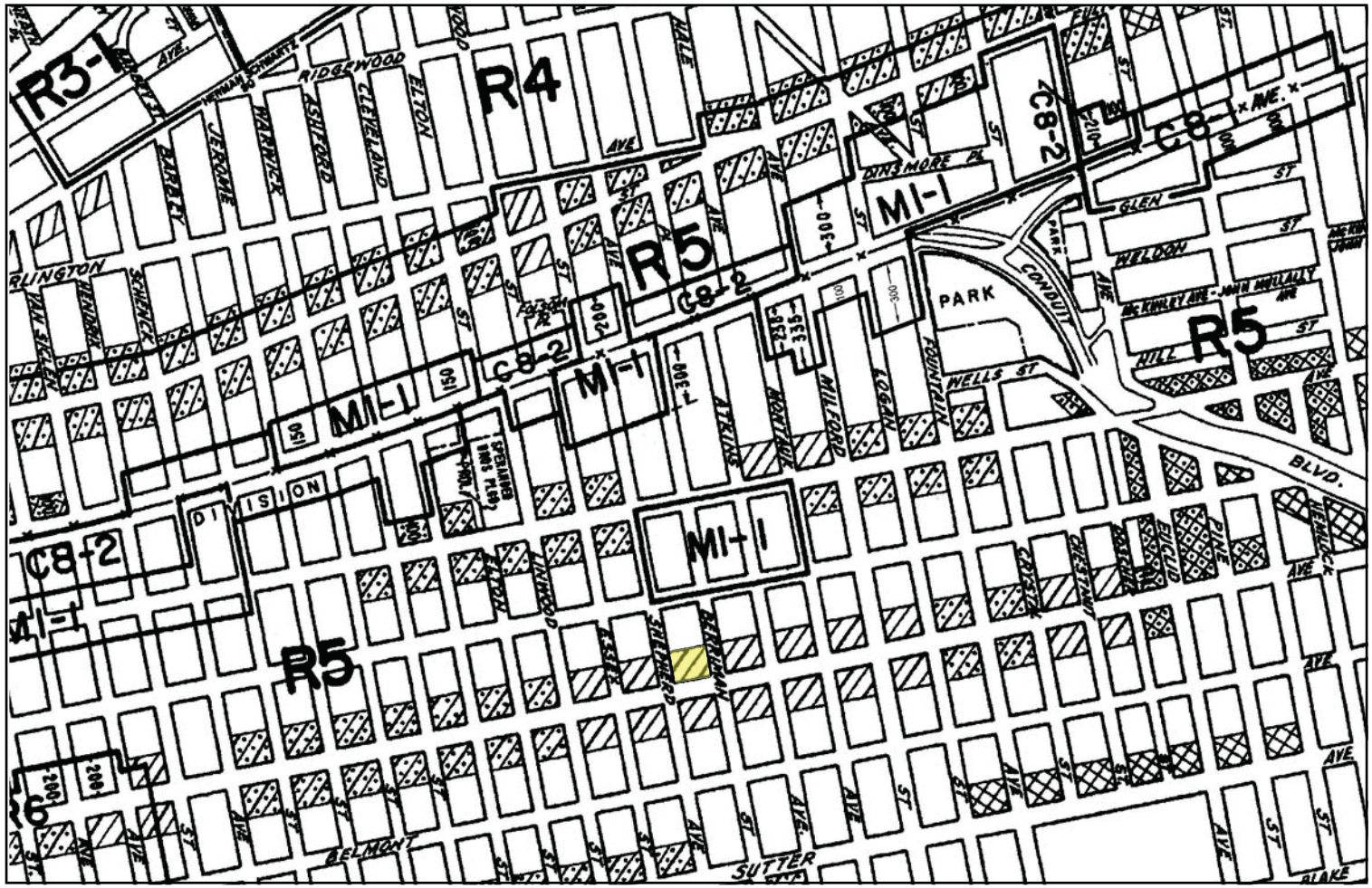
400-Foot Radius

Land Use Map



Legend

- Rezoning Area
- Development Site
- 400-Foot Radius
- One- and Two-Family Residential Walk-Up
- Multi-Family Residentiall Walk-Up
- Multi-Family Residential Elevator
- Mixed-Use
- Commercial
- Industrial
- Transportation and Warehousing
- Institutional
- Open Space
- Parking Facilities
- Vacant Land
- Unknown



ZONING MAP

THE NEW YORK CITY PLANNING COMMISSION

Major Zoning Classifications:

The number(s) and/or letter(s) that follows an **R, C** or **M** District designation indicates use, bulk and other controls as described in the text of the Zoning Resolution.

R – RESIDENTIAL DISTRICT

C – COMMERCIAL DISTRICT

M – MANUFACTURING DISTRICT

SPECIAL PURPOSE DISTRICT
The letter(s) within the shaded area designates the special purpose district as described in the text of the Zoning Resolution.

AREA(S) REZONED

Effective Date(s) of Rezoning:

07-29-2009 C 090382 ZMQ

Special Requirements:

For a list of lots subject to CEQR environmental requirements, see APPENDIX C.

For a list of lots subject to "D" restrictive declarations, see APPENDIX D.

For Inclusionary Housing designated areas on this map, see APPENDIX F.

CITY MAP CHANGES:

♦ AS CORRECTED 03-02-2011

N

MAP KEY

13b	13d	14b
17a	**17c**	18a
17b	17d	18b

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ZONING MAP **17c**

C1-1 C1-2 C1-3 C1-4 C1-5 C2-1 C2-2 C2-3 C2-4 C2-5

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

Area proposed to be rezoned

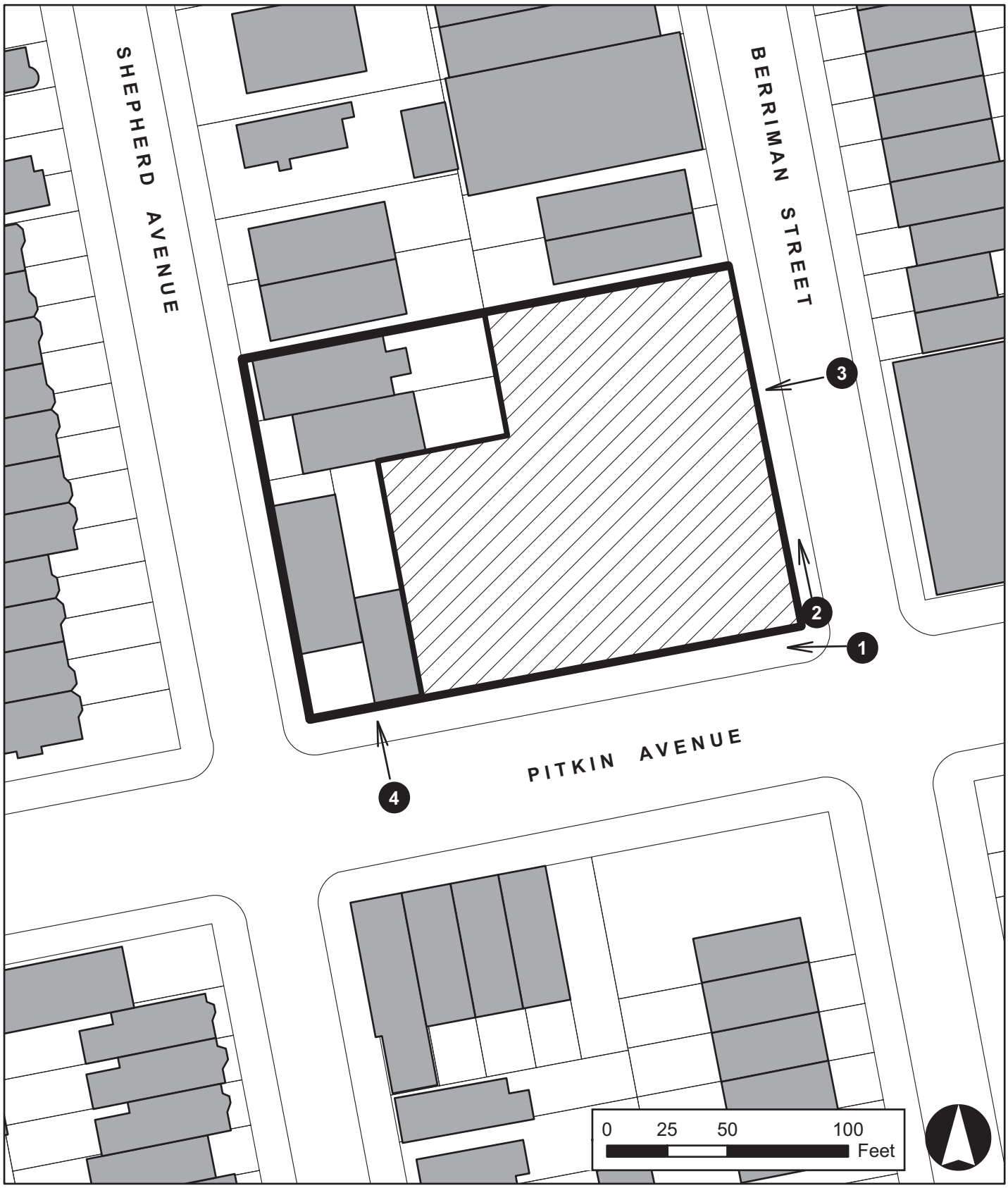


Legend

Proposed Rezoning Area (includes Lots 1, 2, 28, 35, and 38)

Development Site (Lot 28) / Applicant's Property

Key Map



Legend

Development Site

Rezoning Area

1 → Refers to photo numbers in Figure 5



1 View of the Development Site/Rezoning Area along Pitkin Ave.



2 View of the Development Site/Rezoning Area along Berriman St.



3 View of the Development Site/Rezoning Area looking west from Berriman St.



4 Two existing buildings within the Rezoning Area at Pitkin Ave. (not in applicant's ownership)

10. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (DATE THE PROJECT WOULD BE COMPLETED AND OPERATIONAL): **2016**	ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: **Approximately 18-24 months**
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES ☑ NO ☐	IF MULTIPLE PHASES, HOW MANY PHASES: **N/A**
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: **N/A**	

11. *What is the Predominant Land Use in Vicinity of Project?* *(Check all that apply)*

☑ RESIDENTIAL ☐ MANUFACTURING ☑ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☑ OTHER, Describe: INSTITUTIONAL

PART II: TECHNICAL ANALYSES

INSTRUCTIONS: The questions in the following table refer to the thresholds for each analysis area in the respective chapter of the CEQR Technical Manual.

- 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.
- Often, a 'Yes' answer will result in a preliminary analysis to determine whether further analysis is needed. For each 'Yes' response, consult the relevant chapter of the CEQR Technical Manual for guidance on providing additional analyses (and attach supporting information, if needed) to determine whether detailed analysis is needed. Please note that a 'Yes' answer does not mean that an EIS must be prepared—it often only means that more information is required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant either to provide additional information to support this Short EAS Form or complete a Full EAS Form. For example, if a question is answered 'No,' an agency may request a short explanation for this response. In addition, if a large number of the questions are marked 'Yes,' the lead agency may determine that it is appropriate to require completion of the Full EAS Form.

	YES	NO
1. *LAND USE, ZONING AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4 — **Refer to Attachment C, "Land Use, Zoning and Public Policy"**		
(a) Would the proposed project result in a change in land use or zoning that is different from surrounding land uses and/or zoning? Is there the potential to affect an applicable public policy? If "Yes", complete a preliminary assessment and attach.	✓	
(b) Is the project a large, publicly sponsored project? If "Yes", complete a PlaNYC assessment and attach.		✓
(c) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? If "Yes", complete the Consistency Assessment Form.		✓
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
• Generate a net increase of 200 or more residential units?		✓
• Generate a net increase of 200,000 or more square feet of commercial space?		✓
• Directly displace more than 500 residents?		✓
• Directly displace more than 100 employees?		✓
• Affect conditions in a specific industry?		✓
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Does the proposed project exceed any of the thresholds outlined in Table 6-1 of Chapter 6?		✓
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?		✓
(b) Is the proposed project within an underserved area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island? If "Yes," would the proposed project generate 50 or more additional residents? **N/A**		✓
If "Yes," would the proposed project generate 125 or more additional employees? **N/A**		
(c) Is the proposed project in a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island? If "Yes," would the proposed project generate 300 or more additional residents? **N/A**		✓
If "Yes," would the proposed project generate 750 or more additional employees? **N/A**		
(d) If the proposed project is not located in an underserved or well-served area, would the proposed project generate: 200 or more additional residents?		✓
500 additional employees?		✓

	YES	NO
5. *SHADOWS:* CEQR Technical Manual Chapter 8 — **Refer to Attachment B, "Supplemental Screening"**		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	✓	
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?		✓
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9 — **Refer to LPC Letter in Appendix 1**		
(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; is listed or eligible for listing on the New York State or National Register of Historic Places; or is within a designated or eligible New York City, New York State, or National Register Historic District?		✓
If "Yes," list the resources and attach supporting information on whether the project would affect any of these resources. **N/A**		
7. *URBAN DESIGN*: CEQR Technical Manual Chapter 10 — **Refer to Attachment B, "Supplemental Screening"**		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	✓	
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources that is not currently allowed by existing zoning?		✓
8. *NATURAL RESOURCES:* CEQR Technical Manual Chapter 11 — **Refer to Appendix 2**		
(a) Is any part of the directly affected area within the Jamaica Bay Watershed? If "Yes," complete the Jamaica Bay Watershed Form.	✓	
(b) Does the proposed project site or a site adjacent to the project contain natural resources as defined in section 100 of Chapter 11? If "Yes," list the resources and attach supporting information on whether the project would affect any of these resources.		✓
9. *HAZARDOUS MATERIALS:* CEQR Technical Manual Chapter 12 — **Refer to Appendix 3**		
(a) Would the project allow commercial or residential use in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?		✓
(b) Does the project site have existing institutional controls (*e.g.* (E) designations or a Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?		✓
(c) Would the project require soil disturbance in a manufacturing zone or any development on or near a manufacturing zone or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?		✓
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?		✓
(e) Would the project result in development where underground and/or aboveground storage tanks (*e.g.* gas stations) are or were on or near the site?		✓
(f) Would the project result in renovation of interior existing space on a site with potential compromised air quality, vapor intrusion from on-site or off-site sources, asbestos, PCBs or lead-based paint?		✓
(g) Would the project result in development on or near a government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, municipal incinerators, coal gasification or gas storage sites, or railroad tracks and rights-of-way?		✓
(h) Has a Phase I Environmental Site Assessment been performed for the site? If 'Yes," were RECs identified? Briefly identify: **No RECs were identified.**	✓	
10. *INFRASTRUCTURE:* CEQR Technical Manual Chapter 13		
(a) Would the proposed project result in water demand of more than one million gallons per day?		✓
(b) Is the proposed project located in a combined sewer area and result in at least 1,000 residential units or 250,000 SF or more of commercial space in Manhattan or at least 400 residential units or 150,000 SF or more of commercial space in the Bronx, Brooklyn, Staten Island or Queens?		✓
(c) Is the proposed project located in a separately sewered area and result in the same or greater development than that listed in Table 13-1 of Chapter 13?		✓
(d) Would the project involve development on a site five acres or larger where the amount of impervious surface would increase?		✓
(e) Would the project involve development on a site one acre or larger where the amount of impervious surface would increase and is located within the Jamaica Bay Watershed or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek?		✓
(f) Is the project located in an area that is partially sewered or currently unsewered?		✓
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a WWTP and/or generate contaminated stormwater in a separate storm sewer system?		✓
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?		✓
11. *SOLID WASTE AND SANITATION SERVICES:* CEQR Technical Manual Chapter 14		
(a) Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?		✓
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?		✓

	YES	NO
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Would the proposed project affect the transmission or generation of energy?		✓
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 of Chapter 16?		✓
(b) If "Yes," conduct the screening analyses, attach appropriate back up data as needed for each stage, and answer the following questions:		
(1) Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? If "Yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection?		
***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16, "Transporation," for information.* **N/A**		
(2) Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour? If "Yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line? **N/A**		
(3) Would the proposed project result in more than 200 pedestrian trips per project peak hour? If "Yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop? **N/A**		
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources:* Would the proposed project result in the conditions outlined in Section 210 of Chapter 17?		✓
(b) *Stationary Sources:* Would the proposed project result in the conditions outlined in Section 220 of Chapter 17? If 'Yes,' would the proposed project exceed the thresholds in the Figure 17-3, Stationary Source Screen Graph? (attach graph as needed) **Refer to Attachment B, "Supplemental Screening"**	✓	
(c) Does the proposed project involve multiple buildings on the project site?		✓
(d) Does the proposed project require Federal approvals, support, licensing, or permits subject to conformity requirements?		✓
(e) Does the proposed project site have existing institutional controls (*e.g.* E-designations or a Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?		✓
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project, a power plant, or would fundamentally change the City's solid waste management system?		✓
(b) If "Yes," would the proposed project require a GHG emissions assessment based on the guidance in Chapter 18?		
16. *NOISE*: CEQR Technical Manual Chapter 19 **Refer to Attachment D, "Noise"**		
(a) Would the proposed project generate or reroute vehicular traffic?	✓	
(b) Would the proposed project introduce new or additional receptors (see Section 124 of Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?		✓
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?		✓
(d) Does the proposed project site have existing institutional controls (*e.g.* E-designations or a Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?		✓
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Would the proposed project warrant a public health assessment based upon the guidance in Chapter 20?		✓
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted for the following technical areas, check yes if any of the following technical areas required 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		✓
If "Yes," explain here why or why not an assessment of neighborhood character is warranted based on the guidance of in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. **N/A**		

An assessment of neighborhood character was not warranted as no significant adverse impacts were found in the technical areas Land Use, Zoning and Public Policy, Shadows, Urban Design and Visual Resources, Air Quality, and Noise (refer to Attachments B, C, and D).

		YES	NO
19.	**CONSTRUCTION IMPACTS:** CEQR Technical Manual Chapter 22 Would the project's construction activities involve (check all that apply):		
	• Construction activities lasting longer than two years;		✓
	• Construction activities within a Central Business District or along an arterial or major thoroughfare;		✓
	• Require closing, narrowing, or otherwise impeding traffic, transit or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc);	✓	
	• Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out;		✓
	• The operation of several pieces of diesel equipment in a single location at peak construction;		✓
	• Closure of community facilities or disruption in its service;		✓
	• Activities within 400 feet of a historic or cultural resource; or		✓
	• Disturbance of a site containing natural resources.		✓

If any boxes are checked, explain why or why not a preliminary construction assessment is warranted based on the guidance of in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

The proposed action would result in the construction of a 7-story mixed-use residential and commercial building on the development site. Construction activities may result in short-term disruption of both traffic and pedestrian movements at the development site (up to 24 months). This would occur primarily due to the temporary loss of curbside lanes on Pitkin Avenue from the staging of equipment and the movement of materials to and from the development site. These conditions would be temporary and not result in significant adverse impacts on traffic and transportation conditions.

The New York City Department of Transportation's Office of Construction Mitigation and Coordination (NYCDOT-OCMC) issues permits for street and sidewalk closures after evaluation of traffic and pedestrian conditions. The proposed development would be constructed within a period of up to 24 months, and is expected to be operational by 2016. The proposed rezoning and subsequent development on the development site are not expected to result in any significant adverse construction impacts.

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 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

Abdulla Darrat, Project Manager _____ of **Pitkin-Berriman Housing Development Fund Corporation**

APPLICANT/SPONSOR SIGNATURE NAME THE ENTITY OR OWNER

the entity which seeks the permits, approvals, funding or other governmental action described in this EAS.

Check if prepared by: ☑ APPLICANT/REPRESENTATIVE or ☐ LEAD AGENCY REPRESENTATIVE (FOR CITY-SPONSORED PROJECTS)

Philip A. Habib

APPLICANT/SPONSOR NAME

SIGNATURE

LEAD AGENCY REPRESENTATIVE NAME

February 1, 2013

DATE

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 of 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 effect on the environment. 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.

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

2. Are there any aspects of the project relevant to the determination 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? If there are such impacts, explain them and state where, as a result of them, the project may have a significant impact on the environment.

3. ***LEAD AGENCY CERTIFICATION***

Deputy Director, Environmental Assessment and Review Division
TITLE

New York City Department of City Planning
LEAD AGENCY

Celeste Evans
NAME

Celeste Evans
SIGNATURE

ATTACHMENT A
PROJECT DESCRIPTION

I. INTRODUCTION

This attachment provides a detailed description of the proposed action, including development site location, existing conditions of the development site, project purpose and need, and the governmental approvals required for implementation.

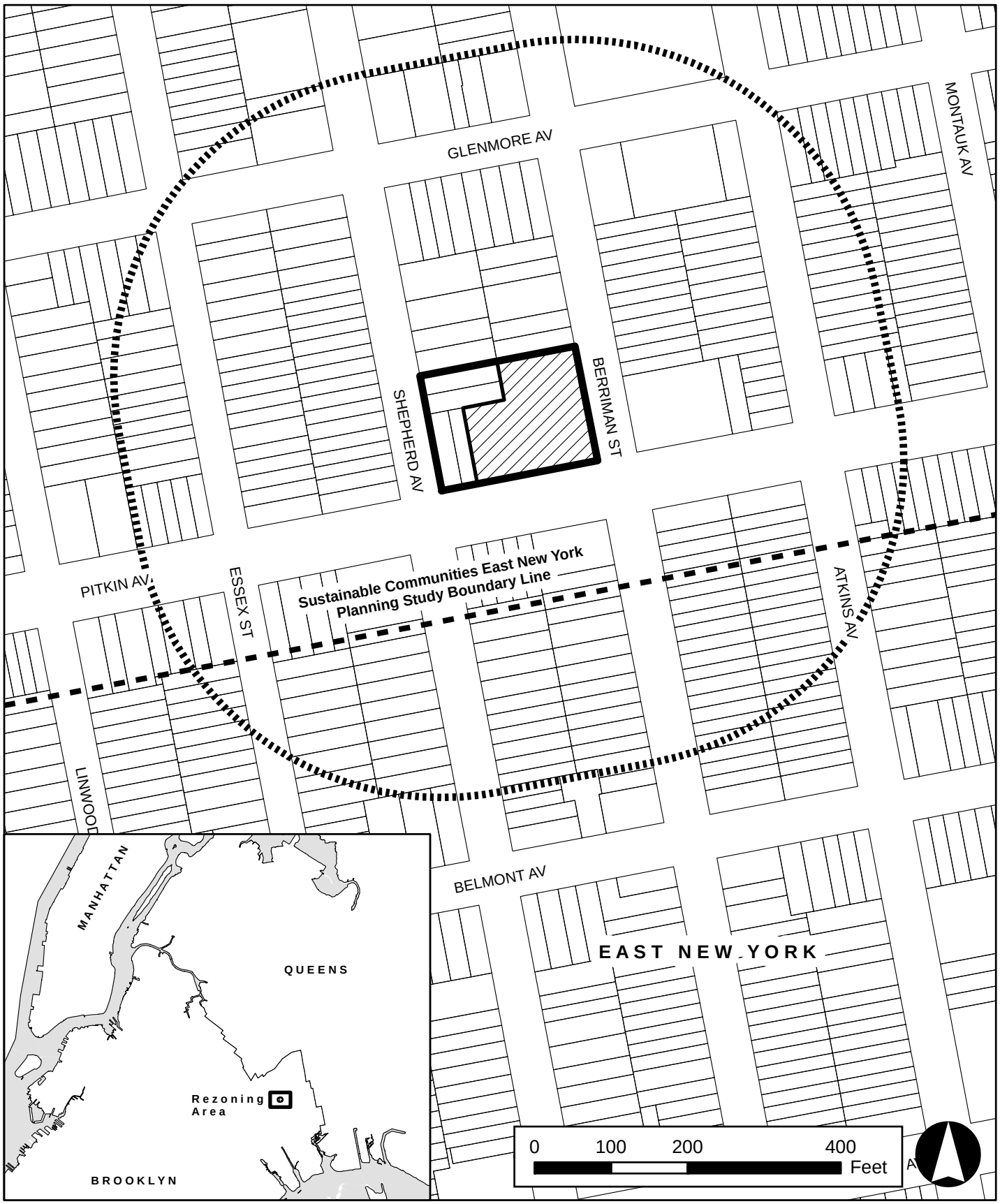
This application is for zoning map amendments affecting the southern portion of a City tax block in the East New York area of Brooklyn Community District 5 (see Figure A-1) to facilitate the construction of a new approximately 69,413 gsf mixed-use residential and commercial development. The 30,000 sf rezoning area includes five tax lots, and is currently zoned R5/C1-3. The rezoning area, which is comprised of Lots 1, 2, 28, 35, and 38 on Block 4005, is generally bounded by Berriman Street to the east, Pitkin Avenue to the south, Shepherd Avenue to the west, and a depth of 150 feet from Pitkin Avenue to the north (refer to Figure A-2).

The applicant, Pitkin-Berriman Housing Development Fund Corporation (HDFC), is proposing to rezone the majority of this area (lots fronting on Pitkin Avenue), from R5/C1-3 to R7A/C2-4 (mapped to a depth of 100 feet along Pitkin Avenue between Shepherd Avenue and Berriman Street), and to remove the C1-3 commercial overlay from the underlying R5 district in the remaining portion (lots fronting on Shepherd Avenue and Berriman Street) of the rezoning area ("the proposed action"). The existing and proposed zoning districts within the rezoning area are shown in Figure A-3.

The proposed action would enable the development of a 7-story mixed-use residential and commercial building on the development site (Lot 28), which is owned by the applicant and currently vacant. The proposed building would have approximately 60 dwelling units (DUs), which translates to approximately 60,113 gsf of residential space on the first through seventh floors, and approximately 9,300 gsf of local retail space on the ground floor, for a total of approximately 69,413 gsf of new development. The residential component would be developed in accordance with the Quality Housing Program, and include all affordable rental units for tenants earning between 30 to 60 percent of the Area Median Income. The required accessory parking spaces for the proposed development would be waived pursuant to New York City Zoning Resolution (ZR) Sections 25-261 and 36-232.

As discussed above, the rezoning area is comprised of five tax lots, four of which are not in control by the applicant (refer to Figure A-2). All these four lots are currently occupied by residential buildings, and one of them also has a ground floor retail component (corner lot at Pitkin and Shepherd Avenues). As explained later in the document, the proposed rezoning would lead to a larger allowable floor area on the three lots fronting on Pitkin Avenue (Lots 35, 38, and a portion of Lot 28), which would be rezoned from R5/C1-3 to R7A/C2-4. Since the existing building on Lot 35 was constructed in 2005, and the one on Lot 38 was renovated and sold in 2010, it is highly unlikely that the current owners would redevelop their properties with

Location Map



Legend

Rezoning Area

Development Site

400-Foot Radius

Proposed Rezoning Area



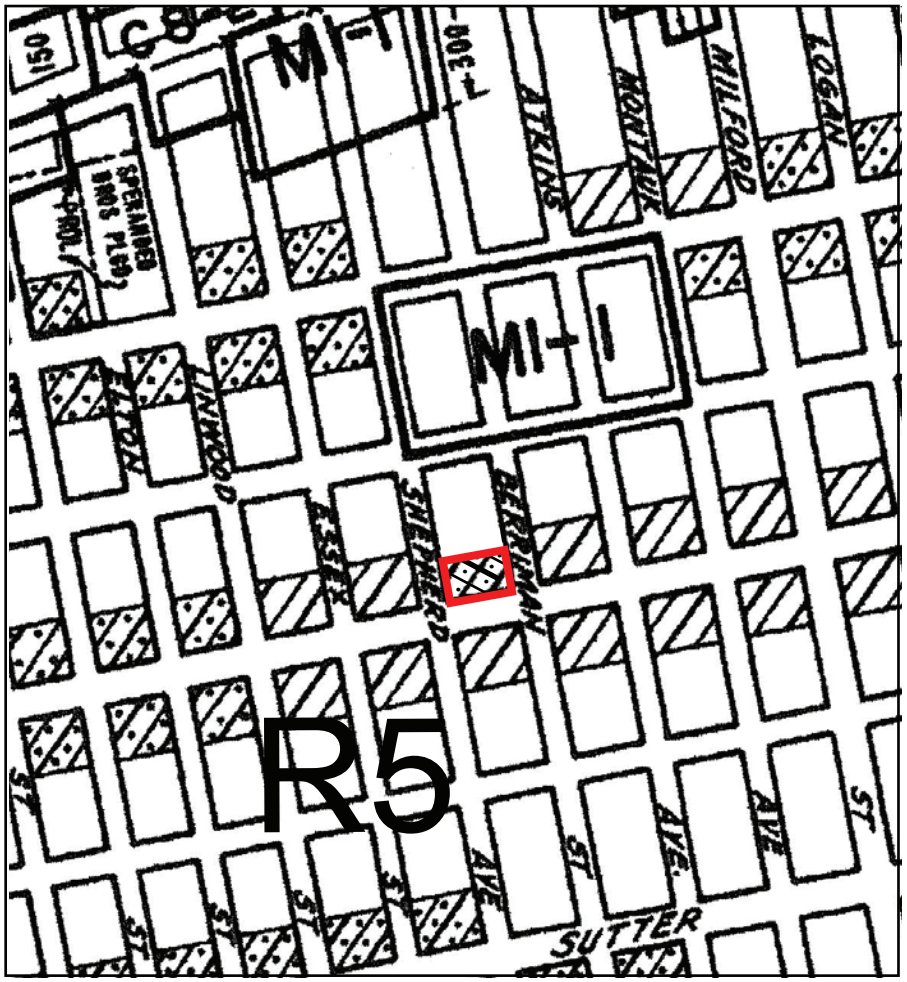
Legend

- Rezoning Area
- Development Site
- To be rezoned from R5/C1-3 to R5
- **4005** Block #
- **35** Lot #
- S Subway Entrance
- To be rezoned from R5/C1-3 to R7A/C2-4

Existing Zoning R5/C1-3



Proposed Zoning R7A/C2-4 and R5



Proposed R7A Zoning District Boundary

Proposed C2-4 Commercial Overlay

new buildings as a result of the proposed rezoning. No change in the underlying zoning designation would occur on the three lots that will be rezoned from R5/C1-3 to R5 (Lots 1, 2, and a portion of Lot 28). The removal of the C1-3 commercial overlay would not induce any changes on these sites as the existing land uses are in compliance with the R5 residential zoning. Therefore, none of these four lots will be considered as projected or potential development sites in the reasonable worst case development scenario (RWCDS). As a result, the applicant's proposal is the only known development proposal in the rezoning area and therefore represents the RWCDS.

The applicant will be constructing the residential portion of the development with affordable housing for low to very low income residents earning 30 to 60 percent of the Area Median Income, pursuant to the New York City Housing Development Corporation (NYCHDC) low income tax credit program. The applicant intends to seek the discretionary financing at a later date, and will undergo environmental review at that time.

II. EXISTING CONDITIONS

The Development Site

The development site, located at 2501 Pitkin Avenue, is owned by the applicant and consists of Lot 28 on Brooklyn Block 4005 in the Brooklyn neighborhood of East New York. It encompasses approximately 20,625 sf and is entirely vacant with approximately 156 feet of frontage on the north side of Pitkin Avenue and 150 feet of frontage on the west side of Berriman Street (refer to Figure A-2). The development site is located within an R5 residential zoning district with a C1-3 commercial overlay (refer to Figure A-3).

The development site is currently vacant, overgrown with low vegetation, and surrounded by a chain-link fence, and its surface is slightly below the surrounding sidewalk elevations. Remnants of former building foundations are visible in the southeast corner of the site. According to historic Sanborn Maps, the development site was occupied by several buildings between 1908 and 1995.

The Rezoning Area

The proposed rezoning area is located in the East New York area of Brooklyn Community District 5. The rezoning area encompasses approximately 30,000 sf of lot area, the majority of which is proposed to be rezoned from C1-3 to R7A/C2-4 (an approximately 20,000 sf area consisting of the tax lots that front on Pitkin Avenue[1]), while the C1-3 commercial overlay in the remaining portion of the rezoning area would be removed from the underlying R5 district (an approximately 10,000 sf area including the tax lots fronting on Shepherd Avenue and Berriman Street[2]), as shown in Figure A-3.

[1] Lots 35, 38, and a portion of Lot 28 (approximately 15,625 sf).
[2] Lots 1, 2, and a portion of Lot 28 (approximately 5,000 sf).

The rezoning area is comprised of five tax lots, four of which are not in control by the applicant (refer to Figure A-2). Lot 35, which is the corner lot fronting at Pitkin Avenue and Shepherd Avenue, includes a privately owned 3-story residential and local retail building, which was built in 2005. The building includes a deli on the ground floor (Pitkin Express Deli Inc.), and two DUs on the upper two floors. Lot 38, which is located adjacent to the east of Lot 35, is occupied by a 3-story residential building with two DUs. This building is estimated to be originally from 1930. However, it was recently purchased and renovated by the applicant, and sold to a private owner in 2010. The owner lives in one unit, and is renting the second DU for an affordable rent. Lot 1, which abuts Lots 28, 35, and 38, has frontages on Shepherd Avenue. It is occupied by a privately owned 3-story residential building with 3 DUs, which was constructed in 2010. Lot 2, which is adjacent to and north of Lot 1, is occupied by a privately owned 2-story residential building, dating from approximately 1910, with four DUs.

The proposed rezoning area is currently comprised of a residential R5 district with a C1-3 commercial overlay mapped to a depth of 150 feet along the north side of Pitkin Avenue between Shepherd Avenue and Berriman Street (refer to Figures A-2 and A-3). R5 is a residential district with a maximum floor area ratio (FAR) of 1.25. Community facilities are allowed up to an FAR of 2.0. Typically, R5 districts produce 3-story attached houses and small apartment houses. A C1-3 overlay permits commercial development up to a maximum FAR of 1.0. Such commercial overlays are typically mapped in residential areas along major avenues that accommodate the retail and personal service shops needed in residential neighborhoods. R5 districts allow Use Groups 1 to 4 as-of-right, C1-3 overlays allow Use Group 6.

Pitkin Avenue is a major 80-foot wide, two-way street in east- and westbound direction, and provides parking lanes on both sides of the street. Berriman Street is a 55-foot wide, one-way northbound street, also with parking lanes on both sides of the street. Pursuant to the ZR, Pitkin Avenue is characterized as a wide street (wider than 75 feet), and Berriman Street as a narrow street (less than 75 feet).

Sustainable Communities East New York Planning Study

The applicant, Pitkin-Berriman Housing Development Fund Corporation, is a New York State Not-For-Profit Housing Development Fund Corporation and is a wholly-owned subsidiary of Cypress Hills Local Development Corporation LLP (CHLDC). The CHLDC is a non-profit community-based organization with the mission to revitalize the Cypress Hills and East New York communities through housing preservation, economic development, and the positive development of youth and families. The New York City Department of City Planning (NYC DCP) Brooklyn Borough Office partnered with the CHLDC (among others) to conduct the Sustainable Communities East New York Planning Study. This planning study is led by the NYC DCP Brooklyn Borough Office. A central goal of the Sustainable Communities program is to link strategies on a metropolitan scale that would foster the creation of mixed-income housing, employment and infrastructure in locations connected by the region's commuter rail network.

The Sustainable Communities East New York study area is bounded by Broadway Junction to the west (major transit hub where A, C, L, J, and Z trains meet), Fulton Street to the north (with the J and Z subway lines underneath), Conduit Avenue to the east, and Pitkin Avenue to the

south (with the A and C subway lines underneath), and also includes Atlantic Avenue, with the Long Island Railroad running below grade (refer to Figure A-1). The study area has high transit accessibility, and includes a mixed-use, predominantly low-income community with substantial amounts of vacant and underutilized land, which provide opportunities for the development of affordable housing and increased neighborhood services, such as local retail and community facilities[3].

As shown in Figure A-1, the proposed rezoning area and the development site are located within the study area of the Sustainable Communities East New York Planning Study. The proposed development on the development site would provide much needed affordable housing units, and local retail on the ground floor, and therefore be significantly aligned with the goals of the Sustainable Communities program.

III. PROJECT PURPOSE AND NEED

The proposed rezoning from R5/C1-3 to R7A/C2-4 and R5 would enable the applicant to develop his currently vacant property with a new 7-story predominantly residential building with ground floor local retail in the immediate vicinity of the existing Shepherd Avenue subway station that serves the C train line (8th Avenue Local). The proposed development would add 60 affordable housing units to the East New York neighborhood, increasing the affordable housing stock in the neighborhood as well as in Brooklyn as a whole. All DUs would be affordable to very low and low-income income households earning between 30 and 60 percent of the AMI, respectively. The need for affordable housing in this neighborhood is well documented by census data, and recurs on the priority list of the annual Brooklyn Community Board 5 community needs assessment.

In addition, the proposed development would also include a 9,300 gsf local retail space on the ground floor of the proposed building. This ground retail floor space is expected to be occupied by a supermarket that carries fresh fruits and vegetables, and offers healthy food choices that are not typically provided in existing delis and bodegas in the neighborhood. Therefore, the availability of local retail space in the East New York neighborhood would be enhanced and the accessibility of healthy food items would be improved by the proposed development. In the long term, the applicant aims to revive the former commercial corridor along Pitkin Avenue by introducing new local retail within the proposed development.

The proposed action is also expected to enhance the character of the rezoning area by facilitating development on a currently vacant and underutilized site. The proposed building would extend along Pitkin Avenue for the entire length of the applicant's property (approximately 156 feet), thereby creating a continuous street wall. The rezoning and associated development on the development site would contribute to the enhancement of the streetscape along Pitkin Avenue.

[3] Source: NYC DCP (http://www.nyc.gov/html/dcp/html/sustainable_communities/index.shtml).

IV. THE PROPOSED ACTION

The rezoning area is currently comprised of a residential R5 zoning district with a C1-3 commercial overlay mapped to a depth of 150 feet along the north side of Pitkin Avenue between Shepherd Avenue and Berriman Street. The proposed zoning map amendments would change the designation within the majority of the rezoning area from R5/C1-3 to R7A/C2-4, and in a small portion from R5/C1-3 to R5, as illustrated in Figures A-2 and A-3. The five tax lots on Block 4005 that are included in the proposed rezoning area are identified in Table A-1 below.

The proposed R7A zoning district is a contextual zoning district. Contextual zoning districts regulate the height, bulk, and setback of new buildings. The goal of contextual zoning is to create new buildings that are consistent with the existing neighborhood scale and character. The proposed R7A zoning district allows a maximum FAR of 4.0 for residential and community facility uses, the maximum allowable lot coverage is 65 percent for an interior lot, and 80 percent for a corner lot. The minimum building base height is 40 feet, the maximum building base height is 65 feet, and the maximum building height is limited to 80 feet. The R7A zoning district is a medium-density apartment house district mapped throughout much of Brooklyn.

The proposed rezoning would increase the maximum allowable FAR for lots that would be rezoned to R7A/C2-4 from 1.25 to 4.0 for residential uses, and from 1.0 to 2.0 for commercial uses on those lots with a C2-4 commercial overlay within the proposed R7A district. As for the lots that would be affected by the proposed C1-3 commercial overlay removal from the underlying R5 zoning district, there would be no change in FAR for residential use. The maximum allowable FAR would still be 3.44. However, after the removal of the C1-3 commercial overlay on these lots (Lots 1, 2, and a portion of Lot 28), no commercial uses would be allowed (refer to Figure A-3).

The proposed R7A/C2-4 zoning would facilitate the redevelopment of the development site, located at 2501 Pitkin Avenue. The vacant development site would be developed with a new 7-story mixed-use building, with approximately 9,300 gsf of local retail floor area on the ground floor, and approximately 60 DUs (60,113 gsf of residential floor area) on the first through the seventh floors of the building.

Pursuant to ZR Section 25-25, accessory parking spaces are required for 25 percent of the proposed DUs, which translates to 15 parking spaces. However, according to ZR Section 25-261, the residential parking requirement within R7A can be waived because the required number is not more than 15 spaces. ZR Section 36-21 requires one parking space per 1,000 sf of retail floor area, which leads to 9 parking spaces for the proposed development. However, this requirement can be waived pursuant to ZR Section 36-232, if the required amount is less than 40 parking spaces. As a result, the proposed development would not provide any off-street accessory parking spaces.

V. DEVELOPMENT SCENARIO

In order to assess the potential effects of the proposed action, a RWCDS for both future "No-Action" and "With-Action" conditions will be analyzed for an analysis year of 2016. The incremental difference between the No-Action and the With-Action scenarios serves as the basis for impact analyses.

To determine the No-Action and With-Action scenarios, standard methodologies were used following the *2012 CEQR Technical Manual* guidelines and employing reasonable worst-case assumptions, to identify the amount and location of future residential growth.

Build Year

The construction of the proposed 7-story building on the proposed development site is expected to take approximately 18 to 24 months. Accounting for NYC DCP Pre-Application and Pre-Certification review time (approximately seven months), and the ULURP procedure (approximately five months), construction is anticipated to start by the end of 2013. It is expected that the proposed development would be complete and operable by the end of 2015, after a maximum 24-month construction period.

As discussed in more detail below, no other projected or potential development sites were identified in the proposed rezoning area. It was therefore conservatively assumed that the analysis build year for the RWCDS associated with the proposed action is 2016.

Future No-Action Condition

Development Site (Applicant's Property)

In the 2016 future without the proposed action, the applicant would develop an as-of-right, 4-story mixed-use residential, community facility, and commercial building with an underground parking garage on the development site, which would comply with the requirements set forth by the existing R5/C1-3 zoning district. As shown in Table A-1, the proposed as-of-right building would include a total of approximately 55,831 gsf, which would be comprised of approximately 5,000 gsf of local retail space and approximately 10,000 gsf of community facility space on the ground floor, and approximately 25,781 gsf of residential area on the first through fourth floors (34 DUs)[4]. The required 43 accessory parking spaces[5] would be provided in an underground parking garage with a size of approximately 15,050 sf[6]. This as-of-right

[4] Pursuant to ZR Section 23-22, 34 DUs result from the DU Factor for R5 zoning districts (760 gsf), and the fact that the as-of-right building with a residential component of 25,781 gsf would require to maximize the number of DUs to make the development financially feasible.

[5] Pursuant to ZR Sections 25-25, 25-31, and 36-21: 24 spaces for residential, 2 spaces for community facility use, and 17 for commercial use, respectively.

[6] Assumption: 350 gsf per parking space.

development would add approximately 102 residents[7] and 37 employees (15 retail[8] and 22 community facility employees[9]) to the development site.

Table A-1
No-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses
25,781 gsf (34 DUs)	5,000 gsf	10,000 gsf	15,050 gsf (43 spaces)	55,831 gsf

The as-of-right building would rise three stories tall to an elevation of 30 feet above the street lot lines (maximum street wall height within an R5 district), and the building's fourth floor would be set back by 15 feet from both Pitkin Avenue and Berriman Street, and rise up to a height of 40 feet (maximum allowable building height in an R5 district). The required accessory open space would be 9,281 sf[10]. This accessory open space area would be provided in the rear of the as-of-right building on the northern portion of the development site.

Remainder of Rezoning Area

In addition to the applicant's property, the rezoning area also includes four other tax lots that are not controlled by the applicant, and currently privately-owned by four different parties (Lots 1, 2, 35, and 38). All four lots are currently occupied by existing buildings. Lots 1 and 2, which front on Shepherd Avenue, include 3-story residential buildings, while the corner lot at Pitkin Avenue and Shepherd Avenue, Lot 35, includes a 3-story building with ground floor local retail and two DUs on its upper two floors, and Lot 38, which fronts on Pitkin Avenue (and is adjacent to Lot 35), includes a 3-story residential building that houses two DUs. In the absence of the proposed zoning changes, no change in the maximum allowable FAR would occur, and no new uses that are not currently permitted would be allowed. Since the buildings on Lots 1, 35, and 38 exceed the maximum allowable FAR in the existing R5/C1-3 zoning district (refer to Table A-3 below), it is highly unlikely that any new development would occur on these lots in the absence of the proposed action. It is therefore anticipated that existing uses within the rezoning area would remain unchanged.

Future With-Action Condition

Development Site (Applicant's Property)

In the future with the proposed action, the applicant's development plan is considered a known proposal likely to occur by 2016 on the development site as a result of the proposed action. As described above, the proposed development would include a new 7-story residential building with ground floor local retail and approximately 10,175 sf of accessory open space in the rear

[7] Source: 2.99 people per household; NYC DCP Community District Demographic Profiles (Census 2010).
[8] Assumption: 3 retail employees per 1,000 gsf.
[9] Assumption: 1 community facility employee per 450 gsf.
[10] Pursuant to ZR Section 23-17: Open Space required for R5 portion: Interior Lot Requirement 45% of 20,625 sf = 9,281 sf.

of the proposed building (refer to Figure A-4)[11]. As shown in Table A-2, the proposed building would comprise a total of 69,413 gsf of floor area, and include approximately 60 DUs (60,113 gsf of residential space), and approximately 9,300 gsf of ground floor local retail space. Residential and retail accessory parking requirements for the proposed zoning would be waived pursuant to ZR Section 25-261 and ZR Section 36-232, respectively, and no accessory parking spaces would be provided.

Table A-2
With-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses
60,113 gsf (60 DUs)	9,300 gsf	0 gsf	0 gsf*	69,413 gsf

* The accessory parking spaces required as a result of the proposed development would be waived pursuant to ZR Sections 22-261 and 36-232.

The increment between the as-of-right development in the No-Action scenario and the proposed development in the With-Action scenario would be an increase of 34,332 gsf of residential floor area (26 DUs) and 4,300 gsf of local retail space, and a decrease of 10,000 gsf of facility space and 15,050 gsf of parking area (43 accessory parking spaces).

The height of the new 7-story development would be 80 feet tall, which is the maximum building height in an R7A zoning district. The proposed building would rise up to 65 feet above the street lot lines on both Pitkin Avenue and Berriman Street, and the seventh floor of the building would be set back by 10 feet from Pitkin Avenue and by 15 feet from Berriman Street (refer to Figure A-5 and Figure A-6). The proposed building would be developed in accordance with the Quality Housing Program, whose bulk regulations are mandatory for residential developments within contextual zoning districts such as the proposed R7A district. The average household size for the residential component of the proposed development would be approximately 2.99 people per DU[12]. Utilizing this average, the proposed development would add approximately 179 new residents. In addition, the proposed development would add approximately 28 local retail employees[13].

Remainder of the Proposed Rezoning Area

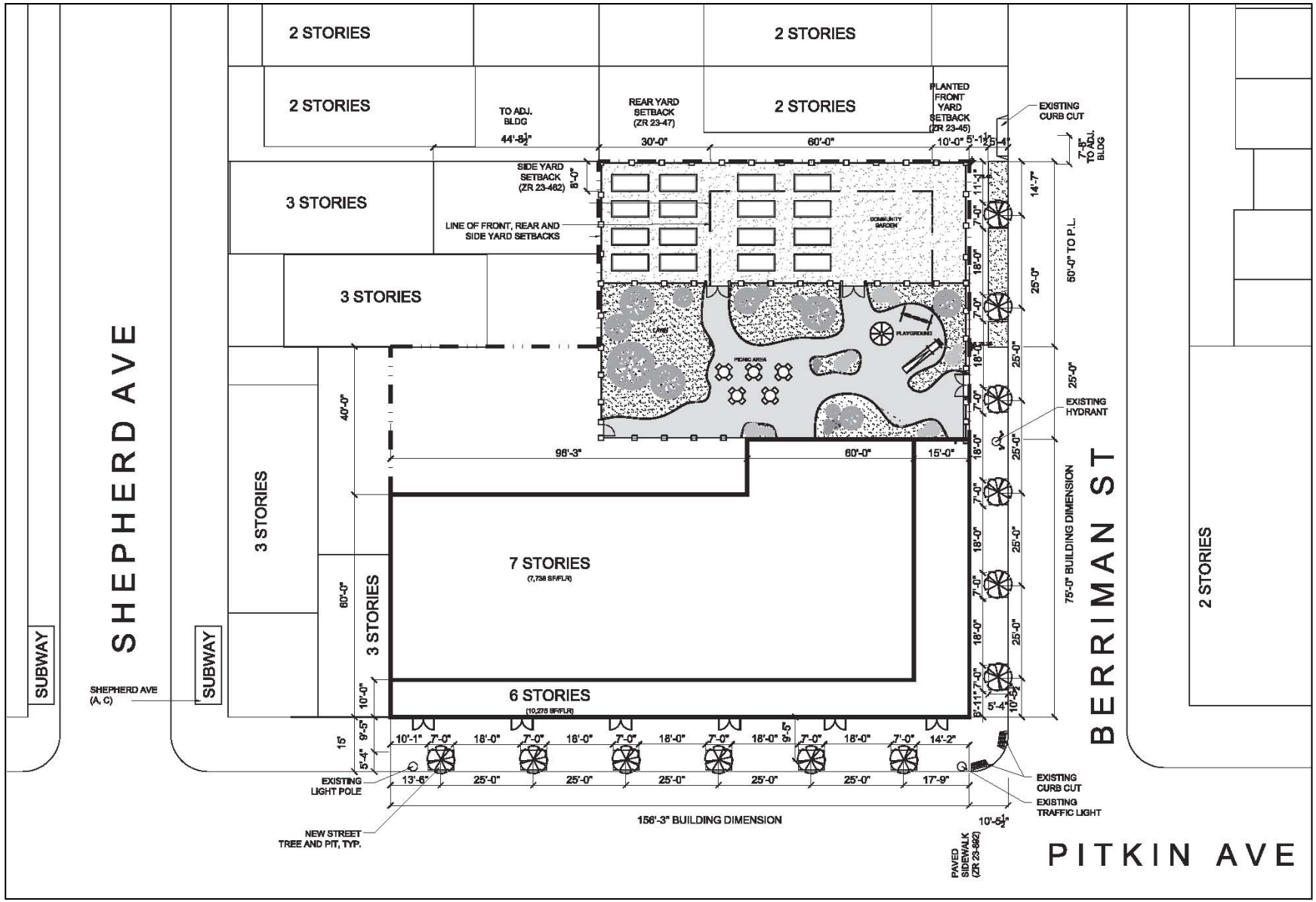
Lots to be rezoned from R5/C1-3 to R5

The proposed action would remove the existing C1-3 commercial overlay mapped at a depth of 150-feet along the north side of Pitkin Avenue between Shepherd Avenue and Berriman Street, and thereby modify the zoning of Lots 1 and 2 on Block 4005. Commercial uses would no longer be permitted on these two tax lots, but residential and community facility uses would continue to be allowed pursuant to the existing R5 zoning. For Lots 1 and 2, the proposed

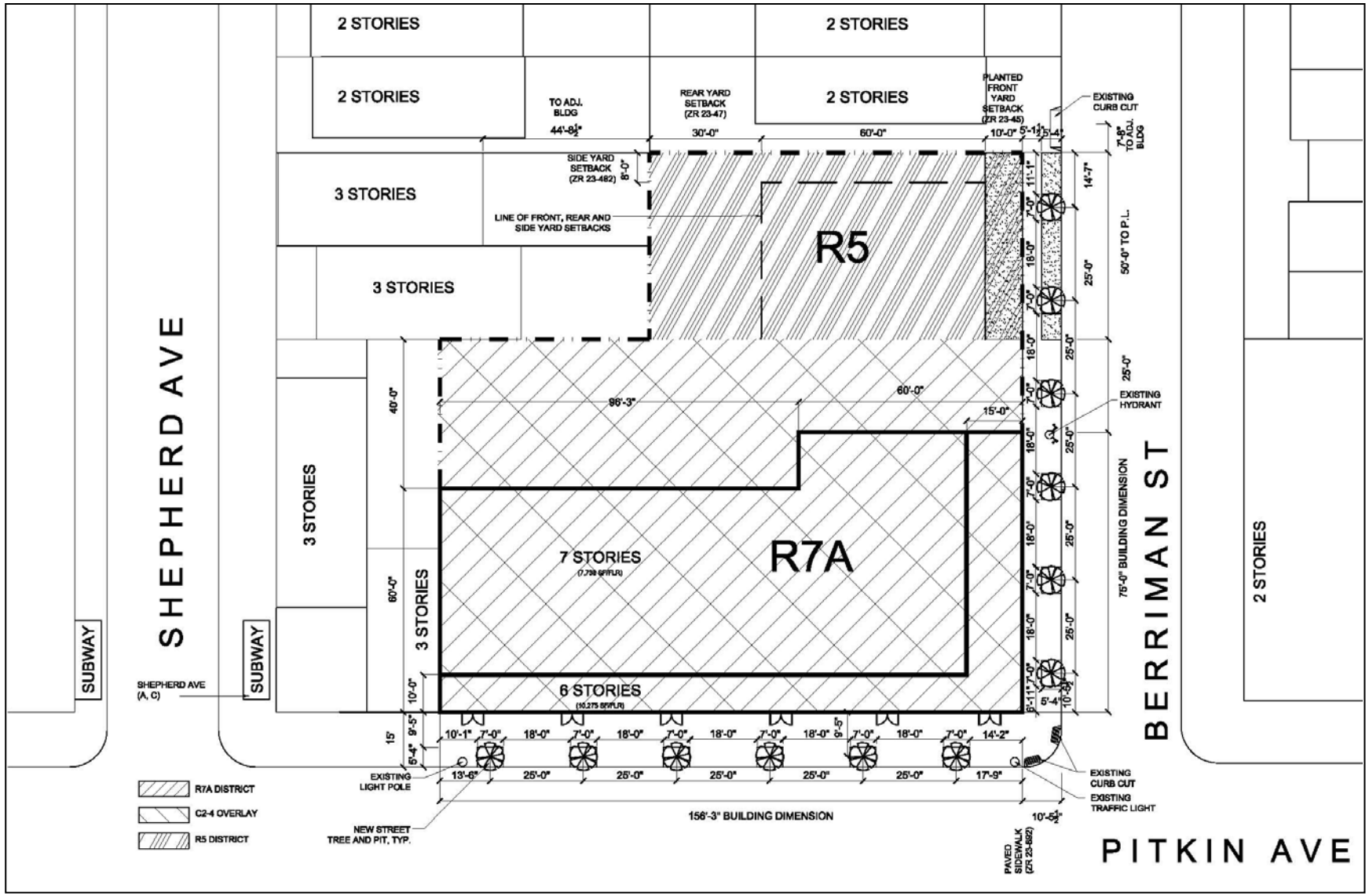
[11] Pursuant to ZR Section 77-23: Open Space required for R5 portion: Interior Lot Requirement 45% of 5,000 sf = 2,250 sf; Open Space required for R7A portion: a) corner lot: 20% of 10,000 sf = 2,000 sf and b) interior lot: 35% of 5,625 sf = 1,969 sf (total required open space = 2,250 sf + 2,000 sf + 1,969 sf = 6,219 sf). Provided will be 10,175 sf.

[12] Source: NYC DCP Community District Demographic Profiles (Census 2010).

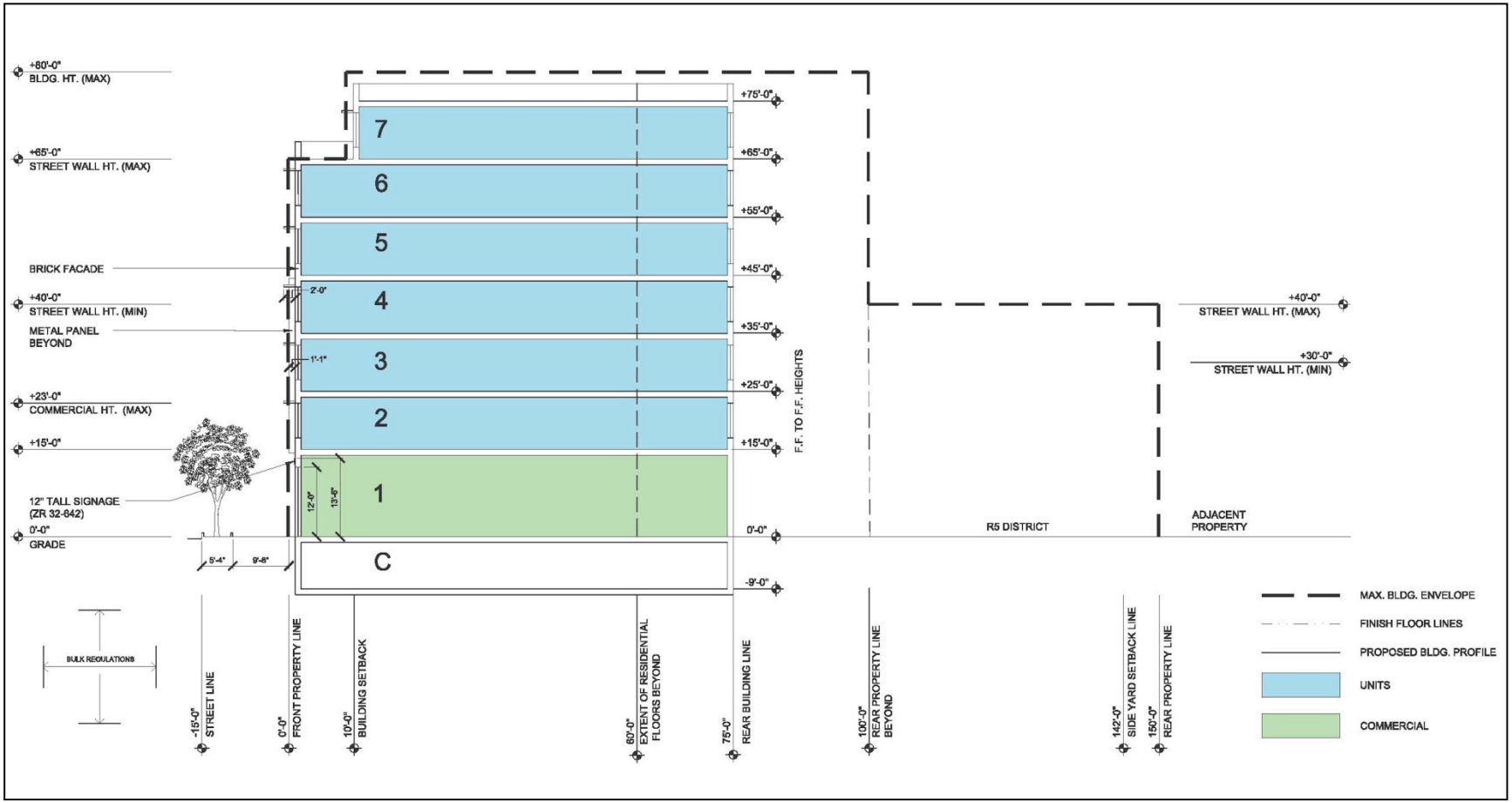
[13] Assumption for retail employees: 3 employees per 1,000 sf.



Source: Lacina Heitler Architects, December 21, 2012



Source: Lacina Heitler Architects, August 22, 2012



Source: Lacina Heitler Architects, August 8, 2012

action would not change the maximum allowable FAR, nor would it allow for new uses that are not currently permitted. Therefore, no new development or conversion, expansion, or enlargement would be induced on those two lots as a result of the proposed action, and the existing uses on these lots are expected to remain in the future with the proposed action. It should also be noted that, as shown in Table A-3, the building on Lot 1 would continue to exceed its maximum allowable residential FAR under the proposed R5 zoning, while the building on Lot 2 would continue to represent approximately 86 percent of the site's maximum allowable residential FAR.

Table A-3
Description of the Tax Lots within the Proposed Rezoning Area and a Comparison of the Maximum Allowable FAR under the Existing and Proposed Zoning, and Existing Built FAR

Lot	Lot Area (sf)	Ex. Uses	# of Floors	Max. Allowable FAR		Ex. Built FAR
				Existing (R/C/CF**)	Proposed (R/C/CF**)	
R5/C1-3 to R5[1]						
1[2]	2,500	Residential	3	1.25/1.0/2.0	1.25/ 0 /2.0	2.01
2[3]	2,500	Residential	3	1.25/1.0/2.0	1.25/ 0 /2.0	1.08
28* (portion)	5,000	Vacant	N/A	1.25/1.0/2.0	1.25/ 0 /2.0	0
R5/C1-3 to R7A/C2-4						
28* (portion)	15,625	Vacant	N/A	1.25/1.0/2.0	4.0/2.0/4.0	0
35[4]	2,500	Residential and Commercial	3	1.25/1.0/2.0	4.0/2.0/4.0	2.36[3]
38[5]	1,875	Residential	3	1.25/1.0/2.0	4.0/2.0/4.0	1.35[4]

* Tax lots owned by the applicant.
** R/C/CF: Residential, Commercial, and Community Facility.
1 The proposed allowable residential FAR is identical under existing and proposed conditions. Therefore, redevelopment on Lots 1, 2 is not anticipated as a result of the proposed action.
2 The 3-story residential building at 409 Shepherd Avenue (Lot 1) was built in 2010, and includes 5,016 gsf (3 DUs).
3 The 3- story residential building at 405 Shepherd Avenue (Lot 2) was built in 1925 and includes 2,700 gsf (4 DUs).
4 The 3-story residential building with ground floor retail at 2481 Pitkin Avenue (Lot 35, corner lot) was built in 2005 and includes 5,900 gsf (2 DUs and ground floor retail).
5 The 3- story residential at 2485 Pitkin Avenue (Lot 38) was built in 1930 and renovated in 2010, and includes 2,531 gsf (2 DUs).
Note: Shaded row indicates that Lot 38 would be built to less than 50% of the allowable FAR under the proposed R7A/C2-4 zoning.
Sources: New York City Department of City Planning, ZoLa, and New York City Department of Finance.

Lots to be rezoned from R5/C1-3 to R7A/C2-4

The proposed action would map an R7A zoning district with a C2-4 commercial overlay on the north side of Pitkin Avenue between Shepherd Avenue and Berriman Street for a depth of 100 feet, thereby increasing the maximum residential FAR from 1.25 to 4.0, the maximum community facility FAR from 2.0 to 4.0, and the maximum commercial FAR from 1.0 to 2.0 on Lots 35 and 38 on Block 4005. As shown in Table A-3, the existing building on Lot 35 exceeds the currently allowable maximum FAR of 1.25 under the current R5/C1-3 zoning. The built FAR on Lot 35 is also more than 50 percent of the allowable maximum FAR of 4.0 under

the proposed R7A/C2-4 zoning. Therefore it is unlikely that the existing building, which was built in 2005, could be demolished to make way for a new development, or that the building would be expanded as a result of the proposed rezoning. Moreover, due to the small building footprint (approximately 1.967 sf), and the applicable yard, base height and setback requirements of the proposed R7A/C2-4 zoning district, it would not be financially feasible to add floors to the existing 3-story building. Therefore, Lot 35 is not considered as a projected or potential development site for RWCDS purposes.

The existing building on Lot 38 also exceeds the currently allowable maximum FAR under the existing R5/C1-3 zoning. However, as indicated in Table A-3, the built FAR on Lot 38 would be less than 50 percent of the allowable maximum residential FAR of 4.0 under the proposed R7A/C2-4 zoning. The building on Lot 38, which originally dates from 1930, was renovated by the applicant and sold to a private owner in 2010. Lot 38 was eliminated from consideration as a possible development site as it is an owner-occupied residential building. Moreover, due to the small building footprint (approximately 844 sf) and the applicable yard, base height and setback requirements of the proposed R7A/C2-4 zoning district, it would not be financially feasible to add floors to this existing 3-story building. Therefore, the existing building on Lot 38 is expected to remain in its current condition in the future with the proposed action, and this lot is not considered as a projected or potential development site for RWCDS purposes.

Proposed RWCDS

The applicant's proposed development on the development site is considered a projected development site, as it has a specific development plan and would be completed by 2016. As discussed above, no other site within the rezoning area has been identified as a projected or a potential development site, as shown in Table A-4. Therefore, for CEQR analysis purposes, the RWCDS for the EAS would analyze the proposed project on the applicant's development site (Lot 28). As shown in Table A-4, as a result of the proposed action approximately 60 DUs (60,113 gsf of residential floor area) and 9,300 gsf of ground floor local retail would be constructed in the rezoning area (proposed R7A portion).

Table A-4
Reasonable Worst Case Development Scenario for the Proposed Action

Site	Max. FAR	Max. Allowable Floor Area (zsf)	Residential (gsf)	Local Retail (gsf)	DUs	Total (gsf)
Development Site[1] (Applicant's Property)	R: 3.3[2] C: 2.0 CF: 4.00 (R7A) 2.00 (R5)	R: 68,751 C: 41,250 CF: 72,500	60,113 sf	9,300 sf	60[3]	69,413 sf
TOTAL RWCDS			**60,113 sf**	**9,300 sf**	**60**	**69,413 sf**

[1] Lot 28; 20,625 sf
[2] Based on adjusted floor area pursuant to ZR Section 77-22
[3] Approximately 1,000 gsf per DU, based on preliminary floor plans

As shown in Table A-5, the incremental (net) change that would result from the proposed action compared to the No-Action scenario would be an increase of 40,299 gsf of residential

space (30 DUs) and 4,300 gsf of local retail space, and a decrease of 10,000 gsf of community facility space and 15,050 gsf of parking space (43 accessory parking spaces). The proposed RWCDS would be analyzed for density-related and site-specific impacts in the EAS.

Table A-5
Comparison of No-Action Scenario and With-Action Scenario/RWCDS

	No-Action Scenario	RWCDS (With-Action Scenario)	Increment (gsf)
Residential	25,781 gsf (34 DUs)	60,113 gsf (60 DUs)	**34,331 gsf (26 DUs)**
Local Retail	5,000 gsf	9,300 gsf	**4,300**
Community Facility	10,000	0	**- 10,000**
Parking Garage	15,050 gsf (43 spaces)	0*	**- 15,050 gsf (43 spaces)**

* The accessory parking spaces required as a result of the proposed development would be waived pursuant to ZR Sections 22-261 and 36-232.

VI. REQUIRED APPROVALS AND REVIEW PROCEDURES

The proposed rezoning is a discretionary public action subject to both the Uniform Land Use Review Procedure (ULURP), as well as the City Environmental Quality Review (*CEQR*). ULURP is a process that allows public review of proposed actions at four levels: the Community Board; the Borough President; the City Planning Commission and, if applicable, the City Council. The procedure mandates time limits for each stage to ensure a maximum review period of seven months, once the application is complete. Through *CEQR*, agencies review discretionary actions for the purpose of identifying the effects that those actions may have on the environment.

ATTACHMENT B
SUPPLEMENTAL SCREENING

INTRODUCTION

This Environmental Assessment Statement (EAS) has been prepared in accordance with the guidelines and methodologies presented in the *2012 City Environmental Quality Review (CEQR) Technical Manual*. For each technical area, thresholds are defined which, if met or exceeded, require that a detailed technical analysis be undertaken. Using these guidelines, preliminary analyses were conducted for all aspects of the proposed action to determine whether detailed analysis of any technical area would be appropriate. Part II of the EAS Short Form identified those technical areas that warrant additional assessment. For those technical areas that warranted a "yes" answer in Part II of the EAS Short Form, supplemental screening is provided in this attachment. The technical areas discussed are: Land Use, Zoning and Public Policy, Shadows, Urban Design and Visual Resources, Air Quality, and Noise. The remaining technical areas detailed in the *2012 CEQR Technical Manual* were not deemed to require supplemental screening because they do not trigger CEQR thresholds and/or are unlikely to result in significant impacts (see Part II of the EAS Short Form). Based on the findings of the supplemental screening analyses, the technical areas that warranted a detailed analysis were Land Use, Zoning, and Public Policy, and Noise. These detailed analyses are provided in Attachment C, "Land Use, Zoning, and Public Policy" and Attachment D, "Noise".

As detailed in Attachment A, "Project Description", the proposed action includes zoning map amendments changing the zoning of the southern portion of a City tax block in the East New York area of Brooklyn Community District 5 to facilitate the construction of a new approximately 69,413 gsf mixed-use residential and commercial development. The 30,000 sf rezoning area includes five tax lots, and is currently zoned R5/C1-3. The rezoning area, which is comprised of Lots 1, 2, 28, 35, and 38 on Block 4005, is generally bounded by Berriman Street to the east, Pitkin Avenue to the south, Shepherd Avenue to the west, and a depth of 150 feet from Pitkin Avenue to the north (refer to Figure A-1 in Attachment A, "Project Description").

Pitkin-Berriman Housing Development Fund Corporation, the applicant, is proposing to rezone the majority of this area (an approximately 20,000 sf area consisting of the tax lots that front on Pitkin Avenue; Lots 35, 38, and a portion of Lot 28) from R5/C1-3 to R7A/C2-4 (mapped to a depth of 100 feet along Pitkin Avenue between Shepherd Avenue and Berriman Street), and to remove the C1-3 commercial overlay from the underlying R5 zoned district in the remaining portion (an approximately 10,000 sf area including Lots 1, 2, and the portion of Lot 28, located between 100 feet and 150 feet from Pitkin Avenue) of the rezoning area.

Lots 1, 2, 35, and 38 of the rezoning area are not owned by the applicant. All four lots are currently occupied by 3-story residential buildings, the corner lot building also includes local retail on the ground floor. As described in Attachment A, "Project Description", none of these lots have been identified as either projected or potential development sites as a result of the proposed zoning changes. The only development site is comprised of Lot 28, which is owned

by the applicant and currently vacant. As a result of the proposed rezoning, the applicant's property would be developed with a 7-story mixed-use residential and commercial building. The proposed development would include approximately 60 dwelling units (DUs) and 9,300 gsf of local retail space, for a total of approximately 69,413 gsf of new development. The average household size for the residential component of the proposed development would be approximately 2.99 people per DU[1]. Utilizing this average, the proposed development would add approximately 179 new residents to the development site and rezoning area. In addition, the proposed development would also add approximately 28 local retail employees[2].

Compared to future conditions without the proposed action, the reasonable worst case development scenario (RWCDS) associated with the proposed action anticipates that the proposed development would result in a net increase of 34,332 gsf of residential space (26 DUs), 4,300 gsf of local retail space, and a net decrease of 10,000 gsf of community facility space and 15,050 gsf of parking space (43 accessory parking spaces; refer to Table B-1). The proposed RWCDS would be analyzed for density-related and site-specific impacts in the EAS. The analysis year for the RWCDS is 2016.

Table B-1
Comparison of No-Action Scenario and With-Action Scenario/RWCDS

	No-Action Scenario	RWCDS (With-Action Scenario)	Increment (gsf)
Residential	25,781 gsf (34 DUs)	60,113 gsf (60 DUs)	**34,332 gsf (26 DUs)**
Local Retail	5,000 gsf	9,300 gsf	**4,300**
Community Facility	10,000	0	**- 10,000**
Parking Garage	15,050 gsf (43 spaces)	0*	**- 15,050 gsf (43 spaces)**
No. of Residents	102	179	**77**
No. of Employees	15	28	**13**

* The accessory parking spaces required for the proposed development would be waived pursuant to ZR Sections 22-261 and 36-232.

LAND USE, ZONING, AND PUBLIC POLICY

A detailed analysis of land use and zoning is appropriate if the proposed action would result in a significant change in land use or would substantially affect regulations or policies governing land use. An assessment of zoning is typically performed in conjunction with a land use analysis when the proposed action would change the zoning on the development site or result in the loss of a particular use.

As the proposed action includes zoning map amendments, a detailed analysis of land use, zoning, and public policy is provided in Attachment C, "Land Use, Zoning and Public Policy". The proposed rezoning would not result in a significant change of land use in the rezoning area as the uses allowed by the proposed zoning would be identical to uses that are currently allowed, and would be consistent with existing land use patterns and trends in the surrounding

1 Source: NYC DCP Community District Demographic Profiles (Census 2010).
2 Assumption for retail employees: 3 employees per 1,000 sf.

area. The proposed zoning changes would increase the allowable residential, community facility, and commercial density within 100 feet of Pitkin Avenue between Berriman Street and Shepherd Avenue. They also would remove the existing C1-3 overlay from the remainder of the rezoning area. The RWCDS associated with the proposed rezoning would add 60,113 gsf of residential area (60 DUs) to the neighborhood. In addition, the RWCDS would also add 9,300 gsf of local retail space to the development site, and therefore increase retail space in the neighborhood.

The proposed zoning change from R5/C1-3 to R7A/C2-4 would not result in any new non-conforming uses. The new R7A/C2-4 zoning district would be consistent with similar residential zoning classifications in the surrounding area. In addition, as the existing structures on Lots 1, 35, and 38 of the rezoning area currently exceed the maximum 1.25 FAR allowable by the existing R5/C1-3 zoning, the proposed R7-A/C2-4 zoning would result in the compliance of these existing properties to the allowable FAR.

The proposed development would be aligned with the goals of the Sustainable Communities East New York Planning Study, which encompasses the rezoning area. The proposed development would be a model for similar future mixed-use affordable housing and local retail developments with higher densities along the Pitkin Avenue corridor, which is located in proximity of public transportation with the A and C subway lines travelling below grade underneath Pitkin Avenue.

Therefore, as discussed in Attachment C, no significant adverse impacts to land use, zoning, or public policy would be expected to occur as a result of the proposed action.

SHADOWS

A shadow assessment considers actions that result in new shadows long enough to reach a publicly accessible open space or historic resource (except within an hour and a half of sunrise or sunset). For actions resulting in structures less than 50 feet high, a shadow assessment is generally not necessary unless the site is adjacent to a park, historic resource, or important natural feature (if the features that make the structure significant depend on sunlight). According to the *2012 CEQR Technical Manual*, some open spaces contain facilities that are not sunlight sensitive, and do not require a shadow analysis including paved areas (such as handball or basketball courts) and areas without vegetation.

As detailed in Attachment A, “Project Description”, the proposed actions would facilitate the development of a 7-story mixed-use residential and commercial building on the development site. The proposed mixed-use building would be over 50 feet tall and therefore warrant a Tier 1 Screening Assessment. In accordance with *2012 CEQR Technical Manual* guidelines, a shadows assessment was undertaken to determine whether the proposed building would result in new shadows long enough to reach publicly accessible open spaces or sunlight-sensitive historic resources, compared to No-Action conditions.

Preliminary Screening Assessment

Tier 1 Screening Assessment

The *2012 CEQR Technical Manual* requires a shadows assessment for proposed actions that would result in new structures or additions to existing structures, which are greater than 50 feet in height and/or adjacent to an existing sunlight-sensitive resource. The proposed development would be a 7-story structure with a street wall height of 65 feet and a roof elevation of 75 feet. Accounting for a parapet (which was assumed to be approximately 5 feet), a shadow radius was calculated for a building height of 80 feet, which constitutes the allowable maximum building height in the proposed R7A zoning district.

According to the *2012 CEQR Technical Manual*, the longest shadow a structure will cast in New York City, except for periods close to dawn or dusk, is 4.3 times its height and occurs on December 21, the winter solstice. As such, the longest shadow that could be cast by the proposed development would be approximately 344 feet in length. The proposed development would be constructed fronting along Pitkin Avenue (156.25 feet), and fronting along Berriman Street (75 feet), while the northern 5,000 sf of the development site would be used for accessory open space. Therefore, the 344-foot shadow radius was drawn from the portion of the development site in which the proposed building would be constructed (refer to Figure B-1).

As shown in Figure B-1, no resources of concern were identified within the 344-foot shadow radius. There is no public open space, nor are there any sunlight-sensitive historic resources in the area surrounding the development site. Therefore, a Tier 2 Screening Assessment and a detailed shadows analysis are not warranted. As shown in this preliminary assessment, no significant adverse shadows impacts are anticipated as a result of the proposed actions.

URBAN DESIGN AND VISUAL RESOURCES

Introduction

Together, the urban design components and visual resources of an area define the distinctive identity of a neighborhood. In an urban design assessment under *CEQR*, one considers whether and how a project may change the experience of a pedestrian in the project area. The assessment focuses on the components of a proposed project that may have the potential to alter the arrangement, appearance, and functionality of the built environment, as experienced by pedestrians in the study area. These components include building bulk, use, and type; building arrangement; block form and street pattern; streetscape elements; street hierarchy; and natural features. The concept of bulk is created by the size of a building and the way it is massed on a site. Height, length and width define a building's size; volume, shape, setbacks, lot coverage, and density define its mass.

Pursuant to the *2012 CEQR Technical Manual* a preliminary analysis of urban design and visual resources is appropriate if a proposed project would result in a building that substantially differs from the existing surrounding neighborhood structure in height, bulk, form, setbacks,

Tier 1 Shadow Screening Map



Legend

- Rezoning Area
- Development Site
- 344-Foot Shadow Radius
- One- and Two-Family Residential Walk-Up
- Multi-Family Residentiall Walk-Up
- Multi-Family Residential Elevator
- Mixed-Use
- Commercial
- Industrial
- Transportation and Warehousing
- Institutional
- Open Space
- Parking Facilities
- Vacant Land
- Unknown

size, and scale, and result in an increased built floor area beyond what would be allowed as-of-right.

The proposed actions include zoning changes that would increase permitted residential, community facility, and commercial in a portion of the proposed rezoning area (i.e., the area within 100 feet of Pitkin Avenue between Shepherd Avenue and Berriman Street). The proposed rezoning would result in the construction of a 7-story mixed-use building on the development site, applying different height, bulk, and setback requirements under the R7A zoning, and could therefore have the potential to result in changes of pedestrian experiences in the study area. As a result, a preliminary analysis is warranted. The following preliminary urban design analysis follows the guidelines of the *2012 CEQR Technical Manual.*

Per criteria of Section 230 of the *2012 CEQR Technical Manual*, a wind condition analysis is not warranted for the proposed actions. The development site is located in the East New York area of Brooklyn, and not in a high wind location, such as along the waterfront, nor is it in a location where wind conditions from the waterfront are not attenuated by existing buildings or natural features. The proposed 7-story development is not expected to alter wind conditions in the vicinity of the development site. Therefore, no wind analysis is warranted.

Study Area

As defined in the *2012 CEQR Technical Manual*, the urban design and visual resources study area consists of the area where the project may influence land use patterns and the built environment. For the purpose of this preliminary assessment, the study area consists of the area within an approximate 400-foot radius of the rezoning area. As shown in Figure B-2, the study area is roughly bounded by the mid-block line between Atkins and Montauk Avenues to the east, Glenmore Avenue to the north, the mid-block line between Essex and Linwood Streets to the west, and Belmont Avenue to the south.

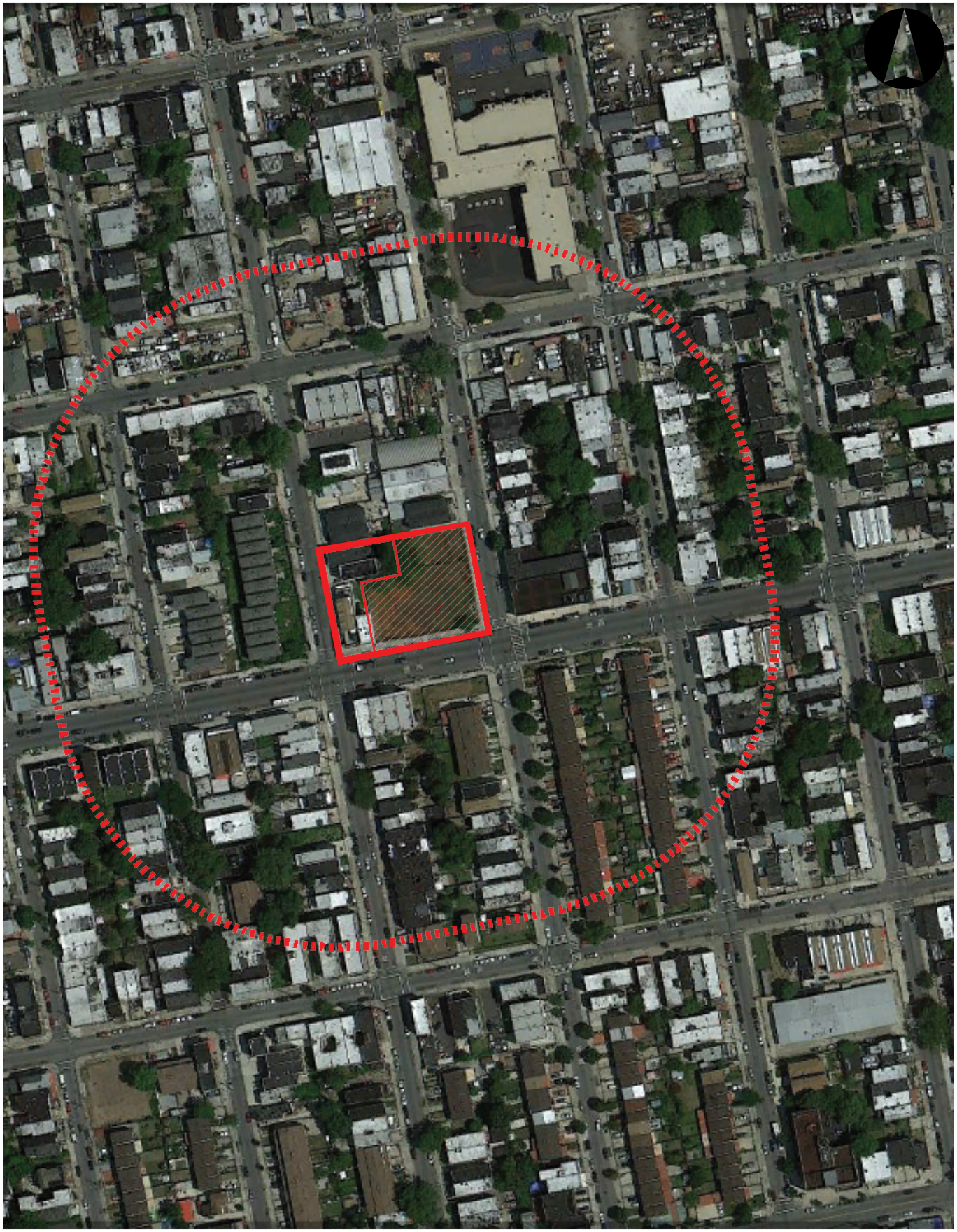
The following preliminary analysis is based on field visits, aerial views, photographs, and other graphic images of the development site, rezoning area, and the surrounding study area. Zoning calculations, including floor area calculations, building heights and lot coverage information are also provided for the development site. This analysis addresses each of the urban design characteristics for existing conditions and the future without and with the proposed actions for the year 2016. As detailed below, the preliminary assessment indicated that the changes to the pedestrian environment as a result of the proposed actions would not be significant and a detailed analysis is not warranted.

Preliminary Analysis

The purpose of the preliminary assessment is to determine whether any physical changes proposed by the project may raise the potential to significantly and adversely affect elements of urban design. Pursuant to the *2012 CEQR Technical Manual* guidelines, as the proposed actions might potentially result in development components that could change the experience of a pedestrian passing by the development site and immediate vicinity, a preliminary assessment is required. As described above, the proposed actions would modify the zoning and therefore

Figure B-2

Urban Design Study Area



Legend

Rezoning Area

Development Site

400-Foot Radius

change various bulk, height and setback requirements to facilitate the implementation of the proposed development.

Existing Conditions

Rezoning Area

The rezoning area is located on a block in the East New York neighborhood of Brooklyn which is bounded by Pitkin Avenue to the south, Berriman Street to the east, Glenmore Avenue to the north, and Shepherd Avenue to the west (see Figure B-2). The development site is comprised of Lot 28 on Block 4005, and includes an area of approximately 20,625 sf. The applicant's lot, which is currently vacant, has 156.25 feet of frontage along Pitkin Avenue, and 150 feet of frontage along Berriman Street. The development site does not include any open space useable for recreational purposes, natural or visual resources, or view corridors (refer to photos in Figures B-3 and B-4). No street trees are located along the development site's Pitkin Avenue frontage. There are four street trees along the development site's Berriman Street frontage.

In addition to the applicant's property, the rezoning area also includes four other tax lots that are not controlled by the applicant, and currently privately-owned by four different parties (Lots 1, 2, 35, and 38). All four lots are currently occupied by existing buildings. Lots 1 and 2, which front on Shepherd Avenue, include 3-story residential buildings, while the corner lot at Pitkin Avenue and Shepherd Avenue, Lot 35, includes a 3-story building with ground floor local retail and two DUs on its upper two floors, and Lot 38, which fronts on Pitkin Avenue (and is adjacent to Lot 35), includes a 3-story residential building that houses two DUs.

Table B-2 shows the maximum allowable and existing FARs, as well as the existing building heights for all properties within the rezoning area.

Table B-2
Existing and Maximum Allowable FARs, and Building Heights within the Rezoning Area

Lot Number	Max. Allowable FAR			Existing Built FAR	No. of floors / Ex. Bldg. Height (estimated)
	R	CF	C		
1	1.25	2.00	1.00	2.01	3 floors / approx. 35 feet
2	1.25	2.00	1.00	1.08	3 floors / approx. 35feet
35	1.25	2.00	1.00	2.36	3 floors / approx. 40 feet
38	1.25	2.00	1.00	1.35	3 floors / approx. 40 feet

Note: Lot 28 (the development site) is currently vacant.
R/CF/C: Residential, Community Facility, and Commercial.

Pitkin Avenue, which bounds the rezoning area to the south, is two-way east-westbound and mapped 80 feet wide, including two travel lanes and one parking lane on both sides of the street. Berriman Street, which bounds the rezoning area to the east, is one-way northbound, and Shepherd Avenue, which bounds the rezoning area to the west is one-way southbound. Berriman Street and Shepherd Avenue are both mapped 55 feet wide, with one travel lane and one parking lane on both sides of the street.

The rezoning area is located on the same block as the Shepherd Avenue C train subway station. At Fulton and Elton Streets, four blocks north and two blocks west of the development site is the Cleveland Street J train subway station. The Long Island Rail Road station East New York (between Atlantic Terminal and Jamaica) is located three subway stops to the west of the rezoning area. Four City bus lines are accessible in the vicinity of the rezoning area: the Q8, which connects Jamaica, Queens, and Spring Creek, Brooklyn, travels along Logan Street in north-south direction (five blocks east of the rezoning area) and along Pitkin Avenue in east-west direction, the Q24 bus line, which connects Jamaica and Broadway Junction, Brooklyn, travels along Atlantic Avenue, which is three blocks north of the rezoning area. The B13 travels northbound along Crescent Avenue and southbound along Euclid Avenue in the vicinity of the rezoning area. This bus connects Bushwick, Brooklyn, and the Gateway Center Mall, Spring Creek, Brooklyn via Queens. The B14 connects the Brooklyn General Mail Facility and Crown Heights, Brooklyn, via Queens, and travels in east-westbound direction along Sutter Avenue, which is two blocks south of the rezoning area.

Photos illustrating the pedestrian experience along the Pitkin Avenue and Berriman Street development site frontages are provided in Figures B-3 and B-4, respectively. As shown in Figure B-3, there are multiple subway vents in the sidewalk along the development site's Pitkin Avenue frontage. These vents are located close to the curb. Street parking is permitted on the north side of Pitkin Avenue. The development site is currently vacant. The surface of the site is slightly lower than the surrounding sidewalk elevation. The property is bounded by a chain link fence. Adjacent to the west of the development site is a 3-story residential building. Across Berriman Street from the development site is a 2-story day care building. As illustrated in Figure B-4, the sidewalk along the development site's Berriman Street frontage is narrower than the Pitkin Avenue sidewalk, and includes four street trees. Street parking is permitted on the west side of Berriman Street. Adjacent to the north of the development site is a 2-story residential building.

Study Area

As discussed above, the study area has been defined as the surrounding area within an approximate 400-foot radius of the rezoning area (see Figure B-2). The study area is roughly bounded by the mid-block line between Atkins and Montauk Avenues to the east, Glenmore Avenue to the north, the mid-block line between Essex and Linwood Streets to the west, and Belmont Avenue to the south. The majority of the study area is located within an R5 residential zoning district, while a small portion in the northeast of the study area is located within a M1-1 manufacturing district.

Land uses in the study area are primarily residential, and the predominant residential building types are attached, up to 3-story single-family and multi-family walk-up buildings. The study area also includes some mixed-use residential and commercial buildings along the north- and south sides of Pitkin Avenue, and a few industrial, warehousing, and transportation-related uses as well as some vacant lots. The study area does not include any visual resources.



1 Looking northwest from the corner of Pitkin Ave. and Berriman St.



2 View of the development site's Pitkin Ave. frontage (looking west)



3 Looking northeast onto the development site from Pitkin Ave.



4 Looking east along the development site's Pitkin Ave. frontage

Pitkin Avenue Rezoning EAS **Figure B-3**

Pictures showing the Pedestrian Perspective along the Development Site (Pitkin Avenue Frontage)



1 Looking north along the development site's Berriman St. frontage



2 Looking south along the development site's Berriman St. frontage



3 Looking west onto the southern portion of the development site (from Berriman St.)



4 Looking west onto the northern portion of the development site (from Berriman St.)

Pitkin Avenue Rezoning EAS **Figure B-4**

Pictures showing the Pedestrian Perspective along the Development Site (Berriman Street Frontage)

Future without the Proposed Actions (No-Action Condition)

Rezoning Area

As discussed above, the rezoning area includes one development site, which is the applicant's property (Lot 28). In the 2016 future without the proposed actions, the applicant would develop an as-of-right, 4-story mixed-use residential, community facility, and commercial building with an underground parking garage on the development site, which would comply with the requirements set forth by the existing R5/C1-3 zoning district. As shown in Table B-3, the proposed as-of-right building would include a total of approximately 55,831 gsf, which would be comprised of approximately 5,000 gsf of local retail space and approximately 10,000 gsf of community facility space on the ground floor, and approximately 25,781 gsf of residential area on the first through fourth floors (34 DUs)[3]. The required 43 accessory parking spaces[4] would be provided in an underground parking garage with a size of approximately 15,050 sf[5].

Table B-3
No-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses	FAR
25,781 gsf (34 DUs)	**5,000 gsf**	**10,000 gsf**	**15,050 gsf* (43 spaces)**	**55,831 gsf**	**1.98****

* The parking garage proposed in the No-Action Development Program would be located below grade.
** Calculation based on 40,781 gsf of above-ground development.

The as-of-right building would rise three stories tall to an elevation of 30 feet above the street lot lines (maximum street wall height within an R5 district), and the building's fourth floor would be set back by 15 feet from both Pitkin Avenue and Berriman Street, and rise up to a height of 40 feet (maximum allowable building height in an R5 district). The required accessory open space would be 9,281 sf. An approximately 5,000 sf accessory open space area would be provided in the northeastern portion of Lot 28, while the remainder of the open space area (4,281 sf) would be provided on the roof of the first floor roof in the rear of the proposed building.

In the absence of the proposed zoning changes, no change in the maximum allowable FAR would occur, and no new uses that are not currently permitted would be allowed. Since the buildings on Lots 1, 35, and 38 exceed the maximum allowable FAR in the existing R5/C1-3 zoning district, it is highly unlikely that any new development would occur on these lots in the absence of the proposed actions. It is therefore anticipated that existing uses within the rezoning area would remain unchanged.

[3] Pursuant to ZR Section 23-22, 34 DUs result from the DU Factor for R5 zoning districts (760 gsf), and the fact that the as-of-right building with a residential component of 25,781 gsf would require to maximize the number of DUs to make the development financially feasible.
[4] Pursuant to ZR Sections 25-25, 25-31, and 36-21: 24 spaces for residential, 2 spaces for community facility use, and 17 for commercial use, respectively.
[5] Assumption: 350 gsf per parking space.

Study Area

It is expected that in the absence of the proposed actions, no major change in land use would occur in the surrounding area, nor would there be any changes in zoning. Current land use trends and general development patterns in the area would continue to exhibit predominantly residential land use, with some local retail uses along the Pitkin Avenue corridor, institutional uses (particularly houses of worship), and industrial and manufacturing uses interspersed. Within the 400-foot study area, no new developments are planned in the near future and the existing street hierarchy, block form, and streetscape of the study area are expected to remain unchanged by the analysis year of 2016. In addition, no open space resources would be created in the study area by 2016. Therefore, the overall urban design and visual character of the study area is anticipated to remain similar to existing conditions.

Future with the Proposed Actions (With Action Condition)

Rezoning Area

In the future with the proposed actions, the applicant would construct a new 7-story residential building with ground floor local retail and approximately 10,175 sf of accessory open space. As shown in Table B-4, the proposed building would comprise a total of 69,413 gsf of floor area, and include approximately 60 DUs (60,113 gsf of residential space), and approximately 9,300 gsf of ground floor local retail space. The proposed building would therefore have less lot coverage than the No-Action (as-of-right) development, but a higher FAR. Residential and retail accessory parking requirements for the proposed development would be waived pursuant to ZR Section 25-261 and ZR Section 36-232, respectively, and no accessory parking spaces would be provided.

Table B-4
With-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses	FAR
60,113 gsf (60 DUs)	**9,300 gsf**	**0 gsf**	**0 gsf***	**69,413 gsf**	**3.3****

* The accessory parking spaces required as a result of the proposed development would be waived pursuant to ZR Sections 22-261 and 36-232.
** Calculation based on 68,751 zsf of new development.

The height of the new 7-story building would be 80 feet tall, which is the maximum permitted building height in an R7A zoning district. The proposed building would rise up to 65 feet above the street lot lines on both Pitkin Avenue and Berriman Street, and the seventh floor of the building would be set back by 10 feet from Pitkin Avenue and by 15 feet from Berriman Street (refer to Figures A-5 and A-6 in Attachment A, "Project Description"). The proposed building would form solid street walls on Pitkin Avenue and Berriman Street, filling in a currently vacant lot.

Figure B-5 compares the existing street view with the street view in the future of 2016 with the proposed 7-story mixed-use building on the development site. The proposed development would be aligned with the Sustainable Communities East New York Planning Study's goals,

Comparison of Existing Conditions and Proposed Building Envelope in Existing Context



1 View northwest along Pitkin Avenue towards the Development Site



2 Identical view illustrating the proposed 7-story mixed-use development on the Development Site

and would be a model for future higher moderate density mixed-use affordable housing and local retail developments to be constructed along the Pitkin Avenue corridor and thoroughfares of similar significance in the vicinity of the development site. Note that Pitkin Avenue is a principal corridor that is in close proximity to public transit suitable for higher density developments.

The proposed action would not change or adversely affect any of the urban design components defined in the *2012 CEQR Technical Manual*. The proposed action would not result in changes in block form, the demapping of streets or the mapping of new streets, nor would it affect the street hierarchy. As the proposed development would be constructed within an existing block, it would not block any significant view corridors.

The proposed development is not anticipated to adversely affect the pedestrian experience of the public space along the development site frontages on Pitkin Avenue and Berriman Street. Therefore, the proposed action would not result in significant adverse impacts on urban design or visual resources in the study area, and a detailed analysis is not warranted.

Conclusion

As previously discussed, the proposed rezoning area is located within the Sustainable Communities East New York Planning study area. The study is looking at the potential for increased densities along wide streets within the study area, especially those served by public transportation. The applicant's goal of providing increased density, including affordable housing and active streetscapes along the Pitkin Avenue transit corridor, matches the broader goals of the Sustainable Communities East New York Study.

The proposed action would positively affect urban design by facilitating the construction of a new 7-story mixed-use residential and commercial building on a currently vacant development site. The proposed building would create a continuous street wall along Pitkin Avenue and connect to the adjacent 3-story building to the west. As discussed above, the 7th floor of the proposed building would be set back by 10 feet from Pitkin Avenue and by 15 feet from Berriman Street. As illustrated in Figure B-5, because of the setbacks the 7th floor would barely be visible from the street level. As a result, the proposed building would not adversely affect the pedestrian experience along the frontages and in the vicinity of the development site.

Further, the proposed 7-story mixed-use building would not block any significant view corridors, views of visual resources, or limit access to any visual resources in the study area. Therefore, the proposed action would not result in significant adverse impacts on urban design in the study area, and no significant adverse impacts on visual resources are anticipated as a result of the proposed action. Hence, no detailed analysis of urban design and visual resources is warranted.

HAZARDOUS MATERIALS

A hazardous material is any substance that poses a threat to human health or the environment. Substances that can be of concern include, but are not limited to, heavy metals, volatile and

semivolatile organic compounds, methane, polychlorinated biphenyls, and hazardous wastes (defined as substances that are chemically reactive, ignitible, corrosive, or toxic). According to the *2012 CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials can occur when: a) hazardous materials exist on a site (in the soil or within existing buildings), and b) an action would increase pathways to their exposure; or c) an action would introduce new activities or processes using hazardous materials.

An assessment of the applicant's property (Lot 28) was conducted in conformance with the ASTM Standard Practice E 1527-05 to determine whether the proposed action could lead to increased exposure of people or the environment to hazardous materials and whether the increased exposure would result in significant adverse public health impacts or environmental damage. EEA Inc. prepared a Phase I Environmental Site Assessment (ESA) for the project site (refer to Appendix 3 for details), which is dated February 15, 2011. The findings are summarized below.

Phase I Environmental Site Assessment

Historic Analysis

EEA's analysis of historical information suggests that a 2-story residential building was constructed on the northeastern portion of Lot 28 before 1908, and that seven 3-story residential buildings with ground floor retail spaces and fronting at Pitkin Avenue were constructed on the project site sometime between 1909 and 1924, and demolished sometime between 1977 and 1987. The non-residential uses on the project site for that time period included an upholstery business, furniture rental, ironworker, travel broker, brokerage business, furniture repair, beauty salons, floor covering business, plumbers, attorneys, florist, jewelry business, sweet shop, a radio repair business, shoe repair, and stationary store.

Residential and retail occupancy does not typically involve the storage and use of significant quantities of hazardous materials, nor would they be expected to generate significant quantities of hazardous wastes. No indications of former businesses or operations on the project site that typically store or use significant quantities of hazardous materials, such as manufacturing businesses, dry cleaners, gasoline filling stations etc., were identified in the information that EEA researched.

Visual Inspection

No drainage structures, no hazardous materials and petroleum products (and no stains or other indications of recent spills or leaks were observed), and no tank fill ports or other visible indications of underground and aboveground storage tanks were observed at the project site. The project site is not listed in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database, which lists all registered facilities with a total combined petroleum storage capacity in excess of 1,100 gallons.

Since the project site is currently vacant, no suspected asbestos-containing materials or lead-based painted surfaces were observed during EEA's project site visit.

Database Analysis

The project site is not included in the following United States Environmental Protection Agency (USEPA) databases: the Superfund or CERCLIS lists, the ERNS database, the RCRA Hazardous Waste Treatment/Storage/Disposal [TSDF] Facilities list, and the RCRA Hazardous Waste Handlers database. There are no listings for the project site on the following New York State Department of Environmental Conservation (NYSDEC) databases: Chemical Bulk Storage, the Brownfields database, the Inactive Hazardous Waste Disposal Site Registry, Solid Waste Facilities, Major Oil Storage Facilities, or SPEDES facilities lists and Spill Logs databases. The project site is not listed in the New York City Environmental Quality Review Requirements "E" Site database.

In addition, there were no identified nearby federal and/or state regulatory hazardous waste sites or facilities (e.g. Superfund, CELRCLIS, Inactive Hazardous Waste Disposal Sites, RCRA Treatment/Storage/Disposal [TSDF] Facilities, Major Oil Storage Facilities, Spill Incidents, Leaking Underground Storage Tanks, etc.) that would likely have the potential to impact the environmental quality of the underlying soils of the project site.

As a result, the Phase I ESA report did not identify any Recognized Environmental Concerns (RECs) for the project site. Therefore, a detailed hazardous materials analysis is not warranted.

The Phase I ESA was reviewed by the New York City Department of Environmental Protection (DEP). In a letter dated January 23, 2013 (refer to Appendix 4), DEP stated that past on-site and/or surrounding area land uses may have impacted the soil and groundwater at the project site. As a result, DEP requires a Phase II Environmental Site Assessment Investigation (Phase II) in order to adequately characterize the surface and subsurface soils prior to construction start. DEP also stated that a Phase II Investigative Protocol/Work Plan, which summarizes the proposed drilling, soil/groundwater, and soil vapor sampling activities, and an investigative Health and Safety Plan (HASP), need to be submitted to DEP for review and approval prior to the start of any field work.

To avoid the potential for significant adverse impacts related to hazardous materials, the proposed rezoning action would include an (E) designation for Block 4005, Lot 28.The applicable text for the (E) designation would be as follows:

Task 1

The fee owner(s) of the lot(s) restricted by this (E) designation will be required to prepare a scope of work for any soil, gas, or groundwater sampling and testing needed to determine if contamination exists, the extent of the contamination, and to what extent remediation may be required. The scope of work will include all relevant supporting documentation, including site plans and sampling locations. This scope of work will be submitted to the New York City Department of Environmental Protection (DEP) for review and approval prior to implementation. It will be reviewed to ensure that an adequate number of samples will be collected and that appropriate parameters are selected for laboratory analysis.

No sampling program may begin until written approval of a work plan and sampling protocol is received from DEP. The number and location of sample sites should be selected to adequately characterize the type and extent of the contamination, and the condition of the remainder of the site. The characterization should be complete enough to determine what remediation strategy (if any) is necessary after review of the sampling data. Guidelines and criteria for choosing sampling sites and performing sampling will be provided by DEP upon request.

Task 2

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

If remediation is necessary according to test results, a proposed remediation plan must be submitted to DEP for review and approval. The fee owner(s) of the lot(s) restricted by this (E) designation must perform such remediation as determined necessary by DEP. After completing the remediation, the fee owner(s) of the lot restricted by this (E) designation should provide proof that the work has been satisfactorily completed.

A DEP-approved construction-related health and safety plan would be implemented during excavation and construction activities to protect workers and the community from potentially significant adverse impacts associated with contaminated soil and/or groundwater. This Plan would be submitted to DEP for review and approval prior to implementation.

AIR QUALITY

Mobile Sources

Based on the *2012 CEQR Technical Manual*, the following criteria are applicable to the proposed action for identifying intersections with the potential to violate the New York City (NYC) de minimis criteria for carbon monoxide (CO):

- Actions that would generate or divert 170 or more peak hour trips through an intersection
- Actions that would result in a substantial number of local or regional diesel vehicle trips

As discussed above, the proposed development, which is identical with the RWCDS, would not add 170 or more vehicle trips to any single intersection in any peak hour. Since the proposed development would include 60 DUs, a minimal additional vehicle trips would be generated as a result of the proposed action. The amount of these vehicle trips would be below the *CEQR*

threshold and no violations of the National Ambient Air Quality Standards (NAAQS) for CO are anticipated. Therefore, no analysis of CO is required.

In addition, the RWCDS would not generate peak-hour vehicular trips with particulate matter emissions that are equivalent to 12 to 23 heavy-duty diesel vehicles (HDDVs). Based on the criteria spreadsheet in the *2012 CEQR Technical Manual's* Air Quality Chapter that is the used for determining HDDV-equivalent vehicle movements from all types of vehicles, the development-generated increments would not exceed the threshold values that would warrant modeling of fine particulate matter (PM_{10} and $PM_{2.5}$). Therefore, no analysis of particulate matter is warranted.

As a result, a detailed mobile source air quality analysis is not warranted.

Stationary Sources

Stationary source impacts could occur with actions that create new stationary sources or pollutants, such as emission stacks for industrial plants, hospitals, or other large institutional uses, or building's boiler stacks used for heating/hot water, ventilation, and air conditioning (HVAC) systems, that can affect surrounding uses; when they add uses near existing or planned future emissions stacks, and the new uses might be affected by the emissions from the stacks, or when they add structures near such stacks and those structures can change the dispersion of emissions from the stacks so that they begin to affect surrounding uses.

The proposed action would be the rezoning of a 30,000 sf area in the East New York neighborhood of Brooklyn. The majority of this area (lots fronting on Pitkin Avenue) would be rezoned from R5/C1-3 to R7A/C2-4 (mapped to a depth of 100 feet along Pitkin Avenue between Shepherd Avenue and Berriman Street), while the C1-3 commercial overlay would be removed from the underlying R5 district in the remaining portion (lots fronting on Shepherd Avenue and Berriman Street) of the rezoning area. The proposed rezoning would facilitate the construction of a new 7-story mixed-use residential and commercial building on the development site, including 60,113 gsf of residential space on the first through seventh floors, and 9,300 gsf of local retail space on the ground floor, for a total of 69,413 gsf of new development.

HVAC Screening Analysis

Potential Impacts of Proposed Development on Existing Buildings

Figure B-6 shows the areas and land uses within 400 feet and 1,000 feet of the rezoning area. No large emission sources are within 1,000 feet of the proposed rezoning area. The nearest building of equal or greater height is located at 1200 Sutter Avenue, which is located beyond the 1,000-foot radius (approximately 1,700 feet to the southeast). Therefore, the stack on the proposed building would be higher than all existing buildings within 400 feet of the rezoning area. Therefore, the proposed action would not cause any air quality impacts to the surrounding community due to its boiler emissions.

Land Uses within 400 Feet and 1,000-Feet of the Rezoning Area



Legend

- Rezoning Area
- Development Site
- 400-Foot Radius
- 1,000-Foot Radius
- One- and Two-Family Residential Walk-Up
- Multi-Family Residentiall Walk-Up
- Multi-Family Residential Elevator
- Mixed-Use
- Commercial
- Industrial
- Transportation and Warehousing
- Institutional
- Open Space
- Parking Facilities
- Vacant Land
- Unknown

Potential Impacts of Existing Buildings on Proposed Development

Potential impacts from HVAC combustion in nearby existing buildings would be a source of concern if the proposed action would create new sensitive receptors within:

- 1,000 feet of a large emission source, or
- 400 feet of a stack associated with commercial, institutional, or large-scale residential developments, and the height of the new development would be similar to or greater than the height of the emission stack.

Pursuant to CEQR, residential uses are considered sensitive receptors. Table B-5 lists existing buildings with registered boiler permits within a 400-foot radius of the proposed rezoning area. Based on the total gross square footage (gsf) of each these buildings, heat input from each of their HVAC systems would be below the threshold of 2.8 million Btu/hour. Cumulative emissions from these locations would not constitute an air quality impact on the proposed development or any other properties within the rezoning area.

Table B-5
Identified Lots with Boilers within 400-Feet of Development

Location	Block	Lot	GSF	No. of Stories	Stack Height (ft.)	Stack distance to rezoning area (ft)
2445 Pitkin Avenue	4003	30	3,219	3	33	365
2458 Pitkin Avenue	4020	10	5,711	3	33	250
2482 Pitkin Avenue	4021	16	3,820	3	33	80
2486 Pitkin Avenue	4021	18	3,300	3	33	80
2488 Pitkin Avenue	4021	19	3,300	3	33	80

Source: NYC Dept. of Buildings, NYC Dept. of Environmental Protection, Sandstone Environmental Associates.

Air Toxics

According to the *2012 CEQR Technical Manual*, facilities with the potential to cause adverse air quality impacts are those that would require permitting under City, State and Federal regulations. The *CEQR Manual* lists the following types of uses that would be a source of concern for the proposed development:

- large emission source (e.g., solid waste or medical waste incinerators, cogeneration facilities, asphalt and concrete plants, or power generating plants) within 1,000 feet,
- a medical, chemical, or research laboratory nearby,
- a manufacturing or processing facility within 400 feet, and
- an odor-producing facility within 1,000 feet.

Review of a NYC Department of Buildings (NYCDOB) online database, telephone directory listings, internet websites, and a search for New York State Department of Environmental Conservation (NYSDEC) permits were conducted to identify if any of the types of facilities listed above exist near the development site and proposed rezoning area. Figure B-6 shows the

area within 400 and 1,000 feet of the proposed rezoning area. No major sources of significant adverse air emissions were identified within 1,000 feet of the rezoning area.

A request for NYC Department of Environmental Protection (NYCDEP) manufacturing and processing permits was made for all establishments within 400 feet of the rezoning area with industrial and manufacturing zoning and/or land uses and names indicative of conducting manufacturing operations. These locations were identified through searches of City agency websites, on-line directories, and other sources. No permits were found in the NYCDEP database.

Air Toxics Screening Analysis

A survey was carried out to identify industrial and manufacturing uses that may have the potential to adversely impact the proposed development on the development site and existing properties within the rezoning area. This includes sources with potential non-criteria emissions that may not have or may require necessary air permits. Criteria for identifying such uses included:

- industrial buildings with stacks, vents, or observed emissions;
- establishments with names indicative of operations that could require permitting; and
- establishments with the potential to cause unpleasant odors.

No major sources of air emissions were identified within 1,000 feet of the site. NYCDEP, upon searching their database, did not return any permits for industrial and manufacturing locations near the rezoning area. However, numerous small auto servicing establishments were identified. No medical, chemical, or research laboratories were identified within 400 feet of the proposed rezoning boundaries. Table B-6 shows the sites documented in the field survey that are classified as industrial and manufacturing land uses or may otherwise be required to file air quality permits.

Auto Spray Painting Emissions

A phone survey was carried out on July 18, 2012, for all four auto repair facilities that are located within 400 feet of the rezoning area (refer to Table B-6) to confirm if spray painting is executed at these locations. An employee at Dr. Jerry's Auto Clinic (765 Essex Street) stated that no spray painting occurred on their premises. Representatives from the U-Haul dealership (351 Essex Street) and NY Cali Auto Body Shop (795 Glenmore Avenue) indicated that no spray painting activities take place at their sites. A call to D&M Collision & Auto Repair (810 Glenmore Avenue) revealed that the phone number was disconnected. Using satellite imagery and street view pictures, no indication was found that this establishment provides spray-painting services. Given these observations, in addition to no listed NYCDEP permits, it is unlikely that spray painting occurs at this site.

Table B-6
Sites of Concern within 1,000 feet of the Rezoning Area

Block	Lot	Dept. of Finance Code	Address	Observed Land Use
3988	1	G2	765 Essex Street	Dr. Jerry's Auto Clinic
	3	G7	351 Essex Street	U-Haul Neighborhood Dealer
3989	1	Z9	355 Shepherd Avenue	Atlantic Ice & Kerosene
	34	Z9	795 Glenmore Avenue	New York Cali Auto Body Shop
	36	Z9	793 Glenmore Avenue	Unnamed Lot (vacant)
3990	1	W1	126 Atkins Avenue	Public School
4003	35	G2	2433 Pitkin Avenue	Auto Repair Shop*
4005	19	Z9	148 Berriman Street	Unnamed Warehouse
	20	Z9	152 Berriman Street	Unnamed Warehouse
	21	F9	154 Berriman Street	Unnamed Warehouse
4006	11	G9	810 Glenmore Avenue	D&M Collision & Auto Repair
4019	38	F9	747 Belmont Avenue	DSK Iron Works
	39	F9	511 Belmont Avenue	DSK Iron Works

F9: Industrial-Misc. Factory, G2: One story garage, G7: Unlicensed parking lot, G9: Misc. garage or gas station, W1: Public School, Z9: Other miscellaneous (Source: Sandstone Environmental Associates, Inc.).

* This car repair shop is located beyond the 400-foot radius was therefore not subject to auto spray painting research.

Conclusion

The mobile source screen showed that there would be no impacts from CO and particulate matter emissions due to development-generated traffic. The HVAC screening analysis showed that the proposed development would not adversely affect any properties in the vicinity, and none of the properties in the surrounding area would adversely affect the proposed development. An air toxics analysis was carried out to identify nearby potential air quality concerns for the development site. No NYCDEP permits related to emissions categorized under air toxics were identified for any properties near the development site and rezoning area. None of the auto body and repair shops near the development site offer spray painting services.

Therefore, the proposed action is not anticipated to result into significant adverse air quality impacts, and no detailed air quality analysis is necessary.

NOISE

CEQR defines noise as any unwanted sound. The *2012 CEQR Technical Manual* recommends an analysis of three principal types of noise sources: mobile, stationary, and construction sources. The noise levels associated with the environmental noise assessment are not simply hazardous noise levels that can cause hearing loss, but significant noise levels below the hazardous levels that have potential detrimental effects on the quality of life in New York City.

According to the *2012 CEQR Technical Manual*, an initial noise impact screening considers whether a proposed action generates any mobile, stationary, or construction sources of noise, or, if the development is a sensitive receptor (such as the proposed development), and if it will be located in an area with high ambient noise levels. A sensitive receptor is an area where human activity may be adversely affected by noise levels. Sensitive receptors include residences, health care facilities, museums, schools, parks, and other uses. Areas with high ambient noise levels include those near highly trafficked thoroughfares, airports, railroads, or other loud activities.

Mobile Source Noise

According to the *2012 CEQR Technical Manual*, a detailed mobile source noise analysis is generally required if passenger car equivalent (PCE) values are at least doubled between existing and action conditions during the worse case expected hour at receptors likely to be most affected by the proposed action. The proposed action, which includes zoning map amendments, would facilitate the development of a 7-story mixed-use residential and local retail building, are not expected to significantly change traffic volumes in the general vicinity of the rezoning area. The proposed development would be a low- to moderate-density development that would consist of a total of approximately 60 DUs and approximately 9,300 gsf of local retail space, which is below the CEQR threshold requiring a preliminary transportation analysis in Zone 2 areas (areas located within 0.25 miles of subway stations)[6].

Developments that are Sensitive Receptors

As stated above, areas with high ambient noise levels include those near highly trafficked thoroughfares, airports, railroads, or other loud activities, which may create unacceptable background noise levels for developments that are sensitive receptors, such as residences, health care facilities, museums, schools, and parks. The proposed building on the development site would include 60 affordable DUs, and is therefore considered a sensitive receptor.

Since the predominant noise source in the area surrounding the development site is vehicular traffic, which is typical of most residential Brooklyn neighborhoods, a mobile source noise level analysis was conducted. Detailed information is provided in Attachment D, "Noise". Measured (existing) noise levels for the Pitkin Avenue building frontage were in the marginally unacceptable category I for the AM and PM peak hours, and in the marginally acceptable category for the midday (MD) peak hour. For the Berriman Street frontage the noise levels were in the marginally acceptable category for the AM and PM, and in the acceptable category for the MD.

The projected noise levels in the No-Action and With-Action conditions (build year 2016) for the Pitkin Avenue building frontage were in the marginally unacceptable I category for the AM and PM peak hours, and in the marginally acceptable category for the MD peak hour. For the Berriman Street frontage the noise levels were in the marginally unacceptable III category for the AM, in the marginally acceptable category in the PM, and in the acceptable category in the MD (refer to Tables D-7 and D-8 in Attachment D, "Noise").

[6] Refer to Table 16-1 in the *2012 CEQR Technical Manual.*

The With-Action noise levels for receptor location #1 was in the same category as the existing and No-Action noise levels for the AM, and PM peak hours (marginally unacceptable I), and in the MD peak hour (marginally acceptable). The With-Action noise levels for receptor location #2 in the MD and PM peak hours were in the same category as the existing and No-Action noise levels (acceptable and marginally acceptable, respectively). The No-Action and With-Action noise levels in the AM peak hour however, were in the marginally unacceptable III category, compared to marginally acceptable under existing conditions (refer to Tables D-5, D-7, and D-8 in Attachment D, "Noise").

The findings indicate that the required attenuation values to achieve interior noise levels of 45 dBA for residential use are 28 dBA for the building frontage at Pitkin Avenue (south façade), and 33 dBA for the building frontage along Berriman Street (east façade) and the frontage to the rear yard (north façade). To achieve interior noise levels of 50 dBA for commercial uses, standard double-glazed windows would be adequate for the Pitkin Avenue frontage, and 28 dBA would be required for the Berriman Street frontage (east façade) and the frontage to the rear yard (north façade).

As discussed in Attachment D, "Noise", to ensure the implementation of the specified attenuation requirements, an (E) designation for noise would be applied to the development site (Block 4005, Lot 28), specifying the appropriate minimum amount of window/wall attenuation required (for details refer to Table D-9 in Attachment D).

These measures would ensure that an acceptable exterior to interior noise attenuation is achieved based on expected With-Action noise conditions at the development site. Therefore, no significant adverse noise impacts are expected to occur as a result of the proposed action.

Stationary Sources

Generally, the stationary sources of noise that are considered by *CEQR* are associated with mechanical systems, i.e. building heating, ventilating and air-conditioning (HVAC) systems. Though the proposed building will employ these systems, it will be mainly residential (including 60 DUs), and local retail, and these HVAC systems are not expected to be unusually loud, and therefore, a detailed analysis is not required.

Construction Sources

Construction noise differs from normal vehicular traffic noise, which continues through the day and nighttime hours. Traffic noise, although varying in level, is a more continuous noise source. Construction noise sources consist of various types of equipment, both mobile and stationary, that are used during the various stages of the construction process, from site preparation to completion of a finished building. Equipment includes vehicles such as trucks and bulldozers, as well as generators, pile drivers, compressors, and power tools.

Community noise levels during construction of the proposed project would be temporarily elevated by construction equipment and vehicles traveling to and from the site. Noise levels vary by the type and number of construction vehicles/equipment and the distances to the receptors. The level of impact from these sources would depend on the noise characteristics of

the equipment, the activities involved, and their location relative to the residences. Noise levels would vary greatly depending on the specific construction activities in progress at a given point in time.

Although construction may take place over approximately 18 to 24 months, it is ultimately temporary in nature, and would be subject to compliance with the New York City Noise Code. Therefore, while the development site would be subject to construction noise during the work week and daytime hours, no long-term adverse noise impacts are expected as a result of the proposed development.

ATTACHMENT C
LAND USE, ZONING, AND PUBLIC POLICY

I. INTRODUCTION

Under the *2012 CEQR Technical Manual* guidelines, a land use analysis evaluates the uses and development trends in the area that may be affected by a proposed project, and determines whether that proposed project is compatible with those conditions or may affect them. Similarly, the analysis considers the project's compliance with, and effect on, the area's zoning and other applicable public policies.

This application is for zoning map amendments affecting the southern portion of a City tax block in the East New York area of Brooklyn Community District 5 ("the proposed action") to facilitate the construction of a new approximately 69,413 gsf mixed-use residential and commercial development. The area to be rezoned comprises approximately 30,000 sf and is generally bounded by Berriman Street to the east, Pitkin Avenue to the south, Shepherd Avenue to the west, and a depth of 150 feet from Pitkin Avenue to the north. It includes five privately owned tax lots on Block 4005 and is currently zoned R5 with a C1-3 commercial overlay.

The applicant, Pitkin-Berriman Housing Development Fund Corporation (HDFC), is proposing to rezone the majority of this area (lots fronting on Pitkin Avenue), from R5/C1-3 to R7A/C2-4 (mapped to a depth of 100 feet along Pitkin Avenue between Shepherd Avenue and Berriman Street), and to remove the C1-3 commercial overlay from the underlying R5 district in the remaining portion (lots fronting on Shepherd Avenue and Berriman Street) of the rezoning area.

The proposed action would facilitate the development of a 7-story mixed-use residential and commercial building on the development site (Lot 28), which is owned by the applicant and currently vacant. The proposed building would have approximately 60 dwelling units (DUs), which translates to approximately 60,113 gsf of residential space on the first through seventh floors, and approximately 9,300 gsf of local retail space on the ground floor, for a total of approximately 69,413 gsf of new development. The residential component would be developed in accordance with the Quality Housing Program. All of the residential units would be rental units for tenants earning between 30 to 60 percent of the Area Median Income. The required accessory parking spaces for the proposed development would be waived pursuant to New York City Zoning Resolution (ZR) Sections 25-261 and 36-232.

Under the guidelines set forth in the *2012 CEQR Technical Manual*, a preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. *CEQR* also requires a detailed assessment of land use conditions if a detailed assessment has been deemed appropriate for other technical areas. Since the proposed action involves a rezoning, a detailed land use and zoning assessment has been conducted. The detailed assessment discusses existing and future conditions with and

without the proposed action in the 2016 analysis year for a primary study area (coterminous with the rezoning area), and a secondary, 400-foot study area surrounding the rezoning area.

As discussed in Attachment A, "Project Description", in addition to the applicant's proposal for the development site there are no other projected or potential development sites in the rezoning area. The Reasonable Worst Case Development Scenario (RWCDS) associated with the proposed rezoning is identical with the proposed development, and would add 60 DUs (60,113 gsf of residential floor area) and 9,300 gsf of ground floor local retail to the portion of the rezoning area proposed to be zoned R7A. The analysis year for the proposed action is 2016.

The applicant will be constructing the residential portion of the development with affordable housing for low to very low income residents earning 30 to 60 percent of the Area Median Income, pursuant to the New York City Housing Development Corporation (NYCHDC) low income tax credit program. The applicant intends to seek the discretionary financing at a later date, and will undergo environmental review at that time.

II. METHODOLOGY

Existing land uses were identified by field surveys in February and September of 2012. New York City Zoning Maps and the Zoning Resolution of the City of New York were consulted to describe existing zoning districts in the study areas, and provided the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Research was conducted to identify relevant public policy documents, recognized by the New York City Department of City Planning (NYC DCP) and other city agencies.

Land use, zoning, and public policy are addressed and analyzed for two geographical areas for the proposed action: (1) rezoning area (which includes the development site), and (2) a secondary study area. For the purpose of this assessment, the secondary study area extends an approximate 400-foot radius from the boundary of the rezoning area and encompasses areas that have the potential to experience indirect impacts as a result of the proposed action. The secondary study area is roughly bounded by Belmont Avenue to the south, Montauk Avenue to the east, Glenmore Avenue to the north, and Linwood Avenue to the west (refer to Figure C-1).

III. PRELIMINARY ASSESSMENT

Land Use and Zoning

A preliminary assessment, which includes a basic description of existing and future land uses and zoning, should be provided for all projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. Since the proposed action includes zoning map changes, a detailed assessment of land use and zoning is warranted and provided in Section IV below. As a detailed assessment is warranted for the proposed action, the information that would typically be included in a preliminary assessment (e.g., physical setting, present land use, zoning information, etc.) has been incorporated into the detailed

Land Use Map



Legend

- Rezoning Area
- Development Site
- 400-Foot Radius
- One- and Two-Family Residential Walk-Up
- Multi-Family Residentiall Walk-Up
- Multi-Family Residential Elevator
- Mixed-Use
- Commercial
- Industrial
- Transportation and Warehousing
- Institutional
- Open Space
- Parking Facilities
- Vacant Land
- Unknown

assessment in Section IV below. As discussed in the detailed assessment, the proposed action is not expected to adversely affect land use or zoning.

Public Policy

An assessment of public policy should accompany an assessment of land use and zoning. According to the *2012 CEQR Technical Manual*, a project that would be located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, requires an analysis of public policy. A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports, which pertain to the study area. If the proposed projects could potentially alter or conflict with identified policies, a detailed assessment should be conducted; otherwise, no further analysis of public policy is necessary. As described below, the proposed action would be aligned with the only public policy for the project area. Therefore, a detailed assessment of public policies is not warranted.

The rezoning area and the study area are not governed by a 197-a plan, designated in-place industrial parks or Industrials Business Zones (IBZs), nor do they fall within the coastal boundary area that is governed by the City's Waterfront Revitalization Program (WRP). In addition, the proposed action does not involve the siting of any public facilities (Fair Share). There is, however, one other public policy applicable to the proposed action, which affects the rezoning area and study area. It is discussed in detail below.

Sustainable Communities East New York Planning Study

The NYC DCP Brooklyn Borough Office partnered with the applicant, Pitkin-Berriman Housing Development Fund Corporation (HDFC)[1] (among others), to conduct the Sustainable Communities East New York Planning Study, which encompasses the applicant's property and the proposed rezoning in East New York. This planning study is led by the NYC DCP Brooklyn Borough Office and funded through the United States Department of Housing and Urban Development (HUD)'s Sustainable Communities Regional Planning Grant Program, which had its third anniversary in June of 2012. The City of New York is a member of the New York-Connecticut Sustainable Communities Consortium, which is coordinated by the Regional Plan Association. A central goal of the Sustainable Communities program is to link strategies on a metropolitan scale that would foster the creation of mixed-income housing, employment and infrastructure in locations connected by the region's commuter rail network.

The New York-Connecticut Sustainable Communities Consortium aims to develop livable communities and growth centers around the region's commuter rail network that will expand economic opportunity by creating and connecting residents to jobs, fostering new affordable, energy-efficient housing, providing more transportation choices, strengthening existing communities and making the region more globally competitive. The initiative is working to

[1] HDFC is a New York State Not-For-Profit Housing Development Fund Corporation, and a wholly-owned subsidiary of Cypress Hills Local Development Corporation (CHLDC). CHLDC is a non-profit community-based organization with the mission to revitalize the Cypress Hills and East New York communities through housing preservation, economic development, and the positive development of youth and families.

reduce congestion, improve the environment and create a strategy to build resilience to the effects of climate change in NYC, with applications for other parts of the region.

As part of that effort, the NYC DCP Brooklyn Borough Office is collaborating with local communities and civic partners in the Sustainable Communities East New York Planning Study to develop a broad and long-term strategy for the Cypress Hills and East New York neighborhoods[2]. The study area is bounded by Broadway Junction to the west (major transit hub where the A, C, L, J, and Z trains meet), Fulton Street to the north (with the J and Z subway lines underneath), Conduit Avenue to the east, and Pitkin Avenue to the south (with the A and C subway lines underneath), and also includes Atlantic Avenue, with the Long Island Railroad running below grade. The study area has high transit accessibility, and includes a mixed-use, predominantly low-income community with substantial amounts of vacant and underutilized land. The area's transit accessibility and the availability of vacant and underutilized properties provide opportunities for the development of housing and increased neighborhood services, such as local retail and community facilities[3].

The proposed rezoning area (including the development site) and the majority of the study area are located within the study area of the Sustainable Communities East New York Planning Study. The proposed development on the development site would provide much needed affordable housing units, as documented on the priority list of the annual Brooklyn Community Board 5 Community Needs Assessment. All 60 DUs in the proposed building would be affordable to very low and low-income income households earning between 30 and 60 percent of the Area Median Income (AMI), respectively.

In addition, the proposed development would also include a 9,300 gsf local retail space on the ground floor of the proposed building. This ground retail floor space is expected to be occupied by a supermarket that carries fresh fruits and vegetables, and offers healthy food choices that are not typically provided in existing delis and bodegas in the neighborhood. Therefore, the availability of local retail space in the East New York neighborhood would be enhanced and the accessibility of healthy food items would be improved by the proposed development. In the long term, the applicant aims to revive the former commercial corridor along Pitkin Avenue by introducing new local retail within the proposed development.

The proposed building is located on the same block as the Shepherd Avenue subway station, which serves the C subway line. Residents of the proposed building and shoppers of the local retail space would be in the immediate vicinity and have direct access to the Shepherd Avenue subway stop.

The proposed rezoning is also expected to enhance the character of the rezoning area by facilitating development on a currently vacant and underutilized site. The proposed building would extend along Pitkin Avenue for the entire length of the applicant's property (approximately 156 feet), thereby creating a continuous street wall. The rezoning and

[2] NYC DCP is also conducting an evaluation of land use and transportation opportunities near Metro-North Stations in the Bronx, and several activities to advance citywide strategic planning efforts for building climate resilience.

[3] Source: NYC DCP (http://www.nyc.gov/html/dcp/html/sustainable_communities/index.shtml).

associated development on the development site would contribute to the enhancement of the streetscape along Pitkin Avenue.

Assessment

The proposed action and resulting development would therefore be significantly aligned with the consortium's plans and the goals of the East New York Planning Study. The proposed development would be one of the first such projects to be implemented in the Pitkin Avenue corridor. No significant adverse public policy impacts or inconsistencies are expected to result from the proposed action. Therefore, the proposed action would not require further analysis of public policy.

IV. DETAILED ASSESSMENT

Existing Conditions

Land Use

Rezoning Area

The proposed rezoning area encompasses 30,000 sf and is located in the East New York area of Brooklyn Community District 5. It includes Lots 1, 2, 28, 35, and 38 on Block 4005. The applicant's development site (Lot 28), which fronts on Pitkin Avenue and Berriman Street, is currently vacant. In addition to the applicant's property, the rezoning area also includes four other tax lots that are not controlled by the applicant, and currently privately-owned by four different parties (Lots 1, 2, 35, and 38). All four lots are currently occupied by existing buildings. Lots 1 and 2, which front on Shepherd Avenue, include 3-story residential buildings, while the corner lot at Pitkin Avenue and Shepherd Avenue, Lot 35, includes a 3-story building with ground floor local retail and two DUs on its upper two floors, and Lot 38, which fronts on Pitkin Avenue (and is adjacent to Lot 35), includes a 3-story residential building that houses two DUs.

Study Area

Land uses in the study area are primarily residential, and the predominant residential building types are attached, up to 3-story single-family and multi-family walk-up buildings. The study area also includes some mixed-use residential and commercial buildings along the north- and south sides of Pitkin Avenue, and a few industrial, warehousing, and transportation-related uses as well as some vacant lots.

The blocks in the southern portion of the study area (south of Pitkin Avenue) are homogenously residential, with some mixed-use buildings along the south side of Pitkin Avenue. These ground floor retail spaces include a clothing store at 2482 Pitkin Avenue, Angel's Barber Shop at 2484 Pitkin Avenue, and one other ground floor retail space, which is currently vacant (2486 Pitkin Avenue). There are also three vacant lots and one parking facility in the southern portion of the study area.

The blocks in the northern portion of the study area (north of Pitkin Avenue) include a wider variety of uses. In addition to residential uses, a few mixed-use buildings are located along the north side of Pitkin Avenue. These include a liquor store and vegetable market, located adjacent to the east of the day care building at 2517 Pitkin Avenue. Institutional uses located in the northern portion of the study area are comprised of a house of worship and educational facilities: Christ the World Restoration Church International at 770 Glenmore Avenue, the Charles Hamilton Early Child Hood Academy across the development site at 2505 Pitkin Avenue, and P.S. 345 Patrolman Robert Bolden at 111 Berriman Street (serving pre-K through 5th grade). Three warehouses with industrial uses are located on the same block as the rezoning area, at 148, 152, and 154 Berriman Street. Two vacant lots at the corner of Berriman Street and Glenmore Avenue are used by a construction company to store materials and equipment. The northern portion of the block to the east of the subject block includes D&M Collision and Auto Repair on 810 Glenmore Avenue, and T&T Express LLC, a shipping company, located on 820 Glenmore Avenue. The two blocks to the west of the subject block include several vacant lots. On the north side of Glenmore Avenue, there is a cluster of industrial and car-related uses. The U-Haul Neighborhood Dealer is located at 351 Essex Street, Atlantic Ice and Kerosene at 355 Shepherd Avenue, New York Cali Auto Body Shop at 793-795 Glenmore Avenue, and Chas W. Habacker Inc. Moving, Storage, Warehouse at 805 Glenmore Avenue. Several parking facilities are located futher north, beyond the 400-foot study area boundary.

Zoning

Rezoning Area

The rezoning area (Lots 1, 2, 28, 35, and 38) is mapped within a residential R5 zoning district with a C1-3 commercial overlay (mapped to a depth of 150 feet along Pitkin Avenue between Berriman Street and Shepherd Avenue).

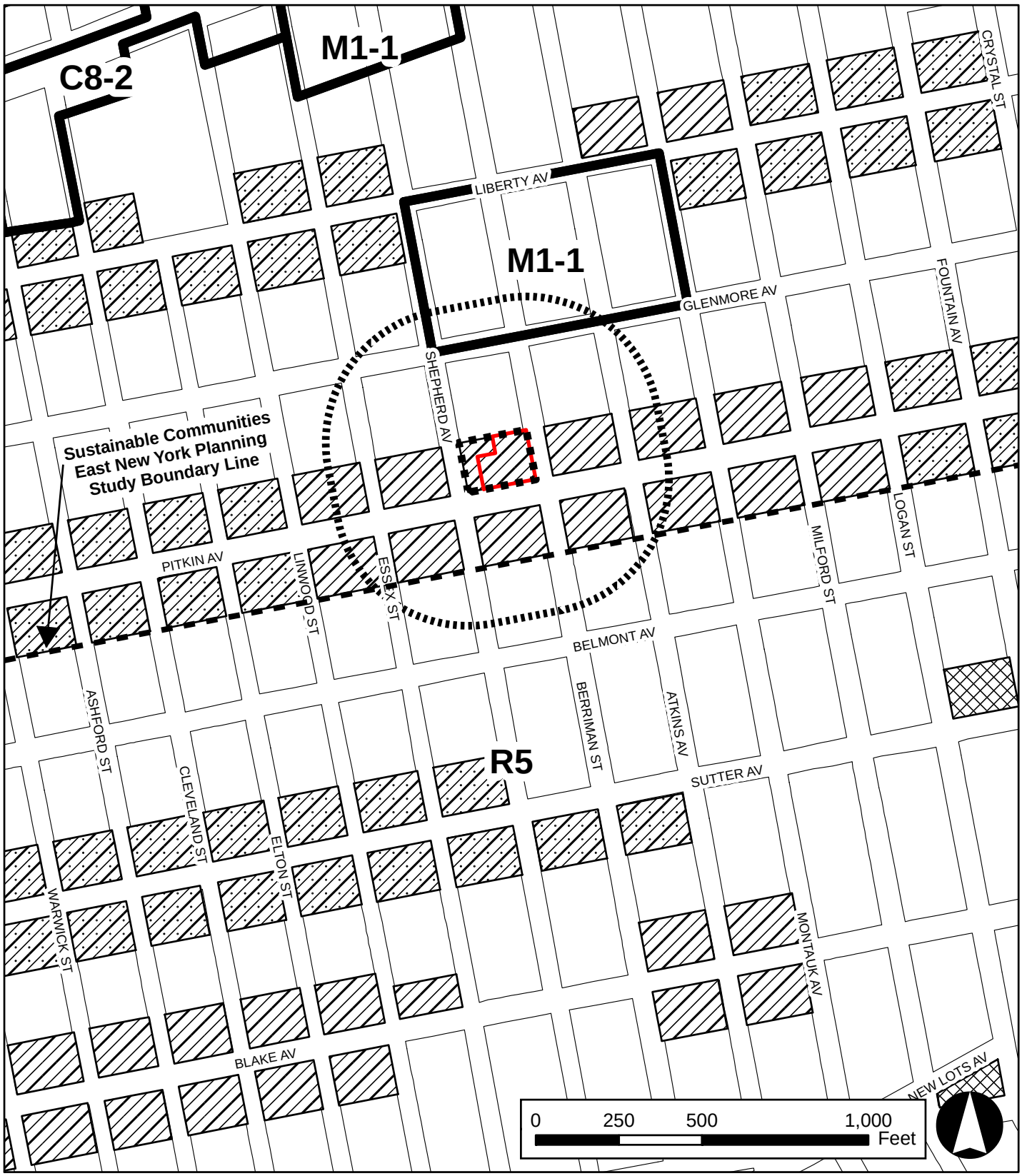
R5 is a residential zoning district widely mapped in Brooklyn, which allows a maximum floor area ratio (FAR) of 1.25 for residential uses and up to an FAR of 2.0 for community facility uses. R5 zoning districts typically produce 3-story attached houses and small apartment houses. C1-3 commercial overlays are mapped within residence districts along major thoroughfares in medium and higher density areas. C1-3 overlays accommodate the local retail and personal service shops needed in residential neighborhoods. The commercial FAR for a C1-3 district mapped within R5 zoning districts is 1.0, with an overlay district depth of 150 feet.

Study Area

The majority of the study area is zoned R5, except for a small portion to the northeast of the rezoning area, which is zoned M1-1 (see Figure C-2).

M1-1 manufacturing districts allow a maximum commercial and light industrial/manufacturing FAR of 1.0, and typically produce 1-story structures. Certain community facility uses are allowed up to an FAR of 2.4 in M1-1 districts. Generally, M1 manufacturing zoning districts are buffers between M2 and M3 districts and adjacent residential districts. M1 manufacturing districts typically include light manufacturing uses that meet high performance standards, such as woodworking shops, repair shops, and wholesale services, and storage facilities.

Existing Zoning



Legend

Rezoning Area | 400-Foot Radius | Development Site | Zoning District

Commercial Overlays: C1-2 | C1-3 | C2-3

Future without the Proposed Actions

This section describes conditions that are expected to exist in the project's build year (2016) absent the proposed action.

Land Use

Rezoning Area

In the absence of the proposed zoning changes, no change in the maximum allowable FAR would occur, and no new uses that are not currently permitted would be allowed. The existing R5 residential zoning with a C1-3 commercial overlay would remain.

In the 2016 future without the proposed action, the applicant would develop an as-of-right, 4-story mixed-use residential, community facility, and commercial building with an underground parking garage on the development site, which would comply with the requirements set forth by the existing R5/C1-3 zoning district. As shown in Table C-1, the proposed as-of-right building would include a total of approximately 55,831 gsf, which would be comprised of approximately 5,000 gsf of local retail space and approximately 10,000 gsf of community facility space on the ground floor, and approximately 25,781 gsf of residential area on the first through fourth floors (34 DUs)[4]. The required 43 accessory parking spaces[5] would be provided in an underground parking garage with a size of approximately 15,050 sf[6]. This as-of-right development would add approximately 102 residents[7] and 37 employees (15 retail[8] and 22 community facility employees[9]) to the development site.

Table C-1
No-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses
25,781 gsf (34 DUs)	5,000 gsf	10,000 gsf	15,050 gsf (43 spaces)	55,831 gsf

The as-of-right building would rise three stories tall to an elevation of 30 feet above the street lot lines (maximum street wall height within an R5 district), and the building's fourth floor would be set back by 15 feet from both Pitkin Avenue and Berriman Street, and rise up to a height of 40 feet (maximum allowable building height in an R5 district). The required

[4] Pursuant to ZR Section 23-22, 34 DUs result from the DU Factor for R5 zoning districts (760 gsf), and the fact that the as-of-right building with a residential component of 25,781 gsf would require to maximize the number of DUs to make the development financially feasible.

[5] Pursuant to ZR Sections 25-25, 25-31, and 36-21: 24 spaces for residential, 2 spaces for community facility use, and 17 for commercial use, respectively.

[6] Assumption: 350 gsf per parking space.

[7] Source: 2.99 people per household; NYC DCP Community District Demographic Profiles (Census 2010).

[8] Assumption: 3 retail employees per 1,000 gsf.

[9] Assumption: 1 community facility employee per 450 gsf.

accessory open space would be 9,281 sf[10]. This accessory open space area would be provided in the rear of the as-of-right building on the northern portion of the development site.

Study Area

It is expected that no change in land use would occur in the study area. The study area would continue to exhibit a mix of predominantly residential uses with some institutional, industrial, and transportation-related uses interspersed. There are no known development projects within the study area.

Zoning

No changes to zoning would occur in the rezoning area. The existing R5/C1-3 zoning would remain. In addition, there are no known rezoning proposals for the study area expected by 2016.

Future with the Proposed Actions

Land Use

Rezoning Area

The proposed zoning map amendments would map an R7A zoning district with a C2-4 commercial overlay on the north side of Pitkin Avenue between Shepherd Avenue and Berriman Street for a depth of 100 feet, thereby increasing the maximum allowable residential FAR from 1.25 to 4.0, the maximum community facility FAR from 2.0 to 4.0, and the maximum commercial FAR from 1.0 to 2.0 on a portion of Lot 28, Lot 35, and Lot 38 on Block 4005.

The proposed action would alter the land use on the development site (Lot 28), and is expected to lead to positive changes for the rezoning area and larger study area. In the 2016 future with the proposed action, within the portion of the rezoning area that is proposed to be rezoned R7A/C2-4, it is anticipated that a total of 60 DUs (60,113 gsf) would be developed in a 7-story mixed-use building. In addition, the proposed building would also contain 9,300 gsf of retail space, for a total of 69,413 gsf of new development (refer to Table C-2). Approximately 10,175 sf of accessory open space would be provided in the in the rear of the proposed building (refer to Figure A-4 in Attachment A, "Project Description")[11]. Residential and retail accessory parking requirements for the proposed development would be waived pursuant to ZR Section 25-261 and ZR Section 36-232, respectively, and no accessory parking spaces would be provided.

[10] Pursuant to ZR Section 23-17: Open Space required for R5 portion: Interior Lot Requirement 45% of 20,625 sf = 9,281 sf.

[11] Pursuant to ZR Section 77-23: Open Space required for R5 portion: Interior Lot Requirement 45% of 5,000 sf = 2,250 sf; Open Space required for R7A portion: a) corner lot: 20% of 10,000 sf = 2,000 sf and b) interior lot: 35% of 5,625 sf = 1,969 sf (total required open space = 2,250 sf + 2,000 sf + 1,969 sf = 6,219 sf). Provided will be 10,175 sf.

Table C-2
With-Action Development Program

Residential	Local Retail	Community Facility	Parking Garage	Total Building Uses
60,113 gsf (60 DUs)	9,300 gsf	0 gsf	0 gsf*	69,413 gsf

* The accessory parking spaces required as a result of the proposed development would be waived pursuant to ZR Sections 22-261 and 36-232.

The proposed rezoning from R5 to R7A would allow the applicant to increase the amount of housing units by 26 DUs (34,332 gsf) from 34 to 60 DUs and the amount of commercial area by one FAR. The new contextual zoning would be more reflective of the proposed character for Pitkin Avenue in the Sustainable Communities East New York Planning Study, which is characterized by higher density mixed-use buildings with affordable residential units and local retail spaces, constructed in proximity to public transportation.

The proposed action would not generate land uses in the rezoning area that would be incompatible with surrounding uses, nor would it displace land uses in such a way as to adversely affect surrounding land uses. Therefore, the proposed project would support land use trends in the rezoning area. No significant adverse land uses impacts are expected as a result of the proposed action.

Study Area

The study area would not undergo any development as a result of the proposed action. The proposed action would have no direct effect on land uses in the study area. As noted above, blocks immediately surrounding the rezoning area primarily support residential uses, with some mixed-use buildings, industrial, warehousing, and automotive-related uses. The proposed development is expected to be compatible with the existing uses of the surrounding area. The proposed action is intended to develop an approximately 20,625 sf underutilized site into a productive mixed-use residential and commercial development that would add 60 future housing units (60,113 gsf) and 9,300 gsf of local retail space to the neighborhood. Therefore, the proposed action would not introduce new land uses that would be incompatible with their surroundings, and are not expected to result in significant adverse land use impacts in the study area.

Zoning

As described above, the proposed action includes zoning map amendments for five lots (Lots 1, 2, 28, 35, and 38) that are located on Block 4005 in the East New York area of Brooklyn Community District 5. The proposed zoning map changes would affect an area of approximately 30,000 sf that is generally bounded by Berriman Street to the east, Pitkin Avenue to the south, Shepherd Avenue to the west, and Glenmore Avenue to the north. The applicant is proposing to rezone the majority of this area (i.e., lots fronting on Pitkin Avenue), from R5/C1-3 to R7A/C2-4. The proposed R7A/C2-4 would be mapped to a depth of 100 feet along Pitkin Avenue between Shepherd Avenue and Berriman Street. In addition, the proposed zoning changes would remove the C1-3 commercial overlay from the underlying R5 district in

the remaining portion (i.e., lots fronting on Shepherd Avenue and Berriman Street) of the rezoning area. Figure C-3 shows the existing and the proposed zoning.

The R7A zoning district is a contextual zoning district, which typically produces medium-density apartment houses. Contextual zoning districts regulate the height, bulk, and setback of new buildings. The goal of contextual zoning is to create new buildings that are consistent with the existing neighborhood character. The proposed R7A zoning district is a contextual district that allows a maximum FAR of 4.0 for residential use, while the maximum allowable lot coverage is 65 percent for an interior lot (such as Lot 38), and 80 percent for a corner lot (such as Lots 28 and 35). Community facility uses are allowed up to a maximum FAR of 4.0. The minimum and maximum building base heights are 40 and 65 feet, respectively, and the maximum building height is limited to 80 feet. The R7A/C2-4 zoning district indicates commercial overlay within residence districts. C2 commercial overlays mapped within an R7A residential district allow commercial uses up to an FAR of 2.0.

Table C-3 provides a comparison of the uses and bulk regulations permitted under the existing and proposed zoning districts. As indicated in Table C-3, the proposed R7A/C2-4 zoning designation would permit new residential and community facility development to a maximum permitted FAR of 4.0, and new commercial development to a maximum permitted FAR of 2.0. This would represent a higher permitted maximum FAR than is allowed under the existing R5/C1-3 districts, which have a maximum permitted residential and community facility FAR of 1.25 and 2.0, respectively. The allowable use groups would be the same under the existing R5/C1-3 and the proposed R7A/C2-4 zoning. As for the lots that would be affected by the proposed C1-3 commercial overlay removal from the underlying R7-1 zoning district, there would be no change in FAR for residential and community facility uses, and therefore, the proposed action would not result in any changes to bulk, height, and setback regulations.

Table C-3
Comparison of Zoning Regulations: R5/C1-3 with R7A/C2-4

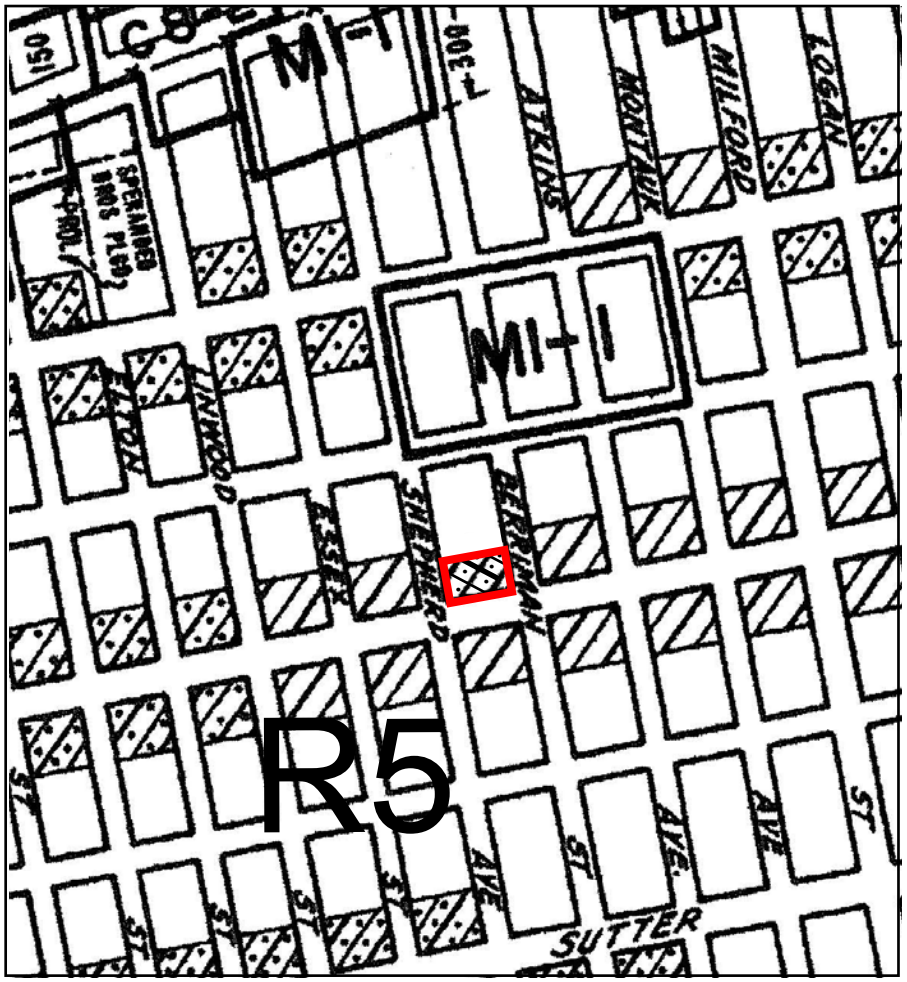
	Existing - R5/C1-3	**Proposed - R7A/C2-4**
Maximum FAR	Residential: 1.25 Community Facility: 2.0 Commercial: 1.0 (in overlay)	Residential: 4.0 Community Facility: 4.0 Commercial: 2.0 (in overlay)
Use Groups	1-4 in Residential District 1-6 in C1-3 Commercial Overlay	1-4 in Residential District 1-9, 14 in C2-4 Commercial Overlay
Streetwall Height	30’ maximum	40’ minimum base height 65' maximum base height
Height	40’ max building height	80' max. building height

In addition, the proposed C1-3 commercial overlay removal from the underlying R7-1 zoning district would not result in any non-conforming uses, as there are currently no commercial uses in this area.

Existing Zoning R5/C1-3



Proposed Zoning R7A/C2-4 and R5



Proposed R7A Zoning District Boundary

Proposed C2-4 Commercial Overlay

As noted in Attachment A, "Project Description", the residential component would be developed in accordance with the Quality Housing Program, which is mandated in contextual zoning districts. The Quality Housing Program sets certain quality standards for building safety, landscaping, recreation space and other amenities. Quality Housing buildings must have amenities relating to the planting of trees, landscaping and recreation space.

Quality Housing regulations produce high lot coverage buildings in R7A districts, with a maximum residential of 4.0 FAR. Also, the Quality Housing Program requires the planting of one street tree per 25 feet of building street frontage. Recreation space has to be accessible from the residential areas of mixed-use buildings. The minimum requirements for outdoor recreation space are 225 sf or 3.3 percent of the residential floor area. An area of approximately 10,175 sf would be provided for accessory recreational use to the residents of the building (refer to Figure A-4 in Attachment A, "Project Description").

As described above, the zoning changes proposed in the rezoning area, which will lead to land use changes on the development site, would be compatible with the existing zoning and uses in the study area. No land use changes are expected to occur as a result of the proposed zoning changes on the remaining four lots of the rezoning area.

The new contextual zoning would be more reflective of the proposed character for Pitkin Avenue (among other thoroughfares) in the Sustainable Communities East New York Planning Study, which is characterized by higher density mixed-use buildings with affordable residential units and local retail spaces, constructed in proximity to public transportation. None of the existing uses would become nonconforming as a result of the proposed action. Therefore, no significant adverse zoning impacts would occur.

V. ASSESSMENT/CONCLUSION

Land Use

The proposed zoning map changes would not result in a significant change of land use in the rezoning area as the uses allowed under the proposed zoning districts would be identical to uses that are currently allowed. Therefore, the land uses resulting from the rezoning would be consistent with existing land use patterns and trends in both the rezoning area and the surrounding area. The proposed rezoning to R7A/C2-4 would add a total of approximately 60,113 gsf of residential floor area to the neighborhood. In addition, 9,300 gsf of retail space would be included in the proposed building, and therefore increase the space available for this neighborhood service. The proposed zoning change would better reflect existing uses in the respective portions of the rezoning area since the current use of these lots does not include commercial uses.

The proposed rezoning to R7A/C2-4 would create opportunities for new residential uses on an underutilized site in an area where a high demand for affordable housing exists. The proposed development would complement existing residential and local retail uses in the neighborhood. This would reinforce and enhance the emerging character of the area, and be a model for future similar developments along Pitkin Avenue. The proposed development would also create a

street wall connecting to the existing residential building west and north of the development site.

The development would not introduce a new or incompatible land use to the rezoning area and the study area. In addition, the proposed action would not adversely affect any of the existing buildings in the rezoning area. Accordingly, the proposed action would not result in significant adverse land use impacts.

Zoning

The proposed rezoning would facilitate a new 7-story mixed-use development on the development site. The new contextual zoning would be more reflective of the proposed character for Pitkin Avenue (among other thoroughfares) in the Sustainable Communities East New York Planning Study, which is characterized by higher density mixed-use buildings with affordable residential units and local retail spaces, constructed in proximity to public transportation. None of the existing uses would become nonconforming as a result of the proposed action.

With the R7A/C2-4 zoning expected to generate development compatibility with existing uses in the study area, the proposed action is not expected to result in any significant adverse impact to zoning.

Public Policy

The proposed development would be aligned with the goals described in the Sustainable Communities East New York Planning study, the only public policy applicable to the rezoning area and study area. Therefore, the proposed action is not expected to result in any significant adverse impacts to public policies.

ATTACHMENT D
NOISE

I. INTRODUCTION

The proposed action, which includes zoning map amendments, would facilitate the development of a 7-story mixed-use residential and local retail building, are not expected to significantly change traffic volumes in the general vicinity of the rezoning area. The proposed development would be a low- to moderate-density development that would consist of a total of approximately 60 DUs and approximately 9,300 gsf of local retail space, which is below the CEQR threshold requiring a preliminary transportation analysis in Zone 2 areas (areas located within 0.25 miles of subway stations)[1].

However, it is assumed that the existing traffic conditions at Pitkin Avenue and Berriman Street, where the proposed development's building frontages would be located, would be the main sources of existing noise for the development site. Therefore, a noise analysis for the proposed development was conducted to determine ambient noise levels and the level of building attenuation necessary to ensure that interior noise levels of the proposed development satisfy applicable interior noise criteria[2]. Based on a field survey of land uses in the area, it was determined that no stationary noise sources contribute significantly to noise levels in the area, and a stationary noise source analysis would not be necessary.

II. NOISE FUNDAMENTALS

Quantitative information on the effects of airborne noise on people is well documented. If sufficiently loud, noise may adversely affect people in several ways. For example, noise may interfere with human activities such as sleep, speech communication, and tasks requiring concentration or coordination. It may also cause annoyance, hearing damage, and other physiological problems. Although it is possible to study these effects on people on an average or statistical basis, it must be remembered that all the stated effects of noise on people vary greatly with the individual. Several noise scales and rating methods are used to quantify the effects of noise on people. These scales and methods consider factors such as loudness, duration, time of occurrence, and changes in noise level with time.

[1] Refer to Table 16-1 in the *2012 CEQR Technical Manual.*
[2] Pursuant to 2012 CEQR standards.

"A"-Weighted Sound Level (dBA)

Noise is typically measured in units called decibels (dB), which are ten times the logarithm of the ratio of the sound pressure squared to a standard reference pressure squared. Because loudness is important in the assessment of the effects of noise on people, the dependence of loudness on frequency must be taken into account in the noise scale used in environmental assessments. Frequency is the rate at which sound pressures fluctuate in a cycle over a given quantity of time, and is measured in Hertz (Hz), where 1 Hz equals 1 cycle per second. Frequency defines sound in terms of pitch components. In the measurement system, one of the simplified scales that accounts for the dependence of perceived loudness on frequency is the use of a weighting network - known as A-weighting - that simulates the response of the human ear. For most noise assessments, the A-weighted sound pressure level in units of dBA is used due to its widespread recognition and its close correlation to perception. In this analysis, all measured noise levels are reported in dBA or A-weighted decibels. Common noise levels in dBA are shown in Table D-1.

Table D-1
Common Noise Levels

Sound Source	(dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Soft Whisper at 5 meters	30
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Source: *2012 CEQR Technical Manual* / Cowan, James P. Handbook of Environmental Acoustics. Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

Note: A 10 dBA increase appears to double the loudness, and a 10 dBA decrease appears to halve the apparent loudness.

Community Response to Changes in Noise Levels

Table D-2 shows the average ability of an individual to perceive changes in noise. Generally, changes in noise levels less than 3 dBA are barely perceptible to most listeners. However, as illustrated in Table D-2, 5 dBA changes are readily noticeable. 10 dBA changes are normally perceived as doublings (or halvings) of noise levels. These guidelines permit direct estimation of an individual's probable perception of changes in noise levels.

Table D-2
Average Ability to Perceive Changes in Noise Levels

Change (dBA)	Human Perception of Sound
2-3	Barely perceptible
5	Readily noticeable
10	A doubling or halving of the loudness of sound
20	A dramatic change
40	Difference between a faintly audible sound and a very loud sound

Source: Bolt Beranek and Neuman, Inc., Fundamentals and Abatement of Highway Traffic Noise, Report No. PB-222-703. Prepared for Federal Highway Administration, June 1973.

Noise Descriptors Used In Impact Assessment

Because the sound pressure level unit, dBA, describes a noise level at just one moment, and very few noises are constant, other ways of describing noise over extended periods have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the "equivalent sound level", L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted as $L_{eq(24)}$), conveys the same sound-energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are sometimes used to indicate noise levels that are exceeded 1, 10, 50, 90 and x percent of the time, respectively. Discrete event peak levels are given as L_1 levels. L_{eq} is used in the prediction of future noise levels, by adding the contributions from new sources of noise (i.e., increases in traffic volumes) to the existing levels and in relating annoyance to increases in noise levels.

For the purposes of this analysis, the maximum 1-hour equivalent sound level ($L_{eq(1)}$) has been selected as the noise descriptor to be used in the noise impact evaluation. $L_{eq(1)}$ is the noise descriptor used in the *2012 New York City Environmental Quality Review (CEQR) Technical Manual* for noise impact evaluation, and is used to provide an indication of highest expected sound levels. $L_{10(1)}$ is the noise descriptor used in the *2012 CEQR Technical Manual* for building attenuation. Hourly statistical noise levels (particularly L_{10} and L_{eq} levels) were used to characterize the relevant noise sources and their relative importance at each receptor location.

Applicable Noise Codes and Impact Criteria

New York City Noise Code

The New York City Noise Control Code, amended in December 2005, contains prohibitions regarding unreasonable noise and specific noise standards, including plainly audible criteria for specific noise sources. In addition, the amended code specifies that no sound source operating in connection with any commercial or business enterprise may exceed the decibel levels in the designated octave bands at specified receiving properties.

New York 2012 CEQR Technical Manual Noise Standards

The New York City Department of Environmental Protection (DEP) has set external noise exposure standards. These standards are shown in Table D-3.

Table D-3
Noise Exposure Guidelines for Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	---------- Ldn ≤ 60 dBA ----------		---------- 60 < Ldn ≤ 65 dBA ----------		(1) 65 < Ldn ≤ 70 dBA, (II) 70 ≤ Ldn		---------- Ldn ≤ 75 dBA ----------
2. Hospital, Nursing Home		$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 65$ dBA		$65 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		$65 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		$55 < L_{10} \leq 70$ dBA		$70 < L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient 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[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

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

Notes:

(i) 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 amphitheaters, 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 old-age homes.

[3] One may use the FAA-approved L_{dn} 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).

Noise Exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The standards shown are based on maintaining an interior noise level for the worst-case hour L_{10} of less than or equal to 45 dBA. Attenuation requirements are shown in Table D-4.

Table D-4
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise level with proposed project	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Attenuation[A]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^{B}$ dB(A)

Note: [A] The above composite window-wall attenuation values are for residential dwellings. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
[B] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.
Source: New York City Department of Environmental Protection / 2012 CEQR Technical Manual, Table 19-3

In addition, the *2012 CEQR Technical Manual* uses the following criteria to determine whether a proposed residential development would be subject to a significant adverse noise impact. The impact assessments compare the projected future With-Action condition $L_{eq(1)}$ noise levels to those calculated for the No-Action condition. If the No-Action levels are less than 60 dBA $L_{eq(1)}$ and the analysis period is not a nighttime period, the threshold for a significant impact would be an increase of at least 5 dBA $L_{eq(1)}$. For the 5 dBA threshold to be valid, the resultant With-Action condition noise level would have to be equal to or less than 65 dBA. If the No-Action noise level is equal to or greater than 62 dBA $L_{eq(1)}$, or if the analysis period is a nighttime period (defined in the CEQR standards as being between 10 PM and 7 AM), the incremental significant impact threshold would be 3 dBA $L_{eq(1)}$. (If the No-Action noise level is 61 dBA $L_{eq(1)}$, the maximum incremental increase would be 4 dBA, since an increase higher than this would result in a noise level higher than the 65 dBA $L_{eq(1)}$ threshold).

III. NOISE PREDICTION METHODOLOGY

Proportional Modeling

Proportional modeling was used to determine No-Action and With-Action noise levels at two receptor locations (at Pitkin Avenue and at Berriman Street), which are discussed in more detail below. Proportional modeling is one of the techniques recommended in the New York City *2012 CEQR Technical Manual* for mobile source analysis.

Using this technique, the prediction of future noise levels, where traffic is the dominant noise source, is based on a calculation using measured existing noise levels and predicted changes in traffic volumes to determine No-Action and With-Action noise levels. Vehicular traffic volumes, which are counted during the noise recording, are converted into Passenger Car Equivalent (PCE) values, for which one medium-duty truck (having a gross weight between 9,900 and 26,400 pounds) is assumed to generate the noise equivalent of 13 cars, and one

heavy-duty truck (having a gross weight of more than 26,400 pounds) is assumed to generate the noise equivalent of 47 cars, and one bus (vehicles designed to carry more than nine passengers) is assumed to generate the noise equivalent of 18 cars. Future noise levels are calculated using the following equation:

FNA NL =10 log (NA PCE/E PCE) + E NL

where:

FNA NL = Future No-Action Noise Level
NA PCE = No-Action PCEs
E PCE = Existing PCEs
E NL = Existing Noise Level

Sound levels are measured in decibels and therefore increase logarithmically with sound source strength. In this case, the sound source is traffic volumes measured in PCEs. For example, assume that traffic is the dominant noise source at a particular location. If the existing traffic volume on a street is 100 PCE and if the future traffic volume were increased by 50 PCE to a total of 150 PCE, the noise level would increase by 1.8 dBA. Similarly, if the future traffic were increased by 100 PCE, or doubled to a total of 200 PCE, the noise level would increase by 3.0 dBA.

Analyses for the proposed development were conducted for three typical weekday time periods: the AM peak hour (8am to 9am), the midday peak hour (12pm to 1pm), and the PM peak hour (5pm to 6pm). These time periods are the hours when the maximum traffic generation is expected and, therefore, the hours when future conditions with the proposed action are most likely to result in maximum noise impacts for the receptor locations.

For the purpose of this analysis, during the noise recording vehicles were counted and classified. To calculate the No-Action PCE values in Brooklyn, an annual background growth rate of 0.50 percent for the Build Year of 2016 was added to the PCE noise values based on counted vehicles[3]. In order to obtain the necessary future With-Action noise PCE values to calculate the With-Action noise levels, a preliminary trip generation analysis for the future without and with the proposed action was conducted including transportation planning assumptions and travel demand forecast (refer to Appendix 5). The incremental amount of vehicles generated per hour in comparison to the No-Action condition was estimated at 12 autos for the AM peak hour, 12 autos for the MD peak hour, and 10 autos for the PM peak hour. For the purposes of trip assignment it was assumed that about three quarter of the development-generated autos per peak hour would travel east- and westbound along Pitkin Avenue (9 vehicles in the AM and MD, 8 vehicles in the PM), and about one quarter would travel northbound along Berriman Street (3 vehicles in the AM and MD, 2 vehicles in the PM).

[3] Calculation according to Table 16-4 in the *CEQR Technical Manual 2012*.

IV. EXISTING CONDITIONS

The rezoning area, which is comprised of Lots 1, 2, 28, 35, and 38 on Block 4005, is generally bounded by Berriman Street to the east, Pitkin Avenue to the south, Shepherd Avenue to the west, and a depth of 150 feet from Pitkin Avenue to the north. The applicant's development site (Lot 28) is currently vacant. The remaining four lots are occupied by 3-story residential buildings, one of which also includes a deli on the ground floor.

As shown in Figure D-1, Berriman Street is a one-way northbound street with one travel lane and parking lanes on both sides of the street. Pitkin Avenue is a two-way street with one travel lane in each direction, and a parking lane on both sides of the street. The intersection of Berriman Street and Pitkin Avenue is signalized. The development site has excellent access to public transportation. The Shepherd Avenue subway station, serving the A and C subway lines, which travel below grade, is located at the corner of Pitkin and Shepherd Avenues.

Highly trafficked thoroughfares in the study area include Atlantic Avenue, which is located two blocks north of the rezoning area, and Linden Boulevard/the POW/MIA Memorial Highway (also Sunrise Highway, New York State Highway 27), which is located about six blocks to the south of the rezoning area. Approximately fourteen blocks to the east is Conduit Boulevard, and approximately sixteen blocks to the west is Pennsylvania Avenue. Conduit Boulevard is a major north-south artery that connects Atlantic Avenue with the Belt Parkway, Southern Parkway, and Nassau Expressway. Pennsylvania Avenue is a major north-south artery that connects to the Jackie Robinson Parkway north of Atlantic Avenue.

Selection of Noise Receptor Locations

As discussed above, traffic is the dominant noise source in the vicinity of the proposed development site and rezoning area. The noise receptor location at Pitkin Avenue was selected to be at the halfway point of the future building's façade dimension, and the sidewalk curb. At the Berriman Street frontage, the noise receptor location was selected to be at the halfway point of the future building's façade dimension, and the sidewalk curb (refer to Figure D-1). The assumption was made that all street frontage windows of the proposed building on the development site will be operable.

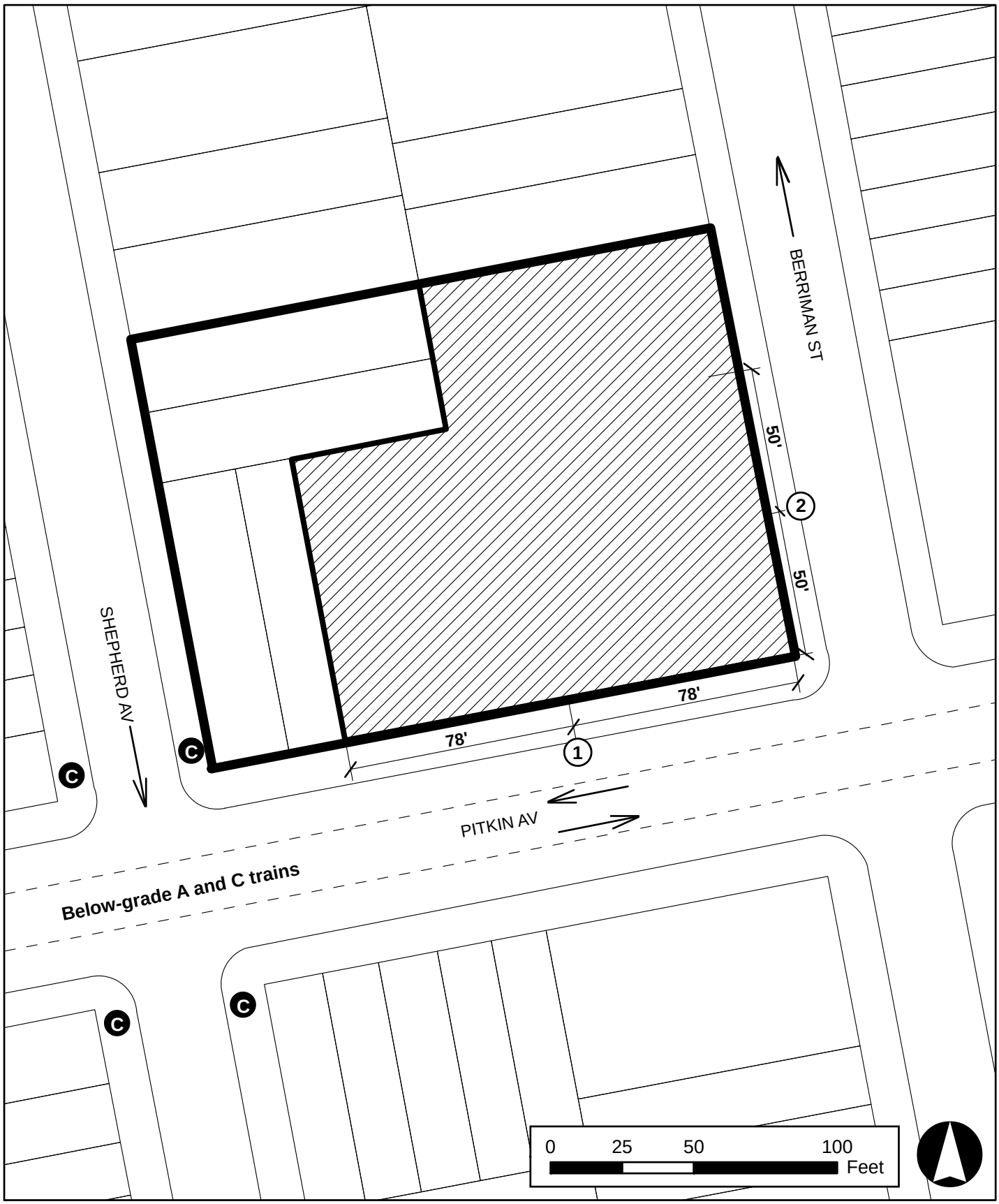
The following two noise receptor locations were chosen (refer to Figure D-1):

- Receptor Location 1 – Future Building Façade at Pitkin Avenue: halfway point of the street frontage dimension at Pitkin Avenue (approximately 78' from the southeast corner of the development site)
- Receptor Location 2 – Future Building Façade at Berriman Street: halfway point of the street frontage dimension at Berriman Street Avenue (approximately 50' from the southeast corner of the project site)

Noise Monitoring

At both receptor locations 20-minute spot measurements of existing noise levels were performed for each of three noise analysis time periods - weekday AM peak hour (8am to

Noise Receptor Locations



Legend

Development Site | Rezoning Area | (1) Noise Receptor Location | Street Direction

9am), weekday midday peak hour (12pm to 1pm), and weekday PM peak hour (5pm to 6pm). Noise monitoring was performed on Tuesday, February 7, 2012, and Thursday, September 27, 2012. In February, the weather was sunny, temperatures between 39F and 50F (daily low/high). Wind speeds were between 8 and 11 mph. In September, the weather was overcast, temperatures between 59F and 72F (daily low/high). Wind speeds were below 12 mph.

Equipment Used During Noise Monitoring

The instrumentation used for the measurements was a Brüel & Kjær Type 4189 ½-inch microphone connected to a Brüel & Kjær Model 2250 Type 1 (as defined by the American National Standards Institute) sound level meter. This assembly was mounted at a height of 5 feet above the ground surface on a tripod and at least 6 feet away from any sound-reflecting surfaces to avoid major interference with source sound level that is being measured. The meter was calibrated before and after readings with a Brüel & Kjær Type 4231 sound-level calibrator using the appropriate adaptor. Measurements at each location were made on the A-scale (dBA). The data were digitally recorded by the sound level meter and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_{max}, L_{min}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. Only traffic-related noise was measured; noise from other sources (e.g., emergency sirens, aircraft flyovers, etc.) was excluded from the measured noise levels. Weather conditions were noted to ensure a true reading as follows: wind speed under 12 mph; relative humidity under 90 percent; and temperature above 14^{o}F and below 122^{o}F (pursuant to ANSI Standard S1.13-2005).

Existing Noise Levels at Noise Receptor Locations

Measured Noise Levels

Noise monitoring results for the two receptor locations are shown in Table D-5. Table D-6 summarizes the traffic for the equivalent 1-hour period. Traffic was the dominant noise source at all receptor locations, and the values shown reflect the level of vehicular activity on the streets adjacent to the rezoning area. It needs to be noted that subway vents are located along Pitkin Avenue between Shepherd Avenue and Berriman Street (refer to pictures #1 and #4 in Figure 6 in the EAS Form). The A and C subway lines run below grade underneath Pitkin Avenue. At receptor location #1, subway-generated noise could be heard in intervals, with the A train passing by the station (runs express during the day), and the C train stopping at Shepherd Avenue, which is a local stop.

As shown in Table D-5, the highest existing L_{10} value was measured at receptor location #1 (Pitkin Avenue) in the PM peak hour (71.7 dBA). The AM peak hour reading in this location was 71.0 dBA, while the midday (MD) peak hour reading was the lowest with 67.9 dBA. These values place the AM and PM in the marginally unacceptable exposure category, and the MD in the marginally acceptable exposure category under existing conditions (pursuant to the *2012 CEQR Technical Manual*).

At receptor location#2 (Berriman Street) the highest L_{10} value was recorded in the AM peak hour (67.6 dBA). The PM peak hour reading in this location was 65.0 dBA, while the midday (MD) peak hour reading was the lowest with 61.3 dBA. These values place the AM and the PM

in the marginally acceptable exposure category, and the MD in the acceptable exposure category under existing conditions (pursuant to the *2012 CEQR Technical Manual*).

Table D-5
Existing Noise Levels (in dBA) at the two Receptor Locations

#	Noise Receptor Location	Time	L_{eq}	L_{max}	L_{min}	L_1	L_{10}	L_{50}	L_{90}	CEQR Noise Exposure Category
1	Halfway point of the street frontage dimension of the Development Site at Pitkin Avenue	AM	67.7	94.9	48.7	78.0	**71.0**	62.0	53.4	**Marginally Unacceptable I**
		MD	64.9	88.0	46.4	76.7	**67.9**	57.9	50.7	**Marginally Acceptable**
		PM	70.5	92.9	49.0	81.7	**71.7**	64.1	54.3	**Marginally Unacceptable I**
2	Halfway point of the street frontage dimension of the Development Site at Berriman Street	AM	71.8	94.7	46.5	82.6	**67.6**	60.7	53.1	**Marginally Acceptable**
		MD	60.1	86.0	44.3	69.6	**61.3**	53.4	48.6	**Acceptable**
		PM	62.4	88.2	48.2	71.3	**65.0**	59.8	51.9	**Marginally Acceptable**

Notes: Field measurements were performed by Philip Habib & Associates on Tuesday, February 7, and Thursday, September 26, 2012 (Location #2, AM peak period). Refer to Figure D-1 for noise monitoring receptor locations.

Table D-6
Existing 1-Hour Equivalent Traffic and PCE Volumes for Noise Receptor Locations

#	Receptor Location	Cars	Light Trucks	Medium Trucks	Heavy Trucks	Total # of Vehicles	PCEs
AM Peak Period							
1	Halfway point of proposed Bldg. Façade at Pitkin Ave.	**246**	**6**	**13**	**4**	**269**	**609**
2	Halfway point of proposed Bldg. Façade at Berriman St.	**46**	**1**	**2**	**0**	**49**	**73**
MD Peak Period							
1	Halfway point of proposed Bldg. Façade at Pitkin Ave.	**134**	**4**	**6**	**3**	**147**	**357**
2	Halfway point of proposed Bldg. Façade at Berriman St.	**27**	**1**	**0**	**0**	**28**	**28**
PM Peak Period							
1	Halfway point of proposed Bldg. Façade at Pitkin Ave.	**269**	**5**	**10**	**3**	**287**	**545**
2	Halfway point of proposed Bldg. Façade at Berriman St.	**41**	**0**	**0**	**0**	**41**	**41**

Source: Philip Habib & Associates, Count and Vehicle Classification, Tuesday, February 7, and Thursday, September 27, 2012.

V. THE FUTURE WITHOUT THE PROPOSED ACTIONS (NO-ACTION)

Using the methodology previously described future noise levels in the No-Action condition were calculated for the three analysis periods in the Build Year 2016. Table D-7 shows the measured existing noise level and calculated future without the proposed action noise levels at both monitoring sites.

Comparing future No-Action noise levels with existing noise levels, slight increases in $L_{eq(1)}$ noise levels would occur at both receptor locations. More specifically, in receptor location #1, the increases would be 0.1 dBA in all three peak periods, while in location #2 the increases would be 0.1 dBA in the AM and PM peak periods, and 0.2 dBA in the MD peak period. Increases of less than 3.0 dBA would be barely perceptible, and based upon 2012 CEQR impact criteria, would not be significant. In terms of 2012 CEQR noise criteria, noise levels at both receptor locations would remain in the same noise exposure category as under existing conditions, except at receptor location #2 where the noise exposure category would change from marginally acceptable to marginally unacceptable III in the AM peak period.

Table D-7
Future No-Action Noise Levels and total PCE Values at Receptor Locations (in dBA)

Noise Receptor Site	Time	No-Action PCEs	Existing Leq($_1$)	2016 No-Action $L_{eq(1)}$	Change	2016 No-Action $L_{10(1)}$	*CEQR* Exposure Category
1	AM	621	67.7	67.8	0.1	**71.1**	**Marginally unacceptable I**
	MD	365	64.9	65.0	0.1	**68.0**	**Marginally acceptable**
	PM	557	70.5	70.6	0.1	**71.8**	**Marginally unacceptable I**
2	AM	75	71.8	71.9	0.1	**76.1**	**Marginally unacceptable III**
	MD	29	60.1	60.3	0.2	**61.5**	**Acceptable**
	PM	42	62.4	62.5	0.1	**65.1**	**Marginally acceptable**

Note: All PCE and noise values are shown for a weekday.

VI. THE FUTURE WITH THE PROPOSED ACTIONS (WITH-ACTION)

Using the methodology previously described, noise levels in the future with the proposed action were calculated for the three peak analysis periods in the Build Year 2016. Table D-8 presents noise levels in the future with the proposed action at both receptor locations in Build Year 2016.

Comparing the future With-Action noise levels with No-Action noise levels, maximum increase in $L_{eq(1)}$ noise level would be 0.4 dBA at receptor site #2in the AM peak hour (refer to Table D-8). Increases of this magnitude would not be perceptible, and based upon CEQR impact criteria would not be significant. No increase in the $L_{eq(1)}$ noise level would occur at receptor locations #1 in the AM peak hour. In terms of CEQR noise criteria, future noise levels

at all of the monitored sites would remain in the same noise exposure category as they are under the No-Action condition.

Table D-8
Future With-Action Noise Levels and total PCE Values at Receptor Locations (in dBA)

Noise Receptor Site	Time	With-Action PCEs	2014 No-Action Leq($_1$)	2014 With-Action $L_{eq(1)}$	Change	2014 With-Action $L_{10(1)}$	*CEQR* Exposure Category
1	AM	630	67.8	67.8	0	**71.1**	**Marginally unacceptable I**
	MD	374	65.0	65.1	0.1	**68.1**	**Marginally acceptable**
	PM	565	70.6	70.7	0.1	**71.9**	**Marginally unacceptable I**
2	AM	78	71.9	72.1	0.2	**76.3**	**Marginally unacceptable III**
	MD	32	60.3	60.7	0.4	**61.9**	**Acceptable**
	PM	44	62.5	62.7	0.2	**65.3**	**Marginally acceptable**

Note: All PCE and noise values are shown for a weekday.

VII. ATTENUATION REQUIREMENTS

As discussed before, required noise attenuation values for buildings are designed to maintain interior L_{10} noise levels of 45 dBA or lower for residential and community facility uses, and 50 dBA or lower for commercial (retail and office) uses, and are determined based on exterior $L_{10(1)}$ noise levels. To ensure that acceptable interior noise levels are provided at the proposed mixed-use building on the development site, the building designs for all future building frontages would be required to provide at least the level of building attenuation specified in Table D-9.

Table D-9
Minimum Attenuation Requirements to Achieve Acceptable Interior Noise Levels

Development Site (Block 4005, Lot 28)	With-Action Max L_{10} (dBA)	Minimum Attenuation Required*
Building Frontage at Pitkin Avenue (south façade) Residential Commercial	**71.9**	28 dBA none**
Building Frontage at Berriman Street (east façade) and frontage to the Rear Yard (north façade) Residential Commercial	**76.3**	33 dBA 28 dBA

Note: The western façade will not include any operable windows.
* Attenuation values for commercial uses are 5 dBA less than for residential uses.
** Standard double-glazed windows would be adequate to provide an attenuation of 23 dBA.

To ensure the implementation of the specified attenuation requirements, an (E) designation for noise would be applied to the development site (Block 4005, Lot 28), specifying the appropriate minimum amount of window/wall attenuation required (refer to Table D-9).

Several noise window/wall attenuation features will be included in the building designs to ensure that acceptable interior noise levels are provided. These include standard well-sealed double-glazed windows and closed windows with alternate means of ventilation. Alternate means of ventilation include, but are not limited to central air conditioning or air conditioning sleeves containing air conditioners.

To implement the specified attenuation requirements shown in Table D-9, an (E) designation for noise would be required for the development site, specifying the appropriate minimum amount of window/wall attenuation required for each façade of the proposed building. The text for the (E) designation for the development site requiring attenuation of 28 dBA for residential uses along the south façade (Pitkin Avenue frontage), and 33 dBA for residential uses and 28 dBA for commercial uses along the east and north facades (Berriman Street frontage and frontage to the rear yard) is as follows:

In order to ensure an acceptable interior noise environment of 45 dBA or lower, future residential uses must provide a closed-window condition with a minimum of 28 dBA window/wall attenuation in the south façade, and a minimum of 33 dBA window/wall attenuation in the east and north facades, and in order to maintain a closed-window condition, an alternate means of ventilation must also be provided for all three facades (south, east, north). For future commercial uses along the east and north facades, an attenuation of 28 dBA is warranted to reach an acceptable interior noise level of 50 dBA or lower, while no attenuation is required for commercial uses along the south façade. More specifically, standard double-glazed windows would be adequate to provide an attenuation of 23 dBA for commercial uses along the south façade.

These measures would ensure that an acceptable exterior to interior noise attenuation is achieved based on expected With-Action noise conditions at the development site. Therefore, no significant adverse noise impacts are expected to occur as a result of the proposed action.

VIII. OTHER NOISE CONCERNS

Mechanical Equipment

No detailed designs of the building's mechanical systems (i.e., heating, ventilation, and air conditioning systems) are available at this time. However, those systems will be designed to meet all applicable noise regulations and requirements, and would be designed to produce noise levels which would not result in any significant increases in ambient noise levels.

Aircraft Noise

An initial aircraft noise impact screening analysis would be warranted if the new receptor would be located within one mile of an existing flight path, or cause aircraft to fly through existing or new flight paths over or within one mile of a receptor. Since the development site is not within one mile of an existing flight path, no initial aircraft noise impact screening analysis is warranted.

Train Noise

As mentioned earlier, the project site is located in proximity of the A and C train subway station at Shepherd Avenue. This station is located below grade, and therefore, there would not be a direct line of sight from the development site to that rail activity. Therefore, a detailed train noise analysis related to rail operations is not warranted.

IX. CONCLUSION

Under the With-Action condition, the peak period L_{10} values at the two receptor locations would range from a minimum of 61.9 dBA to a maximum of 76.3 dBA. Since the relative increases are below 3.0 dBA when compared to the No-Action condition (refer to Tables D-7 and D-8 for No-Action and With-Action L_{10} values), no significant adverse impacts due to project-generated traffic would occur.

Required Attenuation for the Proposed Development

Pitkin Avenue Building Frontage (South Façade)

The maximum With-Action L_{10} value at receptor location #1 (Pitkin Avenue frontage) falls within the 70 to 73 dBA range (71.9 dBA). According to the *2012 CEQR Technical Manual*, this would place the Pitkin Avenue frontage of the proposed building within the Marginally Unacceptable Category I (refer to Tables D-3 and D-4). As the proposed building on the development site would introduce residential uses into an area where With-Action exterior noise levels would exceed 70 dBA, the proposed building would need to provide window-wall attenuation of at least 28 dBA for the façade facing Pitkin Avenue in order to achieve a 45 dBA interior noise level for residential uses. No attenuation would be required for commercial uses along the Pitkin Avenue frontage since standard double-glazed windows would be adequate to ensure an interior noise level of 50 dBA.

Berriman Street Building Frontage and Frontage to the Rear Yard (East and North Facades)

The maximum With-Action L_{10} value measured at noise receptor location #2 (Berriman Street frontage), falls within the 76 to 78 dBA range (76.3 dBA). This places the Berriman Street frontage within the Marginally Unacceptable III Category. As the proposed development on the development site would introduce residential uses into an area where With-Action exterior noise levels would exceed 76 dBA, the proposed development would need to provide window-

wall attenuation of at least 33 dBA for the exterior façade facing Berriman Street (and the façade facing to the north) in order to achieve a 45 dBA interior noise level for residential uses and 28 dBA to achieve 50 dBA interior noise levels for commercial uses.

Implementation

In order to maintain an interior noise environment of 45 dBA for residential uses in a closed window condition, the applicant will be required to provide 28 dBA of window-wall noise attenuation for the building façade along Pitkin Avenue, and 33 dBA of window-wall noise attenuation for the building façade along Berriman Street (and the façade facing to the north). This attenuation can be achieved through installing double-glazed windows on a heavy frame in masonry structures or windows consisting of laminated glass. In addition, an alternate means of ventilation will be required for the building. Alternate means of ventilation may include, but are not limited to, the use of central air conditioning or through-the-wall sleeve-fitted air conditioning units in all habitable rooms (living rooms, dining rooms, bedrooms) facing Pitkin Avenue, Berriman Street, and the rear yard (to the north).

To achieve an interior noise environment of 50 dBA for commercial uses in a closed window condition, the applicant will be required to provide 28 dBA of window-wall noise attenuation for the building façade along Berriman Street. Standard double-glazed windows would be adequate to provide an interior noise environment of 50 dBA along Pitkin Avenue.

As discussed above, to implement the specified attenuation requirements shown in Table D-9, an (E) designation for noise would be required for the development site, specifying the appropriate minimum amount of window/wall attenuation required for each building façade.

The (E) designation for the development site would require attenuation of 28 dBA for residential uses along the south façade (Pitkin Avenue frontage), and 33 dBA for residential uses and 28 dBA for commercial uses along the east and north facades (Berriman Street frontage and frontage to the rear yard).

APPENDIX 1
NYC LPC Environmental Review Letter

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Final Sign-Off

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: PITKIN AVE REZONING
Date received: 2/15/2012

Properties with no Architectural or Archaeological significance:

1) ADDRESS: BERRIMAN STREET, BBL: 3040050025
2) ADDRESS: 170 BERRIMAN STREET, BBL: 3040050026
3) ADDRESS: 2501 PITKIN AVENUE, BBL: 3040050028
4) ADDRESS: 2499 PITKIN AVENUE, BBL: 3040050029
5) ADDRESS: 2497 PITKIN AVENUE, BBL: 3040050031
6) ADDRESS: 2495 PITKIN AVENUE, BBL: 3040050032
7) ADDRESS: 2493 PITKIN AVENUE, BBL: 3040050033
8) ADDRESS: 2491 PITKIN AVENUE, BBL: 3040050034
9) ADDRESS: 2481 PITKIN AVENUE, BBL: 3040050035
10) ADDRESS: 2489 PITKIN AVENUE, BBL: 3040050036
11) ADDRESS: 2487 PITKIN AVENUE, BBL: 3040050037
12) ADDRESS: 2485 PITKIN AVENUE, BBL: 3040050038
13) ADDRESS: 409 SHEPHERD AVENUE, BBL: 3040050001
14) ADDRESS: 405 SHEPHERD AVENUE, BBL: 3040050002

Gina Santucci

2/23/2012

SIGNATURE DATE

Gina Santucci, Environmental Review Coordinator

File Name: 27901_FSO_DNP_02162012.doc

APPENDIX 2
Jamaica Bay Watershed Form

Jamaica Bay Watershed Protection Plan
Project Tracking Form

The Jamaica Bay Watershed Protection Plan, developed pursuant to Local Law 71 of 2005, mandates that the New York City Department of Environmental Protection (DEP) work with the Mayor's Office of Environmental Coordination (MOEC) to review and track proposed development projects in the Jamaica Bay Watershed (http://www.nyc.gov/html/oec/downloads/pdf/ceqr/Jamaica_Bay_Watershed_Map.jpg) that are subject to CEQR in order to monitor growth and trends. If a project is located in the Jamaica Bay Watershed, (the applicant should complete this form and submit it to DEP and MOEC. This form must be updated with any project modifications and resubmitted to DEP and MOEC.

The information below will be used for tracking purposes only. It is not intended to indicate whether further CEQR analysis is needed to substitute for the guidance offered in the relevant chapters of the CEQR Technical Manual.

A. GENERAL PROJECT INFORMATION

1. CEQR Number: _____ 1a. Modification ☐
2. Project Name: **Pitkin Avenue Rezoning EAS**
3. Project Description:

This application is for zoning map amendments of a portion of a City tax block in the East New York area of Brooklyn to facilitate a new approximately 69,413 gsf mixed-use residential and commercial development at 2501 Pitkin Avenue. The proposed zoning map changes would affect an area of approximately 30,000 sf (Lots 1, 2, 28, 35, and 38 on Block 4005) and would change the existing R5/C1-3 zoning to R7A/C2-4 in the majority of the rezoning area, and remove the C1-3 commercial overlay from the remaining portion of the rezoning area (refer to Attachment A, "Project Description" for more details).

4. Project Sponsor: **Pitkin-Berriman Housing Development Fund Corporation (HDFC)**
5. Required approvals: **NYC Department of City Planning approval of zoning map amendments and ULURP**
6. Project schedule (build year and construction schedule): **2016**

B. PROJECT LOCATION:

1. Street address: **2501 Pitkin Avenue (Development Site)**
2481, 2485, and 2501 Pitkin Avenue, 405 and 409 Shepherd Avenue (Rezoning Area)
2. Tax block(s): **4005** Tax Lot(s): **28 (Development Site); 1, 2, 28, 35, and 38 (Rezoning Area)**
3. Identify existing land use and zoning on the project site: **Residential; R5/C1-3 Zoning**
4. Identify proposed land use and zoning on the project site: **Residential; R5 and R7A/C2-4 Zoning**
5. Identify land use of adjacent sites (include any open space): **Residential**
6. Describe existing density on the project site and the proposed density:

Existing Condition	Proposed Condition
The project site is currently vacant.	**69,413 gsf of new development (60 DUs*, 9,300 gsf of local retail)**

7. Is project within 100 or 500 year floodplain (specify)? ☐ 100 Year ☐ 500 Year ☑ No

*** 60,113 gsf of residential floor area.**

C. GROUND AND GROUNDWATER

1. Total area of in-ground disturbance, if any (in square feet): **10,300 sf**
2. Will soil be removed (if so, what is the volume in cubic yards)? **5,350 cubic yards**
3. Subsurface soil classification:
   (per the New York City Soil and Water Conservation Board): **Unknown****
4. If project would change site grade, provide land contours (**attach** map showing existing in 1' contours and proposed in 1' contours). **N/A**
5. Will groundwater be used (list volumes/rates)? ☐ Yes ☑ No

   Volumes: _____ Rates: _____
6. Will project involve dewatering (list volumes/rates)? ☐ Yes ☑ No

   Volumes: _____ Rates: _____
7. Describe site elevation above seasonal high groundwater:

   The site elevation above seasonal high groundwater is estimated at approximately 20 feet**

D. HABITAT

1. Will vegetation be removed, particularly native vegetation? ☐ Yes ☑ No

   If YES,
   - **Attach** a detailed list (species, size and location on site) of vegetation to be removed (including trees >2" caliper, shrubs, understory planting and groundcover).
   - **List** species to remain on site.
   - **Provide** a detailed list (species and sizes) of proposed landscape restoration plan (including any wetland restoration plans).
2. Is the site used or inhabited by any rare, threatened or endangered species? ☐ Yes ☑ No
3. Will the project affect habitat characteristics? ☐ Yes ☑ No

   If YES, describe existing wildlife use and habitat classification using "Ecological Communities of New York State." at http://www.dec.ny.gov/animals/29392.html.
4. Will pesticides, rodenticides or herbicides be used during construction? ☐ Yes ☑ No

   If YES, estimate quantity, area and duration of application.
5. Will additional lighting be installed? ☑ Yes ☐ No

   If YES and near existing open space or natural areas, what measures would be taken to reduce light penetration into these areas?

   The project site is not located near existing open spaces or natural areas***

** **A Phase II Site Investigation has not been conducted for the proposed development.**

*** **Lights are proposed at the building entrances, three facades, and the open space. All lights will comply with the dark skies standards for LEED.**

E. SURFACE COVERAGE AND CHARACTERISTICS

(describe the following for both the existing and proposed condition):

	Existing Condition	Proposed Condition
1. *Surface area:*		
Roof:	N/A (development site is vacant)	Proposed mixed-use Building Approximately 13,094 sf
Pavement/walkway:	N/A (development site does not include paved areas or walkways)	To be determined****
Grass/softscape:	20,625 sf (entire development site area)	To be determined*****
Other (describe):	N/A	N/A

**** The proposed development would include 10,175 sf of accessory open space. The design details have not been determined yet.

2. ***Wetland*** (regulated or non-regulated) area and classification:

Existing Condition	Proposed Condition
N/A (no wetland area at site)	N/A (no wetland area at site)

3. ***Water surface area:***

Existing Condition	Proposed Condition
N/A (no water surface area at site)	N/A (no water surface at site)

4. ***Stormwater management*** (describe):

Existing – how is the site drained?

The development site is currently vacant and is comprised of overgrown softscape. Stormwater on the development site infiltrates directly into the ground.

Proposed – describe, including any infrastructure improvements necessary off-site:

Stormwater management for the new building would most likely include storm drain piping along the sides of the building, and drain stormwater out to the sewer in Pitkin Avenue. No infrastructure improvements would be necessary off-site.

APPENDIX 3
Phase I Environmental Site Assessment

EEA *Inc.*

Environmental Consultants To
Industry And Government Since 1979
www.eeaconsultants.com

55 Hilton Avenue
Garden City, New York 11530

Telephone (516) 746-4400
(212) 227-3200
Fax (516) 746-4432

February 15, 2011

Ms. Nicole Clare
Cypress Hills Local Development Corporation
625 Jamaica Avenue
Brooklyn, New York 11208

Re: Phase I Environmental Site Assessment
Property Described as:
2487-2503 Pitkin Avenue & 166-170 Berriman Street
Brooklyn, New York
(Block 4005, Lots 25, 26, 28, 29, 31 through 34, and 36)
EEA Project Number: ESA 10374

Dear Ms. Clare:

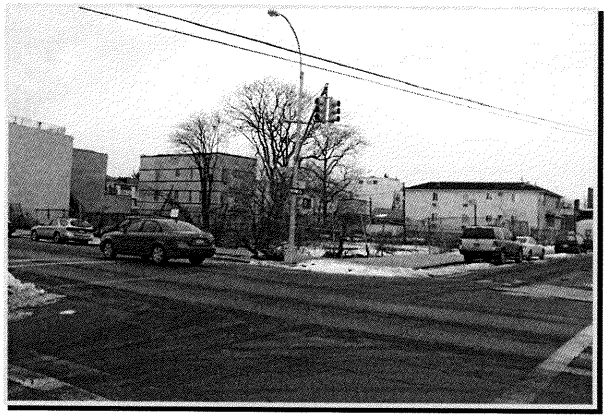
Attached is a revised electronic copy of our Phase I Environmental Site Assessment (ESA) for the property described above. After it was brought to my attention that I missed an aboveground fuel oil tank, I revisited the site (after much of the snow cover had melted) on February 15, 2011 to view this tank. Please except my apologies for missing the tank during the first site visit.

Should you have any questions regarding this revised Phase I ESA, please feel free to contact me.

Sincerely,

Richard Fasciani
Senior Environmental Professional
Environmental Site Assessment Division

PHASE I ENVIRONMENTAL SITE ASSESSMENT



2487 – 2503 PITKIN AVENUE & 166-170 BERRIMAN STREET BROOKLYN, NEW YORK

EEA PROJECT NO. ESA-10374

Prepared for:

CYPRESS HILLS LOCAL DEVEMOPMENT CORP.
625 JAMAICA AVENUE
BROOKLYN, NEW YORK 11208

JANUARY 2011 and Revised (FEBRUARY 15, 2011)

EEA *Inc.*

55 Hilton Avenue, Garden City, New York 11530
Environmental Consultants To Industry And Government Since 1979
www.eeaconsultants.com

Project Environmental Overview
2487-2503 Pitkin Avenue & 166-170 Berriman Street
BRONKLYN, NEW YORK
ESA-10374

Assessment Section	Acceptable	Description of Additional Action or Phase II Investigation Recommended
Historical Review	Yes	
Regulatory Agency Database Review	Yes	
Asbestos-Containing Material (ACM)	Yes	
Aboveground Storage Tanks	Yes	
Underground Storage Tanks	Yes	
Radon	Yes	
Polychlorinated Biphenyls (PCBs)	Yes	
Lead-Based Paint (LBP)	Yes	
On-Site Operations	Yes	
Chemical or Hazardous Materials/Wastes	Yes	
Mold	Yes	
Wetlands	Yes	
Drainage Systems	Yes	

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2487 – 2503 PITKIN AVENUE & 166-170 BERRIMAN
BROOKLN, NEW YORK
PHASE I ENVIRONMENTAL SITE ASSESSMENT

I. INTRODUCTION

EEA Inc. has undertaken a Phase I Environmental Site Assessment (ESA) of the *project site* described as 2487-2503 Pitkin Avenue & 166-170 Berriman Street, located in the borough of the Brooklyn, New York City, New York. This Phase I ESA has been performed in compliance with the scope and limitations of ASTM Practice E 1527-05, as described in the proposal letter dated November 16, 2010. The purpose for this Phase I ESA report is to provide the Cypress Hills Local Development Corporation as the User of this report under the ASTM Practice, with Phase I ESA findings, conclusions, and professional opinions to support their financial business practices. Any exceptions to, or deletions from, this practice are described in Sections VI through VIII of this report.

This Phase I ESA report was completed by EEA's Senior Environmental Professional, Mr. Richard Fasciani. The findings of this Phase I ESA are based on the following: visual inspection of the *project site*, visual survey of adjacent/contiguous and nearby properties, and review of available historical property and environmental regulatory agency records.

A detailed description of the Phase I ESA findings is presented in Section II. EEA's conclusions and professional opinions, based on the findings of this Phase I ESA, are presented in Section III. EEA's Environmental Professional Statement and Signatures are provided in Section IV. EEA's Scope of Work is outlined in Section V. Qualification Statements are provided in Section VI. Disclaimer Statements are presented in Section VII. Any exceptions to, or deletions from, this practice are described in Sections V through VII of this report.

Figures are attached as Appendix A. Photographs are attached as Appendix B. Regulatory Agency Database Information from Toxic Targeting, Inc. is attached as Appendix C. A copy of the completed Phase I ESA User Questionnaire is attached as Appendix D.

II. EXECUTIVE SUMMARY

The findings of this Phase I ESA are based on the following: visual inspection of the *project site*, visual survey of adjacent/contiguous and nearby properties, and review of available historical property and environmental regulatory agency records of the *project site*.

The *project site* is located on the northwest corner at the intersection of Pitkin Avenue and Berriman Street, in the Borough of Brooklyn, New York City, New York. The New York City Tax Map identification of the subject property is Block 4005, Lots 25, 26, 28, 29, and 31 through 34, 36 and 37. The site has approximately 140 feet of frontage along the west side of Berriman Street and 145 feet of frontage along north side of Pitkin Avenue and was surrounded by fencing.

The project site is approximately 20,625 square feet in area. At the time of EEA's site visit, no on-site structures or other improvements were noted on the *project site*. The site contained two large trees, but was mostly covered with low-lying weeds and shrubbery. From observation made during EEA's site visit, the topography of the site was slightly irregular with depressions interspersed throughout. Most of the *project site* appears to have been excavated to below the level of the surrounding sidewalks.

EEA's analysis of historical information regarding the *project site* indicated the former subject buildings were constructed sometime between 1909 and 1924, as three-story residential apartment dwellings with storefronts. The buildings were demolished sometime between 1977 and 1987. Additionally, non-residential uses/businesses that were associated with the various addresses of the project site consisted of: an upholstery business, furniture rental, ironworker, travel broker, brokerage business, furniture repair, beauty salons, floor covering business, plumbers, attorneys, florist, jewelry business, sweet shop, a radio repair business, shoe repair and a stationary store.

Residential and retail occupancy does not typically involve the storage and use of significant quantities of hazardous materials, nor would they be expected to generate significant quantities of hazardous wastes. No indications of former on-site businesses or operations (e.g. manufacturing, dry cleaning, gasoline filling station, etc.) that typically store or use significant quantities of hazardous materials were identified in the information researched for this report.

No drainage structures (e.g., floor drains, storm water drains, etc.,) were noted on the project site.

No hazardous materials or petroleum products were observed at the *project site* during EEA's site visit. No staining or indications of recent spills or leaks were observed.

No tank fillports, vent lines or other visible indications of the presence of underground storage tanks were observed at the *project site* during EEA's site visit. In addition, no aboveground tanks were observed.

The *project site* is not listed in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database, which lists all registered facilities with a total combined petroleum storage capacity in excess of 1,100 gallons.

The project site was void of any structures. No suspected asbestos-containing materials or lead-based painted surfaces were observed during EEA's site visit.

EEA's site inspection included a visual reconnaissance of properties located adjacent/contiguous to, and in the immediate vicinity of the *project site*. These noted properties were viewed from public right-of-ways along Pitkin Avenue and Berriman Street, as well as along the perimeter boundary of the *project site*. Although there were no significant barriers preventing EEA from determining the general uses of these properties, EEA did not enter any of these properties for a detailed inspection of site conditions for legal reasons (i.e., trespassing).

The subject site is surrounded by residential properties to the north and west. To the east (across Berriman Street) are residential dwellings and a day care facility and to the south (across Pitkin Avenue) is undeveloped land and 2-story residential dwellings with groundfloor retail stores.

It should be noted that along the south side of the project site is a MTA subway tunnel and its subway air ventilation vaults/grates are evident in the sidewalk along Pitkin Avenue. No regulatory agency database listings were associated with this section of the MTA subway tunnel. Therefore, it is EEA's professional opinion that the existence of the MTA subway tunnel and its associated air ventilation vault are not considered a recognized environmental concern which would have the potential to impact the underlying soils of the project site. Given the proximity of the *project site* to the subway tunnel, specific construction requirements may need to be adhered to with regard to excavation and/or development of the site.

The project site is not included on the following USEPA databases: the Superfund or CERCLIS lists, the ERNS database, the RCRA Hazardous Waste Treatment/Storage/Disposal [TSDF] Facilities list and the RCRA Hazardous Waste Handlers database. There are no listings for the *project site* on the following NYSDEC databases: Chemical Bulk Storage, the Brownfields database, the Inactive Hazardous Waste Disposal Site Registry, Solid Waste Facilities, Major Oil Storage Facilities, or SPDES facilities lists and Spill Logs databases. Finally the *project site* is not listed on the New York City Environmental Quality Review Requirements "E" Site database.

Furthermore, there were no identified nearby federal and/or state regulatory hazardous waste sites or facilities (e.g., Superfund, CERCLIS, Inactive Hazardous Waste Disposal sites, RCRA Treatment/Storage/Disposal [TSDF] Facilities, Major Oil Storage Facilities, Spill Incidents, Leaking Underground Storage Tanks, etc.) that would likely have the potential to impact the environmental quality of the underlying soils of the *project site*.

Based on the evaluation of readily available information obtained during this Phase I ESA, according to the scope and limitations as defined in the Phase I ESA, and EEA's professional judgment, no *Recognized Environmental Conditions* (RECs) were identified that could be attributed to past and present occupants or uses associated with the *project site*.

III. REPORT OF FINDINGS

The *project site* was inspected on January 5, 2010 and February 16, 2011by EEA Inc. environmental consultant Richard Fasciani. Ms. Nicole Clare of Cypress Hills Local Development Corporation arranged access to the project site and completed EEA's Phase I ESA User Questionnaire. Mr. Damien Junior, of Management Source, the property management firm that manages the project site, was present during the site inspections and available to answer questions. Mr. Junior stated that he has been overseeing this property for approximately two years.

The findings of EEA's Phase I ESA, including our regulatory agency checks, are presented in the following sections.

A. Property Description

i. Location and Legal Description

The *project site* is located on the northwest corner at the intersection of Pitkin Avenue and Berriman Street, in the Borough of Brooklyn, New York City, New York. The New York City Tax Map identification of the subject property is Block 4005, Lots 25, 26, 28, 29, and 31 through 34, 36 and 37. The site has approximately 140 feet of frontage along Berriman Street and 145 feet of frontage along Pitkin Avenue and was surrounded by fencing.

ii. Site Description and Current Use

The project site is approximately 20,625 square feet in area. At the time of EEA's site visit, no on-site structures or other improvements were noted on the *project site.* The site contained one or two large trees, but was mostly covered with low-lying weeds and shrubbery. From observation made during EEA's site visit, the topography of the site was very irregular with depressions interspersed throughout. The site appears to have been excavated to below the level of the surrounding sidewalks.

B. User Provided Information

ASTM E 1527-05 defines the "User" as: "the party seeking to use practice E 1527-05 to complete an environmental site assessment of the property." The performance standards required for all appropriate inquiries (AAI) include inquiries by an Environmental Professional, and additional inquiries by persons (User) seeking to establish one of the CERCLA liability protections. Under § 312.22, additional inquiries by persons seeking to establish one of the CERCLA liability protections, if not otherwise provided to the Environmental Professional, includes in substance: an evaluation of environmental cleanup liens against the *project site*; consideration of specialized knowledge or experience of the person seeking to claim liability protection; evaluation of the relationship of the purchase price to fair market value of the *project site*, if the property was not contaminated; or other commonly known or reasonably ascertainable information about the property.

Based upon the above, a user questionnaire was submitted to Ms. Nicole Clare, of Cypress Hills Local Development Corporation, (User) for characterizing relative environmental risks for commercial purposes, as part of a client's regulatory requirements for conducting All Appropriate Inquiry (AAI) to support any one of the three legal defenses against CERCLA liability, or other stated purposes (see **Appendix D**). The following pertinent information is documented within this Questionnaire:

- Ms. Clare, stated that the purpose of this Phase I ESA is to satisfy the due diligence process for purchasing the project site.
- Ms. Clare stated that no Title Report is currently available; however, she is unaware of any environmental cleanup liens that are filed against the *project site* or recorded under federal, tribal, state or local law. In addition, Ms. Clare is unaware of any Activities and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the *project site* and/or have been filed or recorded in a registry under federal, tribal, state or local law.
- Ms. Clare stated she does not have any specialized knowledge or experience with regard to any chemicals and/or processes used by current occupants of the *project site* or adjoining properties. Ms. Clare stated she has no knowledge with regard to the following items on the *project site*: specific chemicals that are present or once were present, on-site spills or other chemical releases, or environmental cleanups that have taken place. Additionally, Ms. Clare stated that based on her knowledge and experience related to the *project site* together with the fact that historically the use of the *project site* has been residential; there are no obvious indicators that point to the presence or likely presence of contamination at the *project site*.
- Ms. Clare stated that the purchase price being paid reflects fair market value as depicted within the property appraisal that was obtained for the project site.

C. Previous Environmental Reports

No previous environmental reports have been supplied to EEA during the course of this Phase I Environmental Site Assessment.

D. Site History

Primary sources for the history of New York City sites include historical fire insurance/real estate atlases, as well as the available records of the New York City Buildings Department concerning permits for new buildings, certificates of occupancy, alterations, demolitions, and other changes at the site.

i. Historical Atlases

Historical Sanborn fire insurance/real estate atlases (i.e., 1908, 1928, 1951, 1965, 1977. 1987 and 1995) were reviewed for the *project site* (see **Appendix A: Figures 2 through 8**). Historical Sanborn fire insurance atlases are important sources of historical information that may indicate property uses, and the presence of commercial/industrial activities on the *project site*.

The 1908 Sanborn atlas indicates that with the exception of a 2-story dwelling located at 170 Berriman Avenue, the *project site* was undeveloped at that time (see Figure 8).

The 1928 Sanborn atlas indicates that in addition to the two story dwelling, the project site had been developed with seven 3-story structures, all having ground floor retail space (see Figure 7).

The 1951, 1965 and 1977 atlases depict the same structures as on the previous 1928 Sanborn atlas. However, it should be noted that in addition to the 2-story dwelling and "auto parking" is noted at 166 -170 Berriman Avenue. Additionally, the subject building at 2491 Pitkin Avenue is depicted as having an upholstery business on the first floor (see Figures 4, 5 and 6).

The 1987 atlas indicates that all of the buildings on the project site with the exception of 170 Berriman Avenue (2-story dwelling) had been demolished (see Figure 3). The 1995 atlas shows that the building at 170 Berriman Avenue had been demolished and the project site remains vacant.

There were no indications of the storage or use of hazardous materials shown at the *project site* on any of the Sanborn maps reviewed. Furthermore, the depiction of "auto parking" associated with the former residential property is not considered to be an environmental concern requiring further investigation.

ii. Building Department Information

The New York City Department of Buildings (NYCDOB), Building Information System (BIS) website was reviewed for information regarding the history of the *project site*.

Based upon a review of the NYCDOB database, the records on file for the properties that make up the project site indicated that they have always been occupied by residential dwellings. There were no indications of commercial or industrial structures or operations on the project site within the NYCDOB databases.

i. Reverse City Directories

Reverse City Directory Abstracts for the *project site* were obtained from EDR. Based upon review of available reverse address directories (i.e. New York Telephone, R.L. Polk & Co., Hill-Donnelly Information Services, NYNEX Information Resources Company, Cole Information Services) for the years 1920, 1923, 1931, 1934, 1938, 1942, 1947, 1950, 1956, 1958, 1963, 1968, 1973, 1978, 1983, 1988, 1998, 2000, and 2005, a majority of the listings for the *subject property* are residential in nature. Other non-residential uses/businesses that were associated with the various addresses of the project site consisted of: an upholstery business, furniture rental, ironworker, travel broker, brokerage business, furniture repair, beauty salons, floor covering business, plumbers, attorneys, florist, jewelry business, sweet shop, a radio repair business, shoe repair, and a stationary store.

Some of the above non-residential business that were listed within the reverse address directories (e.g., ironworker, furniture repair, radio repair business) are types of uses that are known to involve the use of toxic and hazardous materials. However, given the small size and duration of these businesses, the fact that they were not stand alone operations but rather groundfloor storefronts within residential buildings, and that the former structures were likely connected to the municipal sewer system, it is EEA's professional opinion that the underlying soils on the project site have not been significantly impacted by these non-residential uses.

ii. Summary of Site History

EEA's analysis of historical information regarding the *project site* indicated the former subject buildings were constructed sometime between 1909 and 1924, as three-story residential apartment dwellings with storefronts. The buildings were demolished sometime between 1977 and 1987.

Residential and retail occupancy does not typically involve the storage and use of significant quantities of hazardous materials, nor would they be expected to generate significant quantities of hazardous wastes. No indications of former on-site businesses or operations (e.g. manufacturing, dry cleaning, gasoline filling station, etc.) that typically store or use significant quantities of hazardous materials were identified in the information researched for this report.

EEA's review of the historical information for the *project site* found no evidence of recognized environmental conditions, which may have affected the underlying soils of the *project site*. In addition, EEA found that the readily available historical information shows no significant Data Failures or significant Data Gaps, as defined by ASTM E 1527-05, and as such, EEA's review of the historical information does not prevent EEA from rendering its opinion that there are no recognized environmental conditions associated with the historical activities associated with the *project site*.

E. Site Characteristics

i. Hydrogeology and Site Topography

a. Site Topography

The *project site* is mapped on the United States Geologic Survey (USGS) 7.5 Minute Series Topographic Map - Central Park, N.Y.-N.J. Quadrangle (photo revised 1995) (see **Appendix A: Figure 1**). The general elevation for the area where the *project site* is located is depicted between 20 to 30 feet above mean sea-level.

From observations made during EEA's site assessment, as well as information obtained from the topographic map, it appears that the topography of the *project site*, as well as the surrounding area, is relatively flat.

b. Hydrogeology

Long Island (which includes Queens and Brooklyn) is comprised of a wedge-shaped mass of unconsolidated sand, gravel, silt, and clay, underlain by consolidated bedrock. The thickness of these unconsolidated glacial and deltaic deposits ranges from a few hundred feet in the northwestern sections to over 2,000 feet along the south shore barrier beaches. These unconsolidated deposits constitute the groundwater reservoir. Essentially, three aquifers underlie the region: The Upper Glacial, Magothy, and Lloyd Aquifers. The Upper Glacial extends from the surface down to depths of up to 400 feet. This aquifer is used widely for water supply in areas of central and eastern Suffolk County. Nassau County and portions of southeastern Queens obtain the majority of their water supply from the Magothy Aquifer at depths of 600 to 1,200 feet. The Upper Glacial Aquifer, in Nassau County, is generally of degraded quality due to past/present sanitary and industrial waste disposal practices. The Lloyd Aquifer lies below the Magothy Aquifer and rests on the consolidated bedrock. Depths from land surface range from 200 feet, along the north shore, to over 1,800 feet along the south shore. The Lloyd Aquifer principally supplies water to the south shore barrier beach communities, where the Magothy Aquifer has become contaminated by salt water intrusion.

The water table on Long Island ranges from a few feet along the shorelines and stream/lake margins, to over 200 feet in central parts of the Island. Groundwater flow is principally towards these shorelines. Site specific hydrogeology can only be determined through

a specific program of drilling and core sampling to confirm groundwater depth, direction, and composition of soils. No such drilling program was undertaken as part of this Phase I ESA.

ii. Site Drainage

The *project site* was visually checked for the presence of drainage structures, which may provide routes for hazardous substance or petroleum product migration to surface soils or sewer systems.

No drainage structures were observed on the project site during EEA's site inspection.

iii. Flood Plain Information

The *project site* lies in Zone C, an area of minimal flooding, on the Federal Emergency Management Act (FEMA) Flood Insurance Rate Maps. The *project site* is not in a flood plain.

iv. Sensitive Receptors

Sensitive receptors (i.e., wetlands, surface waters, drinking water well fields, groundwater recharge basins) are identified for the immediate vicinity of the *project site*. In the event of an incident involving the spill of a hazardous substance or petroleum product at the *project site*, more costly remedial actions may be required when sensitive receptors are present.

No surface waters, wetlands, recharge basins, or drinking water well fields were observed on the *project site*.

v. Water Supply

Water is supplied to the *project site* through municipal sources available in this area of Brooklyn. No on-site water supply wells were observed on the *project site* at the time of EEA's site visit.

vi. Monitoring/Observation Wells

No monitoring/observation wells were observed on the *project site* at the time of EEA's site visit.

F. Hazardous Substances and Petroleum Products

No hazardous materials or petroleum products were observed at the *project site* during EEA's site visit. No staining or indications of recent spills or leaks were observed.

G. Storage Tanks

No tank fillports, vent lines or other visible indications for the presence of underground storage tanks were observed at the *project site* during EEA's site visit. However, it should be noted that an old abandoned 275-gallon aboveground fuel oil tank was observed during EEA's second site visit. Based upon the fact that it was partially covered with vegetation, it is assumed that this tank has existed in the same location for a long period of time. Furthermore, the tank appeared to be rusted and empty. It should be noted that the actual presence of this tank is considered a recognized environmental condition. However, due to the fact that it was covered with vegetation and that no staining was observed in the vicinity of the tank, it is not considered a significant environmental concern that would require further investigation.

The *project site* is not listed in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database, which lists all registered facilities with a total combined petroleum storage capacity in excess of 1,100 gallons.

H. PCB-Containing Electrical Equipment

Prior to 1979, PCBs were widely used in electrical equipment such as transformers, capacitors, switches, and voltage regulators for their cooling properties. The manufacture, processing, commercial distribution, and use (except in a "totally enclosed manner") of PCBs was banned in 1979, under the Toxic Substances Control Act (40 CFR Part 761). PCB spills are subject to strict reporting, clean-up and disposal requirements, due to the toxicity of the substance, and their threat to human health and the environment.

No electrical transformers or other electrical equipment containing PCBs were observed on the project site during EEA's site visit.

I. Non-Scope Services Discussion

i. Suspected Asbestos-Containing Materials

No suspected asbestos-containing materials were observed during EEA's site visit.

ii. Lead-Based Paint

There was no evidence of lead-painted surfaces observed on the project site.

iii. Mold

Molds are part of the natural environment. Outdoors, molds play a part in nature by breaking down dead organic matter such as fallen leaves and dead trees, but indoors, mold

growth should be avoided. Molds reproduce by means of tiny spores; the spores are invisible to the naked eye and float through outdoor and indoor air.

Molds are usually not a problem indoors, unless mold spores land on a wet or damp spot and begin growing. Molds have the potential to cause health problems. Mold produces allergens (substances that can cause allergic reactions), irritants, and in some cases, potentially toxic substances (mycotoxins). Inhaling or touching mold or mold spores may cause allergic reactions in sensitive individuals.

No visual evidence of large and/or obvious areas of mold spore growth was noted on the *project site* at the time of EEA's site visit.

iv. Radon

Radon, a naturally occurring radioactive gas, is the product of the decay of radium. It is found most frequently in relatively high concentrations in rock formations containing uranium, granite, shale, phosphate, and pitchblende. Radon may also be found in soils contaminated with industrial waste from uranium and phosphate mining. Radon as a gas can move through the soil and water, and into the atmosphere, and is a potential health concern if confined in sufficiently high concentrations in indoor environments. The U.S. Environmental Protection Agency (USEPA) has set an "action level" of 4.0 picocuries per liter for continuous long term exposure to radon gas. If radon gas is measured above this level, USEPA suggests follow-up testing and remediation measures.

According to data compiled by the Bureau of Radiation Protection, New York State Department of Health, New York City has one of the lowest average levels of basement radon measurements in New York State. The latest statistics indicate an average of 1.4 picocuries/liter for New York City (an average of the five counties), compared to a statewide average of 5.6. Based on these low average levels for New York City, it is unlikely that radon gas levels on the *project site* exceed the USEPA action level of 4.0 picocuries per liter, and therefore radon testing is typically not recommended.

J. Adjacent/Contiguous and Nearby Properties

EEA's site inspection included a visual reconnaissance of properties located adjacent/contiguous to, and in the immediate vicinity of the *project site*. These noted properties were viewed from public right-of-ways along Pitkin Avenue and Berriman Street, as well as along the perimeter boundary of the *project site*. Although there were no significant barriers preventing EEA from determining the general uses of these properties, EEA did not enter any of these properties for a detailed inspection of site conditions for legal reasons (i.e., trespassing).

The subject site is surrounded by residential properties to the north and west. To the east (across Berriman Street) are residential dwellings and a day care facility and to the south (across

Pitkin Avenue) is undeveloped land and 2-story residential dwellings with groundfloor retail stores.

It should be noted that along the south side of the project site is a MTA subway tunnel and its subway air ventilation vaults/grates are evident in the sidewalk along Pitkin Avenue. No regulatory agency database listings were associated with this section of the MTA subway tunnel. Therefore, it is EEA's professional opinion that the existence of the MTA subway tunnel and its associated air ventilation vault are not considered a recognized environmental concern which would have the potential to impact the underlying soils of the project site. Given the proximity of the *project site* to the subway tunnel, specific construction requirements may need to be adhered to with regard to excavation and/or development of the site.

Properties identified within available regulatory agency database search radii are listed in the next subsections of this report (refer to **Sections III.K. and III.L.**).

K. Federal and State Regulatory Records and Databases

EEA obtained and evaluated the readily available and most recent environmental regulatory agency database records provided by Toxics Targeting, Inc. of Ithaca, New York (see **Appendix C** for a copy of this database report). This report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Environmental Site Assessments (E 1527-05).

EEA's review of available and most recent federal and state agency database records for the *project site*, adjacent/contiguous properties, and surrounding neighborhood was completed according to the requirements set forth in ASTM E 1527-05, Section 8. The search distances reviewed for this assessment generally meet or exceed the minimum search distances according to the requirements set forth in ASTM E 1527-05, Section 8.2.1. Any deviations from the minimum search distances are addressed in the individual database discussions presented below.

i. Federal Regulatory Database Search

a. NPL Sites

The United States Environmental Protection Agency (USEPA) National Priorities List (NPL) identifies confirmed hazardous waste sites that are ranked for clean-up under the federal Superfund program. This program was authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA" or "Superfund"), as amended by Superfund Amendments and Reauthorization Act of 1986 ("SARA") and Small Business Liability Relief and Brownfields Revitalization Act of 2002 ("Brownfields Amendments").

The *project site* was not identified within this database. No USEPA NPL sites were identified within an approximate one-mile radius of the *project site*.

b. CERCLIS

The USEPA CERCLA Information System (CERCLIS), which is a comprehensive database and management system that inventories and tracks sites addressed or needing to be addressed by the Superfund program. Sites that USEPA decides do not warrant further evaluation are given a "No Further Remedial Action Planned (NFRAP)" designation by USEPA, which means that no further action under CERCLA is presently anticipated for that site. A "NFRAP" designation does not necessarily indicate that there is no hazard associated with the site only that, based on available information, USEPA does not plan further investigation at this time.

The *project site* was not identified within this database. There are no USEPA CERCLIS sites identified within an approximate 1/2-mile radius of the *project site*.

c. RCRA Corrective Action Activity

The RCRA Corrective Action Activity (CORRACTS) database lists hazardous waste facilities with RCRA corrective action activity reported by the USEPA.

The *project site* was not identified within this database. No RCRA Corrective Action sites were identified within an approximate one-mile radius of the *project site* (see Appendix C).

d. RCRA Treatment/Storage/Disposal Facilities

The RCRA Treatment/Storage/Disposal Facilities (TSDF) database includes facilities that treat, store, and/or dispose of hazardous wastes, or have engaged in these activities in the past. TSDF operators, as with hazardous waste transporters and generators, are regulated under the Resource Conservation and Recovery Act (RCRA).

The *project site* was not identified within this database. No RCRA TSDF sites were identified within an approximate 1/2-mile radius of the *project site*.

e. RCRA Hazardous Waste Generators and Transporters

RCRA Hazardous Waste Generators and Transporters are regulated by the federal government under the Resource Conservation and Recovery Act (RCRA). RCRA facilities are permitted by the USEPA, RCRA Division, to generate hazardous waste as part of business operations and dispose of the waste legally. These facilities generally abide by USEPA regulations for storage, handling and disposal of hazardous materials. RCRA Hazardous Waste Generator and Transporter sites are not permitted to store any hazardous wastes at any time for more than 90 days, reducing the potential risk of a spill. A review of the Hazardous Waste Generator and Transporter listings is useful to assess the kinds of hazardous materials/wastes that are handled, stored, and/or transported in the vicinity of the *project site*, as well as on the *project site*. With the exception of those identified on, or adjacent/contiguous to the *project site*, the

presence of hazardous waste generators or transporters in the immediate vicinity does not necessarily imply risk of contamination to the *project site*.

The *project site* and adjoining properties are not listed in this database.

f. Civil and Administrative Enforcement Docket

USEPA's Civil and Administrative Enforcement Docket is a database that tracks civil judiciary cases filed on behalf of USEPA by the U.S. Department of Justice.

The *project site* and adjoining properties are not listed in this database.

g. Emergency Response Notification System

USEPA's Emergency Response Notification System (ERNS) database contains information from federal agencies on CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity.

The *project site* was not identified within this database.

ii. New York State Regulatory Database Search

a. Inactive Hazardous Waste Disposal Sites

New York State Department of Environmental Conservation's (NYSDEC) Inactive Hazardous Waste Disposal Site Registry contains information concerning potentially hazardous waste sites in New York State. The list of NYSDEC Inactive Hazardous Waste Disposal Sites contains summary information pertaining to those facilities that are deemed hazardous and requiring response actions regulated by the NYSDEC under the State's Superfund Program.

Three NYSDEC Inactive Hazardous Waste Disposal sites were identified within an approximate 1/2-mile radius of the *project site*. All three of these sites are located over an approximate 1,700-foot radius from the subject property and at this distance are all unlikely to have impacted the underlying soils of the *project site*.

b. Hazardous Substance Waste Disposal Sites

NYSDEC maintains a database of waste disposal sites that may pose threats to public health or the environment, but cannot be remediated using monies from the Hazards Waste Remediation Fund.

The *project site* was not identified within this database. No Hazardous Substance Waste Disposal sites were identified within 1/2-mile of the *project site*.

c. Brownfields Sites

New York State (NYS) Brownfields database is a listing of sites that are abandoned, idled or under-used industrial and commercial sites in New York State, where expansion or redevelopment is complicated by real or perceived environmental contamination.

The *project site* is not listed in the Brownsfields Site database. There is one NYS Brownfields site listed within an approximate 1/2-mile radius of the *project site* (see Appendix C). This site is located more than 1/4-mile from the project site and at this distance is not considered likely to have impacted the underlying soils of the project site.

d. Solid Waste Facilities

A check was made of the NYSDEC database of solid waste facilities, including, but not limited to, landfills, incinerators, transfer stations, recycling centers.

The *project site* was not identified within this database. There are no Solid Waste Facilities listed within an approximate 1/2-mile radius of the *project site*.

e. Spill Logs

The NYSDEC maintains a database of spills of hazardous materials, including petroleum products, reported to the agency according to its regulatory requirements. Parties found responsible for these spills are required to respond by notifying the NYSDEC's Spill Hotline, obtain a Spill Number, and eliminate the source of the spill and perform the necessary cleanup of contamination in surface and subsurface soils and groundwater. The responsible party is required to report its response actions to an assigned NYSDEC case manager, and meet the applicable NYSDEC cleanup criteria for the media impacted by the spill before the NYSDEC will render a determination of "no further action" and at such time, the NYSDEC will "close" the spill number. Spill numbers listed as "active" indicate that the spill incident is either still undergoing remediation, or awaiting completion of paperwork for closure. The NYSDEC Spills database records spills of unknown substances, regulated chemicals, petroleum spills, and spills due to tank failures and tank tightness test failures.

The *project site* was not identified within this database. There are 103 NYSDEC spill incidents identified within an approximate 1/2-mile radius of the *project site*, of which 96 have been "closed" by NYSDEC. The remaining 7 spill incidents are listed as "active" within this database, the closest of which is located more than 1,360 feet to the north of the *project site*.

Upon review, due to such factors as the intervening development (e.g., roadways, gas and electrical conduits, subways, underground sewer systems, basements of adjoining and nearby buildings, etc,) between the *project site* and the "active" spill incidents, the distances between the

spill sources and the *project site*, the quantities of materials spilled, and/or the investigation and remediation activities performed by responsible parties, none of these 7 "active" spill incidents were deemed likely to have impacted soils underlying the *project site*.

f. Major Oil Storage Facilities

A check was made of the NYSDEC Major Oil Storage Facilities (MOSF) database, which lists all facilities (onshore facilities or vessels) with petroleum storage capacities of 400,000 gallons or greater.

The *project site* was not identified within this database. No NYSDEC MOSF sites were identified within an approximate 1/8-mile radius of the *project site*.

g. Petroleum Bulk Storage Facilities

NYSDEC maintains registration records for facilities that have petroleum storage capacities in excess of eleven hundred (1,100) gallons and less than four hundred thousand (400,000) gallons. These facilities are documented within the NYSDEC Petroleum Bulk Storage (PBS) and New York City Fire Department (NYCFD) databases.

The *project site* and adjacent properties were not identified within this database.

h. Chemical Bulk Storage Facilities

A check was made of the NYSDEC Chemical Bulk Storage (CBS) database. Chemical bulk storage facilities store regulated hazardous substances in aboveground tanks with capacities of one hundred eighty-five (185) gallons or greater, and/or in underground tanks of any size.

The *project site* was not identified within this database. No CBS sites were identified within an approximate 1/8-mile radius of the *project site*.

L. New York City Regulatory Databases Records

i. New York City Historic Utility Facilities

A check was made of the New York City (NYC) Historic Utility Facilities database which is an inventory of selected power generation stations, manufactured gas plants, gas storage facilities, maintenance yards and other gas and electric utility sites identified within various historic documents, maps, and annual reports of New York utility companies. A majority of these sites operated between the 1890s and 1940s.

The *project site* was not identified within this database. No NYC Historic Utility Facilities were identified within an approximate 1/8-mile radius of the *project site*.

ii. New York City "E" Designated Sites

A check was made of the New York City (NYC) Environmental Quality Review (CEQR) - E Designation Site database, which lists parcels assigned a special environmental ("E") designation under the CEQR process. An "E" designation requires specific protocols that must be followed during redevelopment.

The *project site* was not identified within this database. No NYC Environmental Quality Review - E Designation Sites were identified within an approximate 1/8-mile radius of the *project site*.

M. Data Gaps

According to ASTM E 1527-05, a *Data Gap* is defined as an inability to obtain information during the Phase I ESA process, as required under this standard, despite a good faith effort by the Environmental Professional to obtain this information. As required under the ASTM standard, Section 12.7, the Environmental Profession must include in the ESA report a discussion identifying significant Data Gaps which prevent the Environmental Professional from identifying recognized environmental conditions associated with the *project site*.

If Data Gaps identified during the all appropriate inquiry prevent the Environmental Professional's ability to render an opinion as to whether recognized environmental concerns associated with the *project site*, then such Data Gaps are considered significant, according to the ASTM E 1527-05, Section 12.7. The Environmental Professional must identify significant Data Gaps in the Phase I ESA, identify the sources consulted to address the Data Gap, and comment on the significance of the Data Gap in affecting the opinion as to whether recognized environmental conditions are associated with the *project site*. The Environmental Professional may then provide recommendations to the user of the Phase I ESA for further actions which may be necessary to address these significant Data Gaps.

However, a Data Gap itself is not inherently significant. If the Environmental Professional is able to render an opinion as to whether or not recognized environmental conditions are associated with the *project site*, based on the professional's experience and other information collected during an all appropriate inquiry even where Data Gaps exist, then such Data Gaps are not considered significant and do not need to be discussed in the Phase I ESA.

EEA has performed this Phase I ESA of the *project site* in compliance with the scope and limitations of ASTM Practice E 1527-05, as an all appropriate inquiry under the Final Rule. The findings of this Phase I ESA are based on a visual inspection of the *project site*, visual survey of adjacent/contiguous and nearby properties, review of available historical records, and a review of available environmental regulatory agency records.

No significant data gaps have been identified during the course of this investigation.

IV. PROFESSIONAL OPINIONS

Based on the evaluation of readily available information obtained during this Phase I ESA, according to the scope and limitations as defined in the Phase I ESA, and EEA's professional judgment, the following *Recognized Environmental Conditions* (RECs) were identified during the course of this investigation. However, these RECs are not considered significant enough to warrant further investigation and are as follows:

Aboveground Fuel Oil Tank

It should be noted that an old abandoned 275-gallon aboveground fuel oil tank was observed during EEA's second site visit. Based upon the fact that it was partially covered with vegetation, it is assumed that this tank has existed in the same location for a long period of time. Furthermore, the tank appeared to be rusted and empty. It should be noted that the actual presence of this tank is considered a recognized environmental condition. However, due to the fact that it was covered with vegetation and that no staining was observed in the vicinity of the tank, it is not considered a significant environmental concern that would require further investigation.

Historical Non-Residential Uses

Some of the above non-residential business that were listed within the reverse address directories (e.g., ironworker, furniture repair, radio repair business) are types of uses that are known to involve the use of toxic and hazardous materials. However, given the small size and duration of these businesses, the fact that they were not stand alone operations but rather groundfloor storefronts within residential buildings, and that the former structures were likely connected to the municipal sewer system. Therefore, it is EEA's professional opinion that the underlying soils on the project site are unlikely to have been significantly impacted by these non-residential uses.

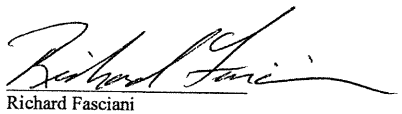
V. CONCLUSIONS

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E 1527-05 of the *project site*. Any exceptions to, or deletions from, this practice are described in Section V and Section VII of this *report*. This assessment has revealed no apparent evidence of *Recognized Environmental Conditions* (RECs) in connection with the *project site* and therefore, no further studies or investigations are recommended.

ENVIRONMENTAL PROFESSIONAL STATEMENT AND SIGNATURES

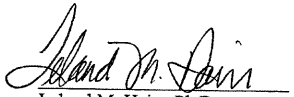
We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a *property* of the nature, history, and setting of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

ENVIRONMENTAL ASSESSOR:



Richard Fasciani
Senior Environmental Professional
Phase I ESA Division Manager

REVIEWER:



Leland M. Hairr, Ph.D.
President

VI. SCOPE OF WORK

A. Purpose and Limitations

The Scope of Work for this Phase I ESA is based on the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527-05) developed by the American Society for Testing and Materials (ASTM), and generally accepted industry protocols, with the following exceptions: no interviews with past property owners, no environmental lien search was performed, and an analysis of the actual purchase price compared with the fair market value of the *project site* was not performed. This Phase I Environmental Site Assessment (ESA) involved, and was limited to: research into the history of uses of the *project site*, checks with appropriate government and regulatory agencies, a visual inspection of the *project site*, and an informal survey of adjacent/contiguous and nearby properties to determine the presence of *Recognized Environmental Conditions*. *Recognized Environmental Conditions* are defined under ASTM E 1527-05, Section 3.2.73 as:

> "the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, ground water, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Since the Phase I ESA scope of work does not typically include testing of building materials (e.g., for asbestos, lead-based paints, PCBs, etc.), or of subsurface soils or groundwater, no definitive assessment of the presence of environmental contamination (from on-site or off-site sources) is made. It should also be noted that other issues that may relate to property value impairments (e.g., ambient air quality, asbestos in building concerns, lead-paint concerns, pollution conditions requiring response costs, noise pollution, perceived risk from electromagnetic fields, etc.) are outside the scope of this Phase I ESA, and are addressed in this study only in a limited manner.

If further determination of any potential contamination or analysis of specific materials is needed, then testing and/or further investigations (e.g., Phase II investigations) may be necessary.

B. Conformance with ASTM Standard

EEA has performed this Phase I ESA of the *project site* in compliance with the scope and limitations of ASTM Practice E 1527-05, and its client's scope of services for Phase I ESAs, as required by the client, as the User. The purpose for this Phase I ESA is to provide EEA's client with Phase I ESA findings, conclusions and professional opinions to support the User's business

practices and to meet one of the requirements for innocent landowner and bona fide prospective purchaser limitations on CERCLA liability. If requested by the client, as the User, the scope of work may exceed the recommended ASTM scope (e.g., additional database searches, evaluations for asbestos, radon, lead-based paint issues, wetlands, etc.). If additional evaluations are requested for the purposes of determining business environmental risks, such evaluations will be based upon considerations including, but not necessarily limited to, the nature of the property and the reasons for performing the assessment, and will be agreed upon between the User and EEA as additional services beyond the scope of the ASTM Phase I ESA practice in a signed writing prior to the initiation of the additional tasks.

In accordance with ASTM standards, a Phase I ESA is not intended by EEA to be used by the User as an environmental compliance report. This Phase I ESA report does not address the specific compliance requirements under federal, state and local laws for storage, use, transport, discharge, or disposal of hazardous or toxic materials associated with the *project site*. Specific compliance issues and questions about a particular site must be addressed directly through the regulatory agency having jurisdiction over the *project site*. In addition, no judgment is made with respect to the facility's compliance with worker exposure standards established by the federal Occupational Safety and Health Administration (OSHA), or any other state or local regulatory body.

C. Sources of Information and Research Methods

As previously mentioned, this Phase I ESA involved, and was limited to: research into the history of uses of the *project site*, checks with appropriate government and regulatory agencies, a visual inspection of the *project site*, and an informal survey of adjacent/contiguous and nearby properties to determine the presence of *Recognized Environmental Conditions* (RECs).

Historical site research is important in the assessment of the likelihood of past releases of hazardous substances and/or petroleum products. Sources of historical information for the *project site* may include one or more of the following:

- Historical Sanborn atlases, aerial photos, etc.
- USGS topographic maps, land use and zoning maps, flood plain maps.
- Interviews with site contacts or current site operators,
- New York City Buildings Department for building history including construction and alteration permits, and New York City Fire Department (NYCFD) for information relating to petroleum storage tanks, and storage and use of hazardous substances or petroleum products.

The site inspection involves a review of current operations and walk-through of the *project site* for visible indications of any significant contamination by hazardous substances and/or petroleum products. The site inspection includes the following objectives:

- to identify sources of potential on-site contamination, such as underground storage tanks, septic systems, dry wells, interior floor drains, electrical equipment potentially containing PCBs, suspected asbestos-containing materials, and suspected lead-based paints, etc.
- to examine the property for signs of potential contamination: stained soils, unusual odors, stressed or dead vegetation, improperly stored drums, oil slicks, on-site waste disposal/dumping, etc.
- to identify the quantity and type of hazardous substances or petroleum products used in the on-site operations.
- to identify potential off-site sources of contamination. Adjacent uses are noted, along with topography and surface water drainage patterns.
- to identify on-site or adjacent off-site sensitive receptors, such as wetlands, surface waters, drinking water wells.

EEA's review of available federal agency records for listings which may include the *project site*, adjacent/contiguous properties, and surrounding neighborhood was completed according to the requirements set forth in ASTM E1527-05, Section 8. The search distances reviewed for this assessment generally meet or exceed the minimum search distances according to the requirements set forth in ASTM E1527-05, Section 8.2.1. Any deviations from the minimum search distances are addressed in the discussions for significant individual database findings.

EEA's review of available federal agency records for listings which may include the *project site*, adjacent/contiguous properties, and surrounding neighborhood included the following federal databases: NPL and Delisted NPL site listings; CERCLIS and CERCLIS NFRAP site listings; RCRA CORRACTS and RCRA non-CORRACTS TSD facility listings; RCRA Generator listings; Federal institutional control/engineering control registries; and the Federal ERNS list.

EEA's review of readily available New York State Department of Environmental Conservation (NYSDEC) records for listings which may include the *project site*, adjacent/contiguous properties, and the surrounding neighborhood included the following state databases: Inactive Hazardous Waste Disposal Sites; Brownfields Sites and Voluntary Cleanup Program (VCP) Sites listings; Solid Waste Facilities and Historical Solid Waste Sites listings; Petroleum Bulk Storage Facilities, Major Oil Storage Facilities and Chemical Bulk Storage

Facilities site listings; and Leaking Underground Storage Tank (LUST) and Spill Site facility listings.

Not all of the objectives described above are applied to every site; investigations are tailored to the particular nature of the site. It should be noted that information requested from regulatory agencies may be incomplete or unavailable within a reasonable time period.

D. User Supplied Information

In order for a prospective purchaser to claim CERCLA landowner liability protections, under section 101 (35)(B) of CERCLA, as amended by the Small Business Liability Relief and Brownfields Revitalization Act, such persons and businesses are required to conduct all appropriate inquiries prior to or on the date of obtaining ownership of the property. The USEPA, in its Final Rule, Standards and Practices for All Appropriate Inquiries, established federal standards and practices for conducting all appropriate inquiries, found in 40 CFR Part 312. Under § 312.11 (a), ASTM E 1527-05 is identified as an industry standard which may be used to comply with all appropriate inquiries.

The performance standards required for all appropriate inquiries include inquiries by an Environmental Professional, and additional inquiries by persons seeking to establish one of the CERCLA liability protections. Under § 312.22, additional inquiries by persons seeking to establish one of the CERCLA liability protections, if not otherwise provided to the Environmental Professional, includes in substance: an evaluation of environmental cleanup liens against the *project site*; consideration of specialized knowledge or experience of the person seeking to claim liability protection; evaluation of the relationship of the purchase price to fair market value of the *project site*, if the property was not contaminated; or other commonly known or reasonably ascertainable information about the *project site*. If such information is not provided to the Environmental Professional, the all appropriate inquiry report prepared by the Environmental Professional must include a determination as to whether the lack of this information affects his or her ability to identify conditions of releases or threatened releases under the Final Rule, and discuss this condition as a significant Data Gap (see **Section III.P.** of this report).

VII. QUALIFICATIONS

EEA Inc. is an environmental consulting firm that has undertaken environmental pollution investigations, development feasibility studies, and environmental site assessment studies since 1979. These site evaluation studies have been prepared for major lenders, public corporations, businesses, developers and governmental agencies. Over 6,000 parcels have been evaluated in the metropolitan New York-New Jersey area during the past eighteen (18) years, ranging from Phase I Environmental Site Assessments to comprehensive soil, water, and asbestos testing programs. EEA also prepares bid specifications for remediation programs and supervises site cleanup.

EEA's principals and senior managers for the hazardous waste investigations each have over 20 years experience in environmental consulting, with established credentials in the field. The necessary qualifications information for EEA's Environmental Professional, as required by the ASTM practice, can be provided upon request.

VIII. DISCLAIMER

This Phase I ESA has been prepared for Cypress Hills Local Development Fund and is only to be used as a *Phase I Environmental Site Assessment* of the *subject property* in compliance with the scope and limitations of ASTM Practice E 1527-05 at the time of EEA's site visit. This Phase I ESA is based on the review of relevant historic and agency records relating to past uses and occupants, which may be incomplete, and upon a visual inspection of the *subject property*.

Any third party reliance on the findings and conclusions contained in this report is expressly prohibited, unless the third party obtains the written consent of EEA beforehand. EEA Inc. assumes no liability for any unauthorized use of this report by any person or entity other than the User for whom it has been prepared. This Phase I ESA was undertaken in accordance with generally accepted currently customary practices, specifically the ASTM Standard Practice for Phase I ESAs. This Phase I ESA makes no representations or conclusions with respect to portions of the *subject property* and its structures which were not inspected, portions of the *subject property* which were hidden from view, or portions of the *subject property* not accessed by EEA for any reason.

As discussed in ASTM E 1527-05, Section 4.5.1, a Phase I ESA cannot wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. The completion of this Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the property, within reasonable limits of time and cost. This Phase I ESA is a visual, non-intrusive assessment where the investigation included a review of readily available applicable records, interviews with site owners and personnel, and an inspection of readily accessible and visible areas.

This Phase I ESA does not involve any sampling, testing, or laboratory analysis of soils, surface water, groundwater, products, building materials, or other substances on-site, but constitutes only the professional opinion of EEA Inc. based on established ASTM Phase I ESA and User procedures and protocols. This Phase I ESA is not, and should not be construed as, a guaranty, warranty, or certification of the presence or absence of toxic or hazardous substances, which can be made only through direct or indirect testing, and contains no formal plans or recommendations to rectify or remediate the presence of any toxic or hazardous substances, which may be subject to regulatory oversight and approval.

Any and all liability on the part of EEA Inc. shall be limited to the greater of $1,000,000 or the extent of applicable coverage of EEA's professional liability insurance between EEA Inc. and the User of this Phase I ESA. EEA Inc. shall have no liability for any other damages, whether consequential, compensatory, punitive, or special, arising out of, incidental to, or as a result of, this Phase I ESA. EEA Inc. assumes no liability for the use of this Phase I ESA by any person or entity other than the institution and/or entities or persons for whom it has been prepared.

APPENDIX 4
NYC Department of Environmental Protection Review Letter

NYC Environmental Protection

Carter H. Strickland, Jr.
Commissioner

Angela Licata
Deputy Commissioner
of Sustainability
alicata@dep.nyc.gov

59-17 Junction Boulevard
Flushing, NY 11373
T: (718) 595-4398
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January 23, 2013

Mr. Robert Dobruskin
Director, Environmental Assessment and Review Division
New York City Department of City Planning
22 Reade Street, Room 4E
New York, New York 10007-1216

Re: Pitkin Avenue Rezoning
2481, 2485, 2501 Pitkin Avenue, 405 and 409 Shepherd Avenue
Block 4005, Lots 1, 2, 28, 35, and 38
DEP # 13DEPTECH037K / CEQR # 77DCP092K
Brooklyn, New York

Dear Mr. Dobruskin:

The New York City Department of Environmental Protection, Bureau of Environmental Planning and Analysis (DEP) has reviewed the October 2012 Environmental Assessment Statement (EAS) prepared by Philip Habib & Associates and the February 2011 Phase I Environmental Site Assessment Report (Phase I) prepared by EEA Inc. on behalf of Pitkin-Berriman Housing Development Fund Corporation (HDFC) (applicant) for the above referenced project. It is our understanding that the applicant is seeking a zoning map amendment from the New York City Department of City Planning to rezone Block 4005, Lots 1, 2, 28, 35, and 38 from R5/C1-3 to R7A/C2-4 in most of the rezoning area and remove the C1-3 commercial overlay from the underlying R5 district in the remaining portion of the rezoning area. The applicant is also seeking 4% Low Income Housing Tax Credits from the New York City Housing Development Corporation (NYCHDC) to facilitate the construction of a seven-story mixed-use residential and commercial building on the development site at 2501 Pitkin Avenue (Lot 28). The proposed building would have approximately 60 dwelling units, which translates to approximately 60,113 gross square feet (gsf) of residential space on the first through seventh floors, and approximately 9,300 gsf of local retail space on the ground floor, for a total of approximately 69,413 gsf of new development space. The required accessory parking spaces for the proposed development would be waived pursuant to New York City Zoning Resolution (ZR) Sections 25-261 and 36-232. The development site is bounded by Pitkin Avenue to the south, Berriman Street to the east, Glenmore Avenue to the north, and Shepherd Avenue to the west in the East New York area of Brooklyn, Community District 5.

It should be noted that Lot 28 (vacant site) is under the control or ownership of the applicant. Lots 1, 2, 35, and 38 are not under the control or ownership of the applicant.

The February 2011 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and industrial uses including an upholstery business, furniture rental, ironworker business, travel broker, brokerage business, furniture repair, beauty salons, floor covering business, auto parking, plumbers, attorneys, florist, jewelry business, sweet shop, a radio repair business, shoe repair and a stationary store. It should be noted that the former on-site buildings were constructed between 1909 and 1924 and were demolished between 1977 and 1987. An abandoned 275-gallon aboveground fuel oil tank was observed on the project site. There is an MTA subway tunnel along the south side of the project site and its subway air ventilation vaults/grates are evident in the sidewalk along Pitkin Avenue. However, there were no regulatory agency database listings associated with this section of the MTA subway tunnel. The New York State Department of Environmental Conservation (NYSDEC) SPILLS database revealed 103 spills sites within a ½-mile radius of the project site, including 7 active status spills and 96 closed status spills.

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

Proposed Development Sites under the control or ownership of the applicant
(Block 4005 Lot 28)

- DCP should inform the applicant that past on-site and or surrounding area land uses may have been impacted the soil and groundwater at this site. Therefore, a Phase II Environmental Site Assessment Investigation (Phase II) is necessary to adequately identity/characterize the surface and subsurface soils prior to the proposed development. A Phase II Investigative Protocol/Work Plan summarizing the proposed drilling, soil/groundwater and soil vapor sampling activities should be submitted to DEP for review and approval. The Work Plan should include blueprints and/or site plans displaying the current surface grade and sub-grade elevations and a site map depicting soil boring locations and groundwater sampling locations. Soil, groundwater and soil vapor samples should be collected and analyzed by a New York State Department of Health Environmental Laboratory Approval Program-CERTIFIED laboratory for the presence of Volatile Organic Compounds (VOCs) by United States Environmental Agency (EPA) Method 8260, Semi-Volatile Organic Compounds (SVOCs) by EPA method 8270, Pesticides/Polychlorinated Biphenyls by EPA Method 8081/8082 and Target Analyte List (TAL) metals (filtered and unfiltered for groundwater samples). The soil vapor sampling will be conducted in accordance with the New York State Department of Health's (NYSDOH) October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and analyzed for VOCs by EPA Method TO-15. An investigative Health and Safety Plan (HASP) should also be submitted to DEP for review and approval.

Sites not under the control or ownership of the applicant-

(Block 4005, Lots 1, 2, 35, and 38)

Please note that the above comments refer to Block 4005 Lot 28, the applicant's development site. The October 2012 Environmental Assessment Statement does not clarify whether any other parcels would be developed as a result of the subject action. In the event that other lots are identified as potential development sites, the potential for hazardous materials impacts and the need for (E) designations should be considered at that time.

DCP should also instruct the applicant that the Phase II Work Plan and HASP (Lot 28) should be submitted to DEP for review and approval prior to the start of any fieldwork. Future correspondence related to this project should include the following tracking number **13DEPTECH037K**. If you have any questions, you may contact Ms. Callista Nazaire at (718) 595-4401.

Sincerely,

Maurice S. Winter
Deputy Director, Site Assessment

c: E. Mahoney
M. Winter
C. Nazaire
T. Estesen
C. Evans – DCP
D. McCarthy – DCP
File

APPENDIX 5
Trip Generation Tables

Table 5-1: Transportation Planning Assumptions

	Build		No-Build		
Land Use:	**Local Retail/ Public Market**	**Residential**	**Local Retail/ Public Market**	**Residential**	**Community Facility**
Size/Units:	9,300 gsf	60 DU	5,000 gsf	34 DU	10,000 sf
Trip Generation:	(1)	(1)	(1)	(1)	(3)
Weekday	205	8.075	205	8.075	44.7
Saturday	240	9.600	240	9.600	26.1
	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
Temporal Distribution:	(1)	(1)	(1)	(1)	(3)
AM	3.0%	10.0%	3.0%	10.0%	4.0%
MD	19.0%	5.0%	19.0%	5.0%	9.0%
PM	10.0%	11.0%	10.0%	11.0%	5.0%
SatMD	10.0%	8.0%	10.0%	8.0%	9.0%
	(1)	(2)	(1)	(2)	(3)
Modal Splits:	AM/PM/SAT	AM/MD/PM	AM/PM/SAT	AM/MD/PM	AM/MD/PM
Auto	2.0%	21.6%	2.0%	21.6%	4.0%
Taxi	3.0%	0.0%	3.0%	0.0%	9.0%
Subway	6.0%	65.9%	6.0%	65.9%	12.0%
Bus	6.0%	11.3%	6.0%	11.3%	5.0%
Walk/Other	83.0%	1.2%	83.0%	1.2%	70.0%
	100.0%	100.0%	100.0%	100.0%	100.0%

	(1)		(1)		(1)		(1)		(3)	
In/Out Splits:	In	Out	In	Out	In	Out	In	Out	In	Out
AM	50%	50%	20.0%	80.0%	50%	50%	20.0%	80.0%	66%	34%
MD	50%	50%	50.0%	50.0%	50%	50%	50.0%	50.0%	58%	42%
PM	50%	50%	65.0%	35.0%	50%	50%	65.0%	35.0%	34%	66%
Sat MD	50%	50%	50.0%	50.0%	50%	50%	50.0%	50.0%	58%	42%

Vehicle Occupancy:	(1)		(1,2)		(1)		(1,2)		(3)	
Auto	2.00		1.00		2.00		1.00		1.40	
Taxi	2.00		1.36		2.00		1.36		1.40	
Truck Trip Generation:	(1)		(1)		(1)		(1)		(3)	
Weekday	0.35		0.06		0.35		0.06		0.04	
Saturday	0.04		0.02		0.04		0.02		0.01	
	per 1,000 sf		per DU		per 1,000 sf		per DU		per 1,000 sf	
	(1)		(1)		(1)		(1)		(3)	
AM	8.0%		12.0%		8.0%		12.0%		7.7%	
MD	11.0%		9.0%		11.0%		9.0%		11.0%	
PM	2.0%		2.0%		2.0%		2.0%		2.0%	
Sat MD	11.0%		9.0%		11.0%		9.0%		11.0%	
	In	Out	In	Out	In	Out	In	Out	In	Out
AM/MD/PM	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

(1) *2012 City Environmental Quality Review (CEQR) Technical Manual.*

(2) *Based on ACS (American Community Servey) Journey-to -Work Data for Brooklyn 1166.*

(3) *125th Street Corridor Rezoning and Related Actions FEIS, February 2008.*

Table 5-2: Transportation Demand Forecast

		Build						No-Build									
Land Use:		**Local Retail/ Public Market**		**Residential**		**Build Total**		**Local Retail/ Public Market**		**Residential**		**Community Facility**		**No-Build Total**		**Net Increment**	
Size/Units:		9,300	gsf	60	DU			5,000	gsf	34	DU	10,000	sf				
Peak Hour Trips:																	
	AM	58		48		106		32		0		18		50		57	
	MD	364		24		388		196		0		40		236		152	
	PM	191		53		244		103		0		22		125		119	
	Sat MD	223		46		269		120		0		23		144		126	
Person Trips:																	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto**	1	1	2	8	3	9	0	0	0	0	0	0	0	0	3	9
	Taxi	1	1	0	0	1	1	0	0	0	0	1	1	1	1	0	0
	Subway	2	2	6	26	8	28	1	1	0	0	1	1	2	2	6	26
	Bus	2	2	1	4	3	6	1	1	0	0	1	0	2	1	1	5
	Walk/Other	25	25	0	-1	25	24	14	14	1	1	8	4	23	19	2	5
	Total	31	31	9	37	40	68	16	16	1	1	11	6	28	23	12	45
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto**	4	4	3	3	7	7	2	2	0	0	0	0	2	2	5	5
	Taxi	5	5	0	0	5	5	3	3	0	0	0	0	3	3	2	2
	Subway	11	11	8	8	19	19	6	6	0	0	0	0	6	6	13	13
	Bus	11	11	1	1	12	12	6	6	0	0	0	0	6	6	6	6
	Walk/Other	151	151	1	1	152	152	81	81	0	0	0	0	81	81	71	71
	Total	182	182	13	13	195	195	98	98	0	0	0	0	98	98	97	97
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto**	2	2	7	4	9	6	1	1	0	0	0	1	1	2	8	4
	Taxi	3	3	0	0	3	3	2	2	0	0	1	1	3	3	0	0
	Subway	6	6	23	12	29	18	3	3	0	0	1	2	4	5	25	13
	Bus	6	6	4	2	10	8	3	3	0	0	0	1	3	4	7	4
	Walk/Other	80	80	0	0	80	80	44	44	0	0	5	9	49	53	31	27
	Total	97	97	34	18	131	115	53	53	0	0	7	14	60	67	71	48
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto**	2	2	5	5	7	7	1	1	0	0	1	0	2	1	5	6
	Taxi	3	3	0	0	3	3	2	2	0	0	1	1	3	3	0	0
	Subway	7	7	15	15	22	22	4	4	0	0	2	1	6	5	16	17
	Bus	7	7	3	2	10	9	4	4	0	0	1	0	5	4	5	5
	Walk/Other	93	93	0	0	93	93	50	50	1	1	10	7	61	58	32	35
	Total	112	112	23	22	135	134	61	61	1	1	15	9	77	71	58	63
Vehicle Trips :																	
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM	**Auto (Total)**	1	1	2	8	3	9	0	0	0	0	0	0	0	0	3	9
	Taxi	1	1	0	0	1	1	0	0	0	0	1	1	1	1	0	0
	Taxi Balanced	2	2	0	0	2	2	0	0	0	0	2	2	2	2	0	0
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3	3	2	8	5	11	0	0	0	0	2	2	2	2	3	9
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
MD	**Auto (Total)**	2	2	3	3	5	5	1	1	0	0	0	0	1	1	4	4
	Taxi	3	3	0	0	3	3	2	2	0	0	0	0	2	2	1	1
	Taxi Balanced	6	6	0	0	6	6	4	4	0	0	0	0	4	4	2	2
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	8	8	3	3	11	11	5	5	0	0	0	0	5	5	6	6
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
PM	**Auto (Total)**	1	1	7	4	8	5	1	1	0	0	0	1	1	2	7	3
	Taxi	2	2	0	0	2	2	1	1	0	0	1	1	2	2	0	0
	Taxi Balanced	4	4	0	0	4	4	2	2	0	0	2	2	4	4	0	0
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	5	5	7	4	12	9	3	3	0	0	2	3	5	6	7	3
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Sat MD	**Auto (Total)**	1	1	5	5	6	6	1	1	0	0	1	0	2	1	4	5
	Taxi	2	2	0	0	2	2	1	1	0	0	1	1	2	2	0	0
	Taxi Balanced	4	4	0	0	4	4	2	2	0	0	2	2	4	4	0	0
	Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	5	5	5	5	10	10	3	3	0	0	3	2	6	5	4	5

		Total Build			Total No-Build			**Net Increment**		
	Total Vehicle	In	Out	Total	In	Out	Total	In	Out	Total
	AM	5	11	16	2	2	4	3	9	12
	MD	11	11	22	5	5	10	6	6	12
	PM	12	9	21	5	6	11	7	3	10
	Sat MD	10	10	20	6	5	11	4	5	9