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

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

Prepared for:
Cropsey Partners LLC.

Prepared by:
Equity Environmental Engineering
500 International Drive, Suite 150
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December 6, 2021

2300 Cropsey Avenue

Block 6471, Lot
109, p/o 13; Block 6928, p/o Lot 55

Brooklyn Community District 11

CEQR Reference No: 21DCP032K

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

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

Part I: GENERAL INFORMATION

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

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

2. *Project Name* 2300 Cropsey Avenue

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency) 21DCP032K	BSA REFERENCE NUMBER (if applicable)
ULURP REFERENCE NUMBER (if applicable) 200358ZMK	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY Department of City Planning			NAME OF APPLICANT Cropsey Partners LLC		
NAME OF LEAD AGENCY CONTACT PERSON Stephanie Shellooe, AICP, Director			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON Amber Kartalyan, Equity Environmental Engineering LLC		
ADDRESS 120 Broadway, 31st Floor			ADDRESS 500 International Drive, Suite 150		
CITY New York	STATE NY	ZIP 10271	CITY Mount Olive	STATE NJ	ZIP 07828
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 973-527-7451x204	EMAIL amber.kartalyan@equityenvironmental.com	

5. *Project Description*

The Applicant, Cropsey Partners LLC, requests approval of a zoning map amendment to rezone Block 6471, Lots 109, and p/o Lot 13, and Block 6928 p/o Lot 55 ("The Rezoning Area") from R6 to R6/C2-4. The Proposed Action would enable commercial uses on the Applicant's lot located on Block 6471, Lot 109 ("Projected Development Site 1").

A 23-story, 293-foot-tall building is currently being constructed as-of-right on Projected Development Site 1 with approximately 329,522 gross square feet ("gsf") of floor area. The Proposed Action would permit 35,247 gsf of first floor (ground floor) commercial use (supermarket) at the Projected Development Site. The building would contain 219,755 gsf of residential floor area containing 154 dwelling units, 35,247 gsf of first floor commercial use (supermarket), and 74,520 gsf of community facility uses. The development is allowed as-of-right within the existing R6 zoning district, with the exception of the proposed 35,2467 gsf of ground floor commercial use. 263 parking spaces are provided, with 108 parking stalls located in the cellar, 134 parking stalls on the second floor, and 21 exterior parking stalls located at grade. Projected Development Site 1 is located in the Gravesend neighborhood within Community District 11 in Brooklyn.

The Proposed Action is a discretionary action subject to environmental review. The NYC Department of City Planning is the lead agency on behalf of the City Planning Commission for environmental review under City Environmental Quality Review ("CEQR").

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 11	STREET ADDRESS 2300 Cropsey Avenue
TAX BLOCK(S) AND LOT(S) Block 6471 Lots 109 and p/o Lot 13; Block 6928, p/o Lot 55		ZIP CODE 11214
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS Belt Parkway to the west, Cropsey Avenue to the east, Bay Parkway to the north, and 24th Avenue to the south.		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R6		ZONING SECTIONAL MAP NUMBER 28c

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

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

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

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

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

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

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

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

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

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

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

Physical Setting (both developed and undeveloped areas)
Total directly affected area (sq. ft.): 167,326 within Affected Area; 45,688 on Project Site
Waterbody area (sq. ft) and type:
Roads, buildings, and other paved surfaces (sq. ft.):
Other, describe (sq. ft.):

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)
SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 329,522
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 329,522
HEIGHT OF EACH BUILDING (ft.): 293
NUMBER OF STORIES OF EACH BUILDING: 23

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: 45,688
The total square feet not owned or controlled by the applicant: 121,638

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 45,688 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 456,880 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 45,688 sq. ft. (width x length)

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

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	219,755	35,247	74,520	N/A
Type (*e.g.,* retail, office,	154 units	UG 6 Supermarket	UG 4 Medical	N/A

school)				

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

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 456 NUMBER OF ADDITIONAL WORKERS: 330

Provide a brief explanation of how these numbers were determined: Brooklyn CD 11 average household size of 2.96 x 154 units (ACS 2017); 3 employees per 1,000 sf of retail and CF use

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

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

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: The 23-story mixed-use building is currently under construction on Projected Development Site 1. The No-Action Scenario assumes that the development currently underway on Projected Development Site 1 would be completed. The community facility uses would be located on the first, second, and third floors of the proposed building. The floor area breakdown would be 219,755 gsf of residential (154 dwelling units) and 109,767 gsf of community facility (ambulatory diagnostic). Even though the transfer of development rights with Lot 55 would permit an additional 40,000 gsf of development on Lot 109, based on the Applicant's market assessment of the area any additional development beyond what is proposed (either residential or community facility uses) would not be economically feasible due to diminishing returns on investment. Additionally, Projected Development Site 1 is an interior lot with a maximum permitted lot coverage of 65%. Because of the sky exposure plane restrictions within the R6 zoning district and maximum lot coverage of 65%, further expansion beyond what is proposed is not feasible.

9. *Analysis Year* CEQR Technical Manual Chapter 2

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

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: Approximately 22 months:
*18 months for environmental process and ULURP Process and 4 months for interior build-out of the ground floor commercial space

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

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: The building is already under construction and would be completed in a single phase. Following approval of the rezoning proposal the ground floor will be filled with a community facility (ambulatory diagnostic) tenant and commercial (supermarket).

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

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

Part II: TECHNICAL ANALYSIS

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

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

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

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

	YES	NO
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): 0 (no increment)		
o Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): 0 (no increment)		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
o Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☒
o 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?	☐	☒
o Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☐	☒
o If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒

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

20. *APPLICANT'S CERTIFICATION*

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

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

APPLICANT/REPRESENTATIVE NAME	DATE
Amber Kartalyan	12/6/2021

SIGNATURE Amber Kartalyan

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

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

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

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

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

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

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

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

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

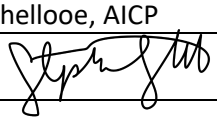
☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result.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

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

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

TITLE	LEAD AGENCY
Director, Environmental Assessment and Review Division	City Planning Commission
NAME	**DATE**
Stephanie Shellooe, AICP	December 10, 2021

SIGNATURE



NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The applicant, Cropsey Partners LLC, seeks approval of a Zoning Map Amendment to rezone the affected area (Brooklyn Block 6471, Lots 109 and a portion of (p/o) Lot 13; Block 6928, p/o Lot 55) from R6 to R6/C2-4 (the "proposed action"), in the Gravesend neighborhood of Brooklyn, Community District 11. The proposed action would facilitate the development of the applicant-owned Projected Development Site 1 (Lot 109) at 2300 Cropsey Avenue with 35,247 gross square foot (gsf) of ground floor commercial use. Construction of a 23-story mixed-use residential and community facility building that conforms to and complies with the existing zoning is nearing completion on Projected Development Site 1, and will contain 329,522 gsf of floor area, including 219,755 gsf of residential floor area containing 154 dwelling units, and 109,767 gsf of community facility (ambulatory diagnostic) use. The proposed C2-4 commercial overlay would allow for the replacement of 35,247 gsf of community facility space on the ground floor with 35,247 gsf of commercial (supermarket) use. The proposed action would result in the development of locally serving commercial use to fulfill local retail needs. The site is located along a wide road that serves as a major thoroughfare, in an area that is well-served by public transit and accessible by major highways. The site is within the Coastal Zone Boundary, and the proposed action would be consistent with the policies set forth in the New York City Waterfront Revitalization Program (WRP). The proposed action would introduce a ground floor commercial use within an otherwise as-of-right mixed-use residential development and the proposed commercial use would be compatible with existing uses in the surrounding area. Therefore, the assessment concludes that no significant adverse impacts are anticipated for land use, zoning, and public policy, and no further analysis is warranted.

Transportation

A detailed analysis related to pedestrian and transit trips is included in this EAS. The projected pedestrian volumes for the proposed project would exceed the threshold of 200 pedestrians per hour at any sidewalk, crosswalk, or intersection corner per the 2020 CEQR Technical Manual. Accordingly, a detailed level of service analysis (LOS) was performed for pedestrian crosswalk queuing segments and sidewalk segments at two intersections --- Cropsey Avenue at Bay 34th Street, and Cropsey Avenue at 23rd Avenue. The detailed LOS assessment found that the proposed action would not have a significant adverse impact on pedestrians. Therefore, the proposed action would not result in significant adverse transportation impacts.

Air Quality

A detailed analysis related to air quality is included in this EAS. In accordance with 2020 CEQR Technical Manual guidance, a detailed assessment was performed for mobile sources because the proposed action would result in operable windows or air intakes within 200 feet of an atypical roadway, the Belt Parkway. The air pollutant dispersion analysis found that vehicular emissions from the Parkway would not have a significant adverse impact on the proposed project. The proposed project passed the stationary source screening analysis for its heating, ventilation, and air conditioning system. Therefore, based on the air quality screening and detailed analysis, the proposed action would not result in significant adverse impacts with respect to air quality.

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

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Stephanie Shellooe, AICP	DATE December 10, 2021
SIGNATURE	
TITLE Chair, City Planning Commission	
NAME Anita Laremont	DATE December 13, 2021
SIGNATURE	

Figure 1: Project Location Map

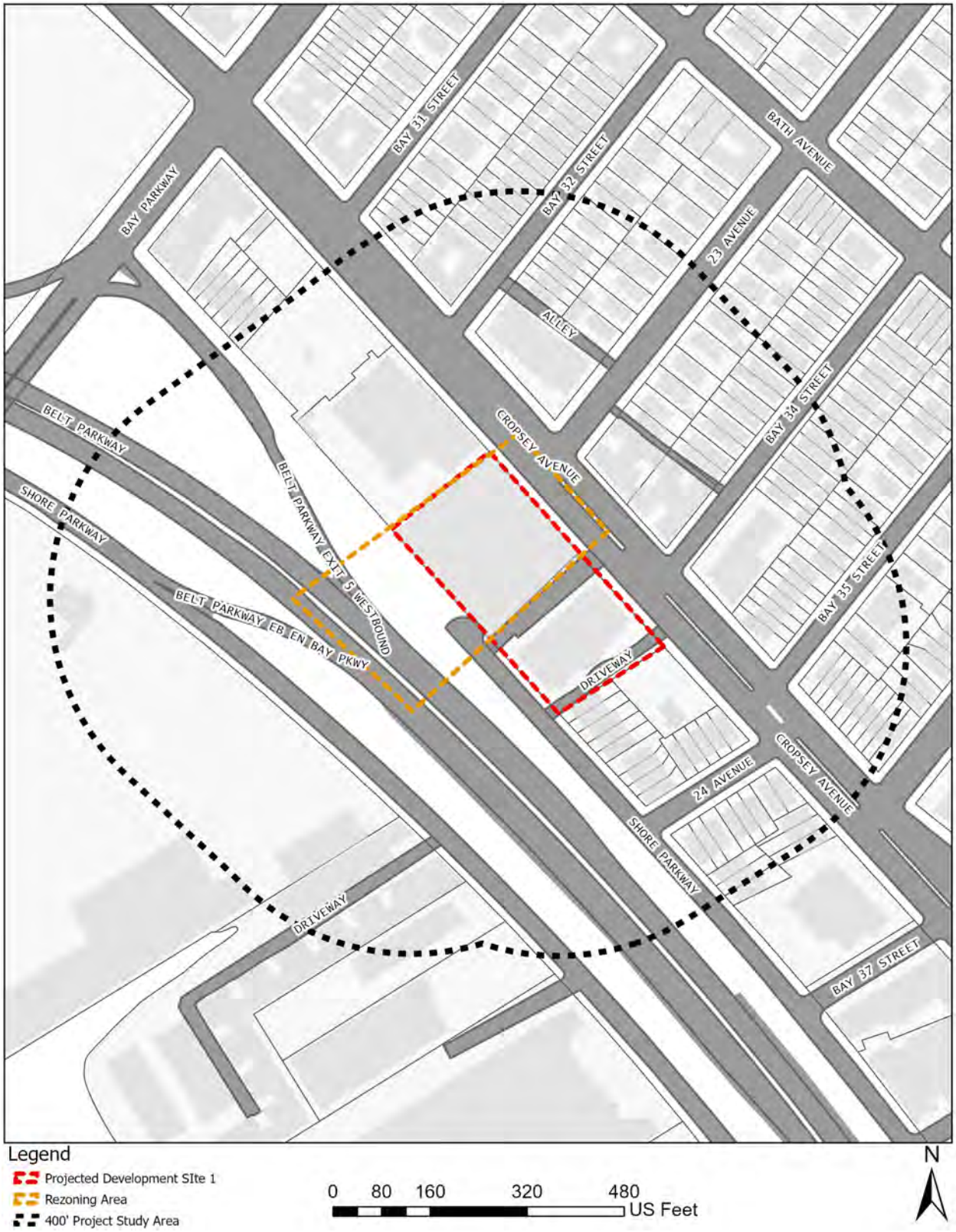


Figure 2: Land Use Map

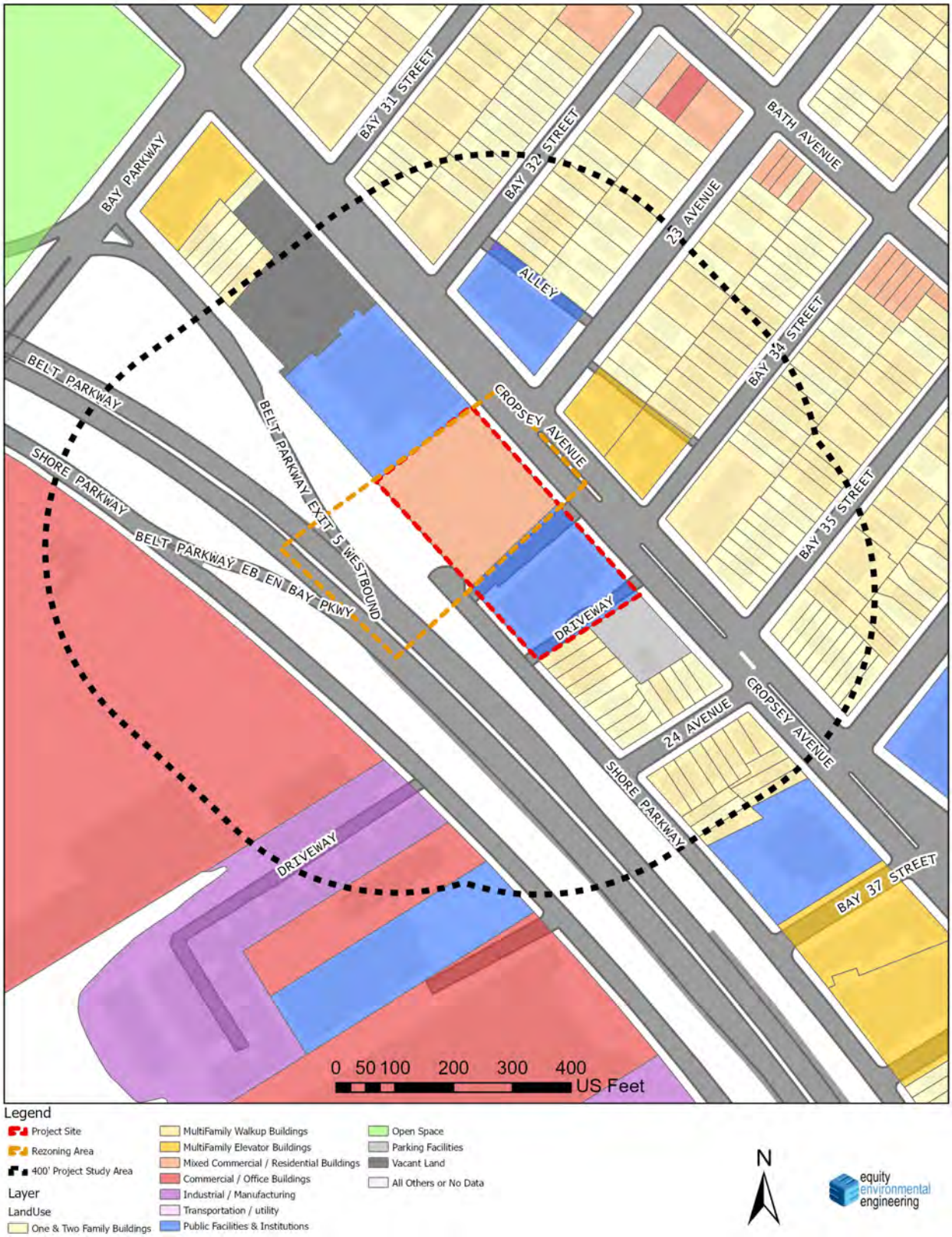


Figure 3: Zoning Map

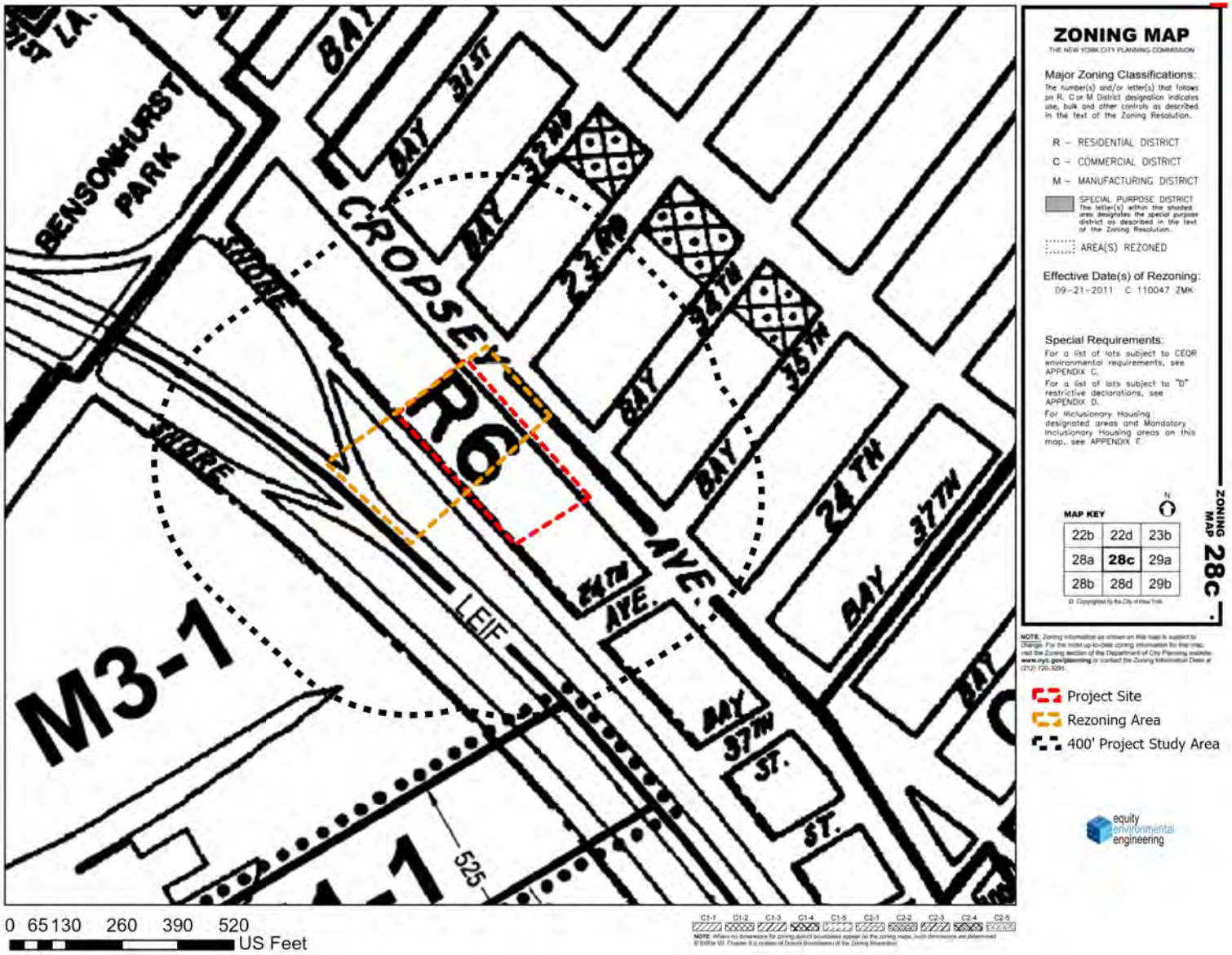


Figure 4: Zoning Change Map

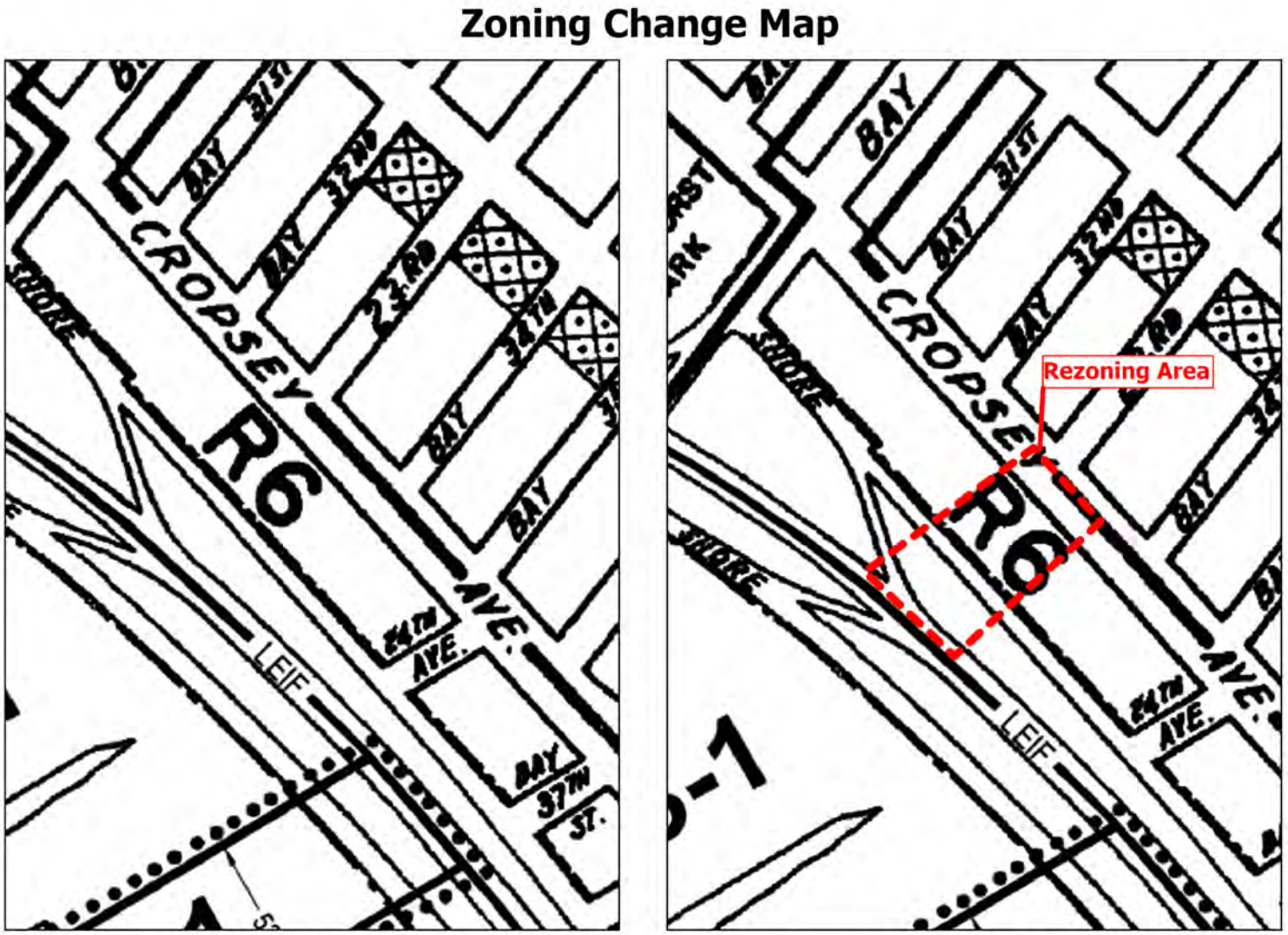


Figure 5: Tax Map

Figure 6: Area Photos/Photo Key

1. View of the Development Site facing southwest from the intersection of Cropsey Avenue and 23rd Avenue.

2. View of theDevelopment Site facing south from Cropsey Avenue.

3. View of Cropsey Avenue facing southeast (Development Site at right).

Urban Cartographics
Photographs Taken on November 3, 2021

2300 Cropsey Avenue, Brooklyn

4. View of the sidewalk along the southwest side of Cropsey Avenue facing southeast (Development Site at right).

5. View of the northeast side of Cropsey Avenue facing north from the Development Site.

6. View of the Development Site facing southwest from Cropsey Avenue.

Urban Cartographics
Photographs Taken on November 3, 2021

2300 Cropsey Avenue, Brooklyn

7. View of the Development Site facing west from Cropsey Avenue.

8. View of Cropsey Avenue facing northwest (Development Site at left).

9. View of 23rd Avenue facing northeast from Cropsey Avenue.

Urban Cartographics
Photographs Taken on November 3, 2021

2300 Cropsey Avenue, Brooklyn

10. View of the sidewalk along the southwest side of Cropsey Avenue facing northwest (Development Site at left).

11. View of the northeast side of Cropsey Avenue facing east from the Development Site.

12. View of Cropsey Avenue facing northwest (Development Site at left).

Urban Cartographics
Photographs Taken on November 3, 2021

2300 Cropsey Avenue, Brooklyn

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13. View of the sidewalk along the southwest side of Cropsey Avenue facing northwest (Development Site at left).

14. View of the northeast side of Cropsey Avenue facing east from the Development Site.

15. View of the Development Site facing west from Cropsey Avenue.

Urban Cartographics
Photographs Taken on November 3, 2021

16. View of the Development Site facing southwest from Cropsey Avenue.

17. View of Shore Parkway facing northwest (Development Site at right).

18. View of the Development Site facing north from Shore Parkway.

2300 Cropsey Avenue, Brooklyn

Page 6 of 8

Urban Cartographics
Photographs Taken on November 3, 2021

19. View of the sidewalk along the northeast side of Shore Parkway facing northwest (Development Site at right).

20. View of the southwest side of Shore Parkway facing south from the Development Site.

21. View of the Development Site facing northeast from Shore Parkway.

2300 Cropsey Avenue, Brooklyn

Page 7 of 8

Urban Cartographics
Photographs Taken on November 3, 2021

22. View of Shore Parkway facing northwest (Development Site at right).

23. View of the Development Site facing north from Shore Parkway.

24. View of Shore Parkway facing southeast (Development Site at left).

Urban Cartographics
Photographs Taken on November 3, 2021

2300 Cropsey Avenue, Brooklyn

1.0 PROPOSED ACTION

1.1 Introduction

The Applicant, Cropsey Partners LLC, requests approval of a zoning map amendment to rezone Block 6471, Lots 109, and p/o Lot 13, and Block 6928 p/o Lot 55 ("The Rezoning Area") from R6 to R6/C2-4. The Proposed Action would enable commercial uses on the Applicant's lot located on Block 6471, Lot 109 ("Projected Development Site 1").

A 23-story, 293-foot-tall building is currently being constructed as-of-right on Projected Development Site 1 with approximately 329,522 gross square feet ("gsf") of floor area. The Proposed Action would permit 35,247 gsf of first floor (ground floor) commercial use (supermarket) at the Projected Development Site. The building would contain 219,755 gsf of residential floor area containing 154 dwelling units, 35,247 gsf of first floor commercial use (supermarket), and 74,520 gsf of community facility uses. The development is allowed as-of-right within the existing R6 zoning district, with the exception of the proposed 35,2467 gsf of ground floor commercial use. 263 parking spaces are provided, with 108 parking stalls located in the cellar, 134 parking stalls on the second floor, and 21 exterior parking stalls located at grade. Projected Development Site 1 is located in the Gravesend neighborhood within Community District 11 in Brooklyn.

The Proposed Action is a discretionary action subject to environmental review. The NYC Department of City Planning is the lead agency on behalf of the City Planning Commission for environmental review under City Environmental Quality Review ("CEQR").

1.2 Background

According to DOB records, Projected Development Site 1 was improved with a building that was constructed in 1923 and was demolished before 1952. In 1952 a new 6-story 69-foot-tall nursing home was approved for the lot, which was subsequently demolished around 2016. The certificate of occupancy for the building constructed in 1952 listed a 22-car parking garage as part of the development. A 23-story, 293-foot-tall building is currently being constructed on the Projected Development Site.

There have been two previous City Planning Commission actions within the proposed rezoning area:

1. Block 6471, Lot 13 (C880274 MMK): a portion of the lot was demapped effective 2/15/1989.
2. Block 6471, Lot 55 (N1820087 ZCK): Special permit pursuant to C960007 ZSK effective 4/29/1996.

1.3 Description of Surrounding Area

The area within a 400-foot radius of the Rezoning Area (the "Surrounding Area") is located in the Gravesend neighborhood of Brooklyn, Community District 11. Land use within the 400-foot surrounding area includes community facility, multi-family walk-up and elevator buildings, one- and two-family buildings, mixed-use commercial and residential buildings, commercial buildings, and industrial buildings. Built form in the area varies widely, with low-, mid-, and high-rise multi-family buildings, mid- and high-rise community facility buildings, and low-rise commercial buildings. Buildings range from 2 to 18 stories tall.

Zoning in the Surrounding Area is generally medium-density and low-density residential with some commercial and industrial nearby. The Rezoning Area is centrally located within an R6 zoning district that runs generally from 86th Street and Bay Parkway to Cropsey Avenue and Leif Ericson Drive. To the southeast of the Rezoning Area is an M3-1 zoning district, and to the northeast of the Rezoning Area is an R5 zoning district. To the west and northwest of the Rezoning Area is Shore Parkway Park and Bensonhurst Park. The Rezoning Area is within the Coastal Zone and the Flood Zone

The traffic grid is irregular with disjointed collector roads dead ending at Cropsey Avenue. The Rezoning Area is bounded by Bay Parkway to the north, Belt Parkway to the west, 24th Avenue to the south, and Cropsey Avenue to the east. Bay Parkway (100 feet wide) is a southwest-northeast road with three moving lanes of traffic in each direction. Belt Parkway (300+ feet wide) is a southeast-northwest road with three moving lanes in each direction and an exit ramp adjacent to the Rezoning Area which feeds into Bay Parkway. 24th Avenue (60 feet wide) is a southwest-northeast road with one moving lane of traffic and curbside parking. Cropsey Avenue (120 feet wide) is a southeast-northwest road with two moving lanes in each direction and curbside parking. Bay Parkway, Belt Parkway, and Cropsey Avenue are classified as Principal Arterial roadways.

The area is well-served by transit. There are several bus lines running along Cropsey Avenue and nearby including include the Q1, Q43, N22, N26, Q36, Q43, Q76, Q77, N26, N6, and N1. The nearest metro station is the 25th Avenue Station which includes access to the D line.

1.4 Description of Rezoning Area

The Rezoning Area is shown in **Figure 1** and summarized below. The R6/C2-4 zoning district promotes low to medium-density, residential development up to 3.60 FAR, community facility development up to 4.80 FAR, and commercial development up to 2.00 FAR. The Lots within the rezoning area are described below in **Table 1.4-1.**

Table 1.4-1: Rezoning Area Existing Conditions

Block	Lot	Lot Area (sq. ft)	Site ID	Zoning	Existing Land Use	Ownership
6471	109	45,688	Projected Site 1	R6	Community Facility (Vacant)	Cropsey Partners LLC
6471	13	83,388	Other Site	R6	Commercial (bank)	Cropsey Properties LLC
6925	55	37,928	Other Site	R6	Commercial (laundromat/dry cleaners)	We Care II, LLC

1.5 Description of Projected Development Site 1

Projected Development Site 1 has been vacant since the previous building was demolished in 2016. The site is undergoing active construction with a 23-story, 293-foot-tall building, which began in January 2019.

1.6 Description of Proposed Development

The proposed development would be the same as the building currently under construction except that the ground floor would replace 35,247 gross square feet of community facility use (ambulatory diagnostic) with commercial use (supermarket). The proposed development would be a 23-story, 293-foot-tall, 329,522 GSF structure with 219,755 GSF of residential floor area (154 dwelling units), 74,520 GSF of community facility floor area, and 35,247 GSF of commercial floor area.

Build Year

The Proposed Development is anticipated to be complete by 2023 factoring the Environmental Approval process and ULURP process of 18 months, and 4 months for the interior build-out of the ground floor commercial space.

1.7 Action(s) Necessary to Facilitate the Project

The actions necessary to facilitate construction of the Proposed Development include approvals of a Zoning Map Amendment to rezone Block 6471, Lots 109, p/o 13, and Block 6925 p/o Lot 55 from an R6 zoning district to an R6 zoning district with a C2-4 commercial overlay (R6/C2-4).

1.8 Purpose and Need

The Applicant is proposing a zoning map amendment to map the area with a C2-4 commercial overlay. The Applicant believes that the Proposed Action would allow for commercial development along a principal roadway within Brooklyn that would be in line with nearby zoning and built form. The Proposed Action would induce the development of local serving commercial use (supermarket) within the community.

1.9 Analysis Framework

The analysis which follows compares the incremental difference between the future absent the proposed actions (no-action condition) and the future with the proposed actions (with-action condition for the 2023 build year). The EAS studies the potential for individual and cumulative environmental impacts related to the proposed actions occurring in a study area of approximately 400 feet around the Rezoning Area. The analysis framework is described below:

Reasonable Worst-Case Development Scenario (RWCDS)

Pursuant to 2020 CEQR Technical Manual methodology, sites may be considered 'soft' if they are built to substantially less than the maximum allowable floor area ratio and are of a sufficient size or could be assembled into a parcel of sufficient size, to support a feasible development. Sites that have recently been developed or redeveloped are considered less likely to be soft, due to the significant recent investment in the current use. The Technical Manual also discusses that it is often appropriate to categorize soft sites in the future With-Action as either "projected" or "potential" sites. Projected development sites are defined as those sites that are more likely to be developed as a result of the proposed project. Potential sites are defined as sites that could be developed but have been determined to have less development potential than the projected development sites, based on observed historic and current market conditions, location, site configuration, proximity to transit, infrastructure and other facilities, and other factors that affect the likelihood that they would be developed under the proposed actions.

Future No-Action Conditions

Under future conditions absent the Proposed Action, the proposed building on the Applicant's lot (Block 6471, Lot 109) would be completed. Without the C2-4 commercial overlay the ground floor use of the proposed building would instead be community facility (UG 4 medical office) use. In this scenario community facility uses would be located on the first, second, and third floors of the proposed building. The floor area breakdown would be 219,755 gsf of residential (154 dwelling units) and 109,767 gsf of community facility (ambulatory diagnostic). Even though the transfer of development rights with Lot 55 would permit an additional 40,000 gsf of development on Lot 109, based on the Applicant's market assessment of the area any additional development beyond what is proposed (either residential or community facility uses) would not be economically feasible due to diminishing returns on investment. Additionally, Lot 109 is an interior lot with a maximum permitted lot coverage of 65%. Because of the sky exposure plane restrictions within the R6 zoning district and maximum lot coverage of 65%, further expansion beyond what is proposed is not feasible. 263 parking spaces would be provided, with 108 parking stalls located in the cellar, 134 parking stalls on the second floor, and 21 exterior parking stalls located at grade.

Future With-Action Conditions

The With-Action RWCDS would be the same as the No-Action scenario, except that the ground floor uses would be a mix of community facility (ambulatory diagnostic) and commercial use (supermarket).

Projected Development Site 1 (Block 6471, Lot 109)

The Proposed Commercial overlay would enable expanded uses on the ground floor of Projected Development Site 1. Accordingly, the With-Action RWCDS would be the same as the

No-Action scenario, except that the ground floor uses would be a mix of UG 4 medical office and commercial use. The same 23-story, 293-foot-tall, 329,522 gsf structure would be built. The floor area breakdown would be 219,755 gsf of residential (154 dwelling units), 74,520 gsf of community facility (ambulatory diagnostic), and 35,247 gsf of commercial use (supermarket). 263 parking spaces would be provided, with 108 parking stalls located in the cellar, 134 parking stalls on the second floor, and 21 exterior parking stalls located at grade.

Other Sites

The remaining lots within the Rezoning Area are not considered likely to redevelop as a result of the Proposed Action and would remain as they currently are in the future. Only a 4-foot strip of Block 6471, Lot 13 would be rezoned, making redevelopment unlikely, and a 35-foot strip of Block 6925, Lot 55 would be rezoned outside of the current buildings' footprints making redevelopment unlikely.

The Projected Development Site is shown in **Figure 1.** The RWCDS Analysis Framework described above is shown in **Table 1.9-1.**

The environmental review technical analyses will be based on the increment between the no-action and with-action condition with respect to the Projected Development Site. The incremental development would consist of a new nine-story, 95-foot-tall building on the Projected Development Site. The existing, no-action, and with-action conditions on the lots within the Rezoning Area are presented in the **Table 1.9-2 Incremental Analysis Table.**

Table 1.9-1: Analysis Framework – Existing, No-Action and With-Action Calculations

Site Info				Existing/No-Action Conditions						With-Action Condition						
Site ID	Block	Lot	Lot Area (gsf)	Zoning	Res. (gsf)	DU	CF (gsf)	Comm. (gsf)	Total (gsf)	Zoning	Res. (gsf)	DU	Affordable Dwelling Units	CF (gsf)	Comm. (gsf)	Total (gsf)
Projected Development Site 1	6471	109	45,688	R6	219,755	154	109,767	0	329,522	R6/C2-4	219,755	154	0	74,520	35,247	329,542
Total			**45,688**		**219,755**	**154**	**109,767**	**0**	**329,522**		**219,755**	**154**	**0**	**74,520**	**35,247**	**329,522**

CF = Community Facility
Comm. = Commercial
Res. = Residential
DU = Dwelling Units
gsf = gross square feet

Table 1.9-2: Incremental Analysis Table

Use	No-Action Condition	With-Action Condition	Increment
Residential	154 DUs 219,755 gsf	154 DUs 219,755 gsf	0 DUs 0 gsf
Market Rate (DUs)	154	154	0
Comm. Facility (gsf)	109,767	74,520	-35,247
Manufacturing (gsf)	0	0	0
Commercial (gsf)	0	35,247	35,247
Total building (gsf)	329,522	329,522	0
Residents[1]	456	456	0
Workers[2]	330	330	0

Notes: 'DUs' indicates Dwelling Units; 'gsf' indicates gross square feet

[1] Assumes 2.84 persons per residential dwelling unit per Queens Community District 8 Census Data

[2] Assumes 3 employees per 1,000 sf retail/community facility uses

2.0 ENVIRONMENTAL REVIEW

2.1 Land Use, Zoning, and Public Policy

The *CEQR Technical Manual* recommends procedures for analysis of land use, zoning and public policy to ascertain the impacts of a project on the surrounding area. Land use, zoning and public policy are described in detail below. This section considers existing conditions, development trends, and zoning and other public policies in relation to the Projected Development Site and the area in which the proposed actions may have an effect; potential development sites are not included in this analysis because development is less likely on these sites in the foreseeable future. Because the Proposed Action would permit development of uses (commercial) that are not permitted as of right under the Projected Development Site's existing R6 zoning district to an R6/C2-4 zoning district, a preliminary assessment of Land Use, Zoning, and Public Policy is provided.

Methodology

Existing land uses were determined by reference to the New York City Zoning and Land Use (Zola) database and PLUTOTM 20v5 shapefiles. These uses were then confirmed through site visits. The evaluation of lots within the 400-foot Study Area were performed with reference to New York City Zoning Maps and the Zoning Resolution of the City of New York and served as the basis for the zoning evaluation of the Future No-Action and Future With-Action Conditions. Public Policy research was performed through an evaluation of New York City Department of City Planning (NYCDCP) and other city agencies programs and documentation.

2.1.1 Land Use

The *CEQR Technical Manual* suggests that a land use, zoning and public policy study area should generally extend 400 feet from the Rezoning Area. Existing land use patterns of city blocks within approximately 400 feet of the Rezoning Area are presented in **Figure 2.** The proposed zoning map amendment would affect the following lots: Block 6471 Lots 109, p/o 13, and Block 6925 p/o Lot 55.

Existing Conditions

Land use within the 400-foot surrounding area includes mixed commercial and residential buildings, mid- and high-rise multi-family buildings, and commercial and industrial buildings.

A full breakdown of each site within the Rezoning Area can be found in **Section 1.4**, **Description of Rezoning Area** or **Table 2.1-1** below**.**

Table 2.1-1: Land Use in the Rezoning Area

Address	Block	Lot	Lot Area	Built SF	Existing FAR	Use
2300 Cropsey Avenue	6471	109	45,688	0	0	Vacant
2230 Cropsey Avenue	6471	13	83,388	120,618	1.45	Community Facility
2340 Cropsey Avenue	6825	55	37,928	134,400	3.4	Community Facility

Projected Site 1 (Block 6471 Lot 109) is a regular-shaped through-lot with frontage along Cropsey Avenue and Leif Ericson Drive; the site is under active construction.

Analysis

Future No-Action Conditions

Under Future No-Action Conditions, Projected Development Site 1 would be developed with a 329,522 GSF mixed-use residential and community facility building that is already under construction. There are no other active construction projects within the Study Area. Other land uses in the Study Area are expected to generally remain the same and conform with current zoning regulations.

Future With-Action Conditions

Projected Development Site 1 (Block 6471, Lot 109)

Under Future With-Action Conditions, the same 23-story, 293-foot-tall, 329,522 gsf structure would be built as in the No-Action Scenario, except that the ground floor would replace 35,247 gross square feet of community facility use (ambulatory diagnostic) with commercial use (supermarket). The proposed development would be a 23-story, 293-foot-tall, 329,522 GSF structure with 219,755 GSF of residential floor area (154 dwelling units), 74,520 GSF of community facility floor area, and 35,247 GSF of commercial floor area.

Conclusion

The proposed rezoning would result in the development of the Rezoning Area with a mixed-use residential building with community facility and ground floor commercial use. The introduction of commercial uses by the proposed zoning district would result in the development of locally serving commercial use on Projected Development Site 1 that would fulfill local needs. Projected Development Site 1 is located along a wide road that is a major thoroughfare in the area, has nearby access to major highways, and is well-served by public transit. Therefore, the Proposed Action would not result in any significant adverse impacts to land use, and further analysis is not necessary.

2.1.2 Zoning

The *CEQR Technical Manual* suggests that a zoning study area should generally extend 400 feet from the site of the proposed action. Existing zoning districts within approximately 400 feet of Projected Development Site 1 are presented in **Figure 2.1-2.**

Existing Conditions

Zoning Study Area

The zoning districts within 400 feet of the Rezoning Area are shown above in **Figure 3**. Details regarding the zoning districts within 400 feet of the Rezoning Area are presented below in **Table 2.1-2**. The Rezoning Area is centrally located within an R6 zoning district that runs generally from 86th Street and Bay Parkway to Cropsey Avenue and Leif Ericson Drive.

Table 2.1-2: Summary of Existing Zoning Regulations

Zoning District	Type and Use Group (UG)	Floor Area Ratio (FAR)	Parking (Required Spaces)
R6	Non-Contextual Residential UGs 1-4	2.43 FAR – Residential 4.80 FAR – Community Facility	70% of DU; 25% of IRHU
M3-1	Heavy Manufacturing UGs 6-14, 16-18	2.00 FAR – Commercial 2.00 FAR – Manufacturing	1 per 300 sf
M1-1	Light Manufacturing UGs 4-14, 16, 17	1.00 FAR – Commercial 1.00 FAR – Manufacturing 2.40 FAR – Community Facility	1 per 300 sf
R5	Non-Contextual Residential UGs 1-4	1.25 FAR – Residential 2.00 FAR – Community Facility	85% of DU; 42.5% of IRHU

Source: Zoning Handbook, New York City Department of City Planning, 2018

Existing zoning districts in the surrounding area include:

R6

R6 zoning districts are widely mapped in built-up, medium-density areas in Brooklyn, Queens and the Bronx. The character of R6 districts can range from neighborhoods with a diverse mix of building types and heights to large-scale "tower in the park" developments such as Ravenswood in Queens and Homecrest in Brooklyn. Developers can choose between two sets

of bulk regulations. Standard height factor regulations, introduced in 1961, produce small multi-family buildings on small zoning lots and, on larger lots, tall buildings that are set back from the street. Optional Quality Housing regulations produce high lot coverage buildings within height limits that often reflect the scale of older, pre-1961 apartment buildings in the neighborhood.

Buildings developed pursuant to height factor regulations are often tall buildings set back from the street and surrounded by open space and on-site parking. The FAR in R6 districts ranges from 0.78 (for a single-story building) to 2.43 at a typical height of 13 stories; the open space ratio (OSR) ranges from 27.5 to 37.5. Generally, the more open space, the taller the building. Thus, the maximum floor area ratio is achievable only where the zoning lot is large enough to accommodate a practical building footprint as well as the required amount of open space. There are no height limits for height factor buildings although they must be set within a sky exposure plane which begins at a height of 60 feet above the street line and then slopes inward over the zoning lot.

M3-1

M3 districts are designated for areas with heavy industries that generate noise, traffic or pollutants. Typical uses include power plants, solid waste transfer facilities and recycling plants, and fuel supply depots. Even in M3 districts, uses with potential nuisance effects are required to conform to minimum performance standards.

Like M2 districts, M3 districts are usually located near the waterfront and buffered from residential areas. Large M3 districts are mapped along the Arthur Kill in Staten Island, along the East River shore of the South Bronx, and along the Gowanus Canal in Brooklyn. Smaller M3 districts, such as portions of Astoria, are located along the waterfront in all five boroughs and accommodate public utilities.

M1-1

M1 districts range from the Garment District in Manhattan and Port Morris in the Bronx with multistory lofts, to parts of Red Hook or College Point with one- or two-story warehouses characterized by loading bays. M1 districts are often buffers between M2 or M3 districts and adjacent residential or commercial districts. M1 districts typically include light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Nearly all industrial uses are allowed in M1 districts if they meet the stringent M1 performance standards. Offices, hotels and most retail uses are also permitted. Certain community facilities, such as hospitals, are allowed in M1 districts only by special permit, but houses of worship are allowed as-of-right.

Floor area ratios in M1 districts range from 1.0 to 10.0, depending on location; building height and setbacks are controlled by a sky exposure plane which may be penetrated by a tower in certain districts. Although new industrial buildings are -usually low-rise structures that fit within sky exposure plane, commercial and community facility buildings can be constructed as towers

in M1-3 through M1-6 districts. In the highest density manufacturing district, M1-6, mapped only in Manhattan, an FAR of 12 can be achieved with a bonus for a public plaza. Except along district boundaries, no side yards are required. Rear yards at least 20 feet deep are usually required, except within 100 feet of a corner.

R5

R5 districts allow a variety of housing at a higher density than permitted in R3-2 and R4 districts. The FAR of 1.25 typically produces three-and four-story attached houses and small apartment houses. With a height limit of 40 feet, R5 districts provide a transition between lower- and higher-density neighborhoods and are widely mapped in Brooklyn, Queens and the Bronx. Portions of Windsor Terrace and Ocean Parkway in Brooklyn are R5 districts.

To ensure compatibility with neighborhood scale, the maximum street wall height of a new building is 30 feet and the maximum building height is 40 feet. Above a height of 30 feet, a setback of 15 feet is required from the street wall of the building; in addition, any portion of the building that exceeds a height of 33 feet must be set back from a rear or side yard line. Detached houses must have two side yards that total at least 13 feet, each with a minimum width of five feet. Semi-detached houses need one eight-foot-wide side yard. Apartment houses need two side yards, each at least eight feet wide. Front yards must be 10 feet deep or, if deeper, a minimum of 18 feet to prevent cars parked on-site from protruding onto the sidewalk. Cars may park in the side or rear yard, in the garage or in the front yard within the side lot ribbon; parking is also allowed within the front yard when the lot is wider than 35 feet. Off-street parking is required for 85% of the dwelling units in the building, but requirements are lower for income-restricted housing units (IRHU) and are further modified within the Transit Zone.

Analysis

Future No-Action Conditions

No changes to zoning are anticipated in the future without the Proposed Action. The Surrounding Area would continue to be governed by the underlying zoning districts. The Rezoning Area would continue to be within an R6 zoning district.

Future With-Action Conditions

R6/C2-4
The Proposed Action would establish a C2-4 overlay within the Rezoning Area, including on the Projected Development Site. The proposed C2-4 zoning overlay would permit local service retail up to 2.00 FAR and would introduce UGs 5-9 and 14 to the Rezoning Area.

Conclusion

The proposed addition of a C2-4 commercial overlay to the Rezoning Area would introduce local service commercial use groups 5-9 and 14. Other than the introduction of the commercial use groups, there would be no significant changes to zoning as a result of the Proposed Action. The Rezoning Area is well-suited for commercial uses due to the wide road fronting the block, proximity to major highways, and availability of public transit. The development resulting from the proposed action would not result in significant adverse impacts; therefore, no further analysis is required.

2.1.3 Public Policy

Officially adopted and promulgated public policies describe the intended use applicable to an area or particular site(s) in the City. The Rezoning Area is not part of, or subject to, an Urban Renewal Plan (URP), adopted community 197-a Plan, Solid Waste Management Plan, Business Improvement District (BID), Industrial Business Zone (IBZ), or the New York City Landmarks Law. The Proposed Action is not a large publicly sponsored project, and as such, consistency with the City's OneNYC 2050 for sustainability is not warranted. The Rezoning Area is located within the Waterfront Revitalization Program boundaries.

The Rezoning Area is located in a Food Retail Expansion to Support Health Program (FRESH) area. The goal of the FRESH Program is to encourage the development and retention of convenient, accessible stores that provide fresh meat, fruit and vegetables, and other perishable goods in addition to a full range of grocery products. The program offers a set of zoning incentives that provide additional floor area in mixed buildings that include a FRESH food store to reduce the amount of required parking for food stores and permit larger grocery stores as-of-right in light manufacturing districts.

A citywide FRESH Update Text Amendment (CEQR No. 21DCP182Y), is currently in public review. The proposed zoning text amendment, FRESH II, will update the existing program under the NYC ZR 63-00 that provides incentives for neighborhood grocery stores to locate in underserved neighborhoods in the City. FRESH II will include an expansion of the program boundary, mechanism to prevent saturation of FRESH supermarkets, modification to the glazing requirement for conversions, changes to parking regulations, and zoning text clarifications.

Waterfront Revitalization Program

The project is within the Coastal Zone Boundary, which is subject to review under the Waterfront Revitalization Program (WRP). The WRP establishes the City's policies for waterfront planning, preservation, and development projects to ensure consistency over the long term. The goal of the program is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing any potential conflicts among these objectives.

ANALYSIS

Future No-Action Condition

There are no relevant changes to public policy expected in the study area in the future No-Action condition.

Future With-Action Condition

There are no relevant changes to public policy expected in the study area in the future With-Action condition.

Food Retail Expansion to Support Health Program (FRESH)

Under the RWCDS no FRESH supermarket is anticipated, and the Proposed Action would not alter or conflict with the objectives of the FRESH program.

Waterfront Revitalization Program

Because the Rezoning Area is located within the boundaries of the New York City Coastal Zone and is subject to CEQR discretionary review procedures, the Proposed Action must be reviewed and assessed for consistency with the policies and conditions set forth in the New York City WRP.

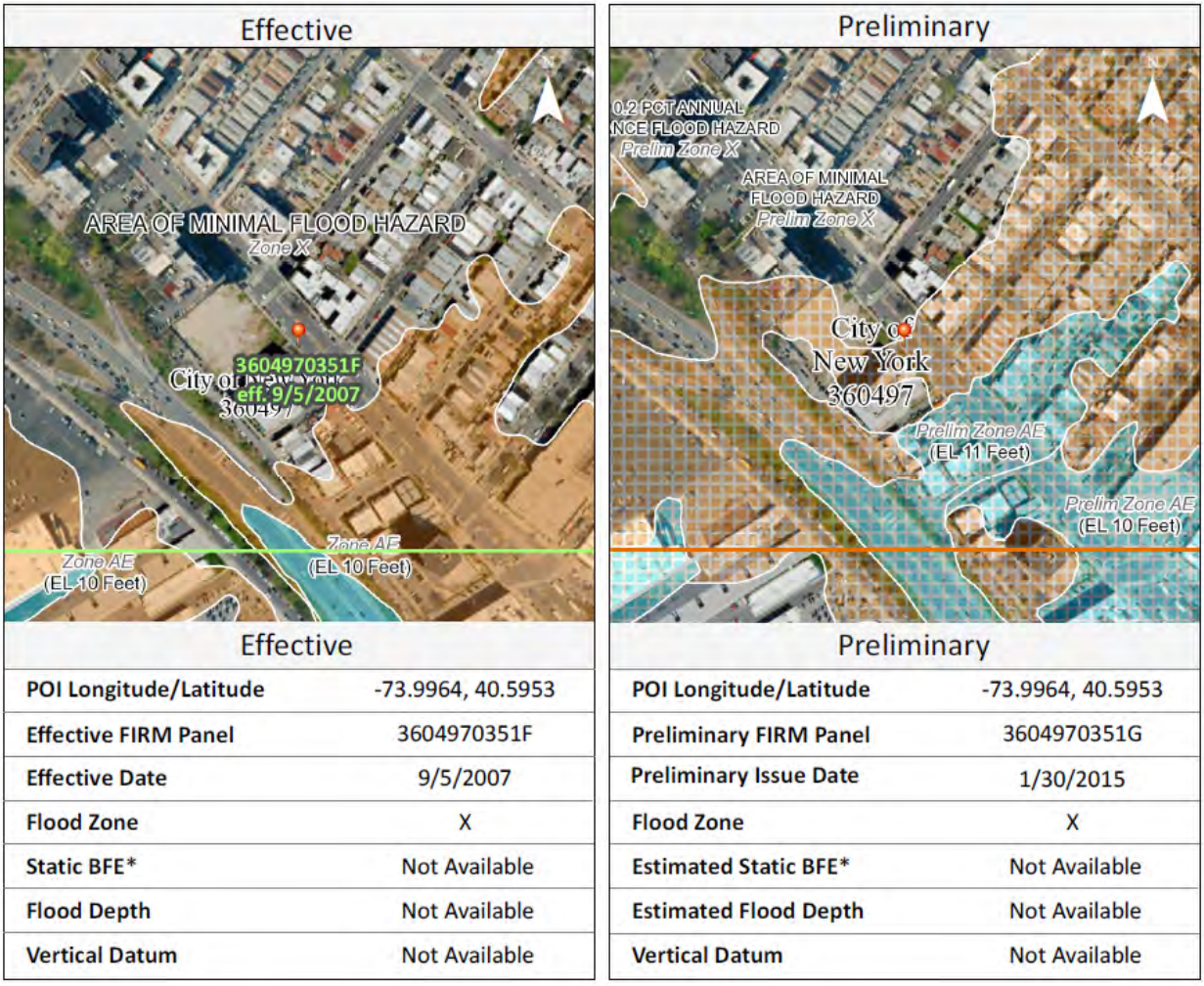
The WRP Consistency Assessment Form (CAF) was completed (see **Appendix A**) to determine if the Proposed Action is consistent with the WRP policies. The Rezoning Area is within the 2007 Effective FEMA Flood Insurance Rate Map (FIRM) and the 2015 Preliminary FEMA Flood Insurance Map (PFIRM) 0.2% chance annual floodplain. No hazardous features would be introduced to the area under the Proposed Action. Figure **2.1-1** below shows the 2007 FIRM comparison to the 2015 PFIRM. **Figure 2.1-2** below shows the Rezoning Area in relation to Coastal Zone Boundary special area designations.

Figure 2.1-1: 2007 FIRM and 2015 PFIRM Comparison

Comparison of Flood Hazard

Effective & Preliminary Flood Hazards

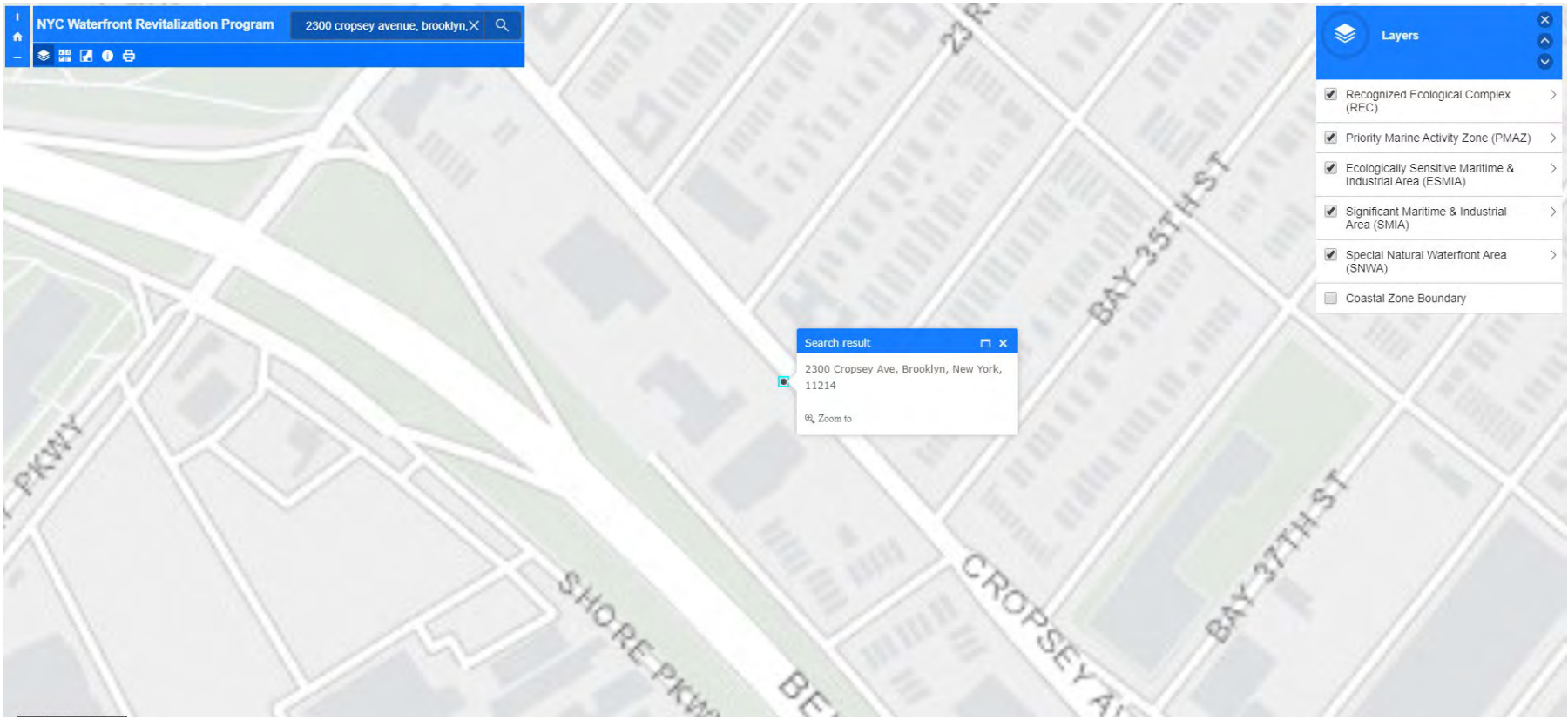
FEMA



Effective	
POI Longitude/Latitude	-73.9964, 40.5953
Effective FIRM Panel	3604970351F
Effective Date	9/5/2007
Flood Zone	X
Static BFE*	Not Available
Flood Depth	Not Available
Vertical Datum	Not Available

Preliminary	
POI Longitude/Latitude	-73.9964, 40.5953
Preliminary FIRM Panel	3604970351G
Preliminary Issue Date	1/30/2015
Flood Zone	X
Estimated Static BFE*	Not Available
Estimated Flood Depth	Not Available
Vertical Datum	Not Available

Figure 2.1-2: Coastal Zone Boundary Special Area Designations



POLICY 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development

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

The Proposed Action would permit the development of commercial uses. The lot would be developed with a mixed-use commercial and residential building in an area bounded by two wide roads. The surrounding area is predominantly residential, commercial, and community facility uses. The development of Projected Development Site 1 with a commercial and residential building would add to the commercial corridors along Bath Avenue to the north and Shore Parkway to the south, with appropriate roadway access, and therefore the Proposed Action is consistent with policy 1.1.

Policy 1.3: Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed

The Projected Development Site is located in an area with fully developed infrastructure and adequate capacity to support the proposed project. The surrounding community provides supportive infrastructure complementary to commercial and residential uses, such as community facilities and open space resources. Additionally, the Projected Development Site is located near adequate roadway access and mass-transit available within walking distance to support the proposed development.

Policy 5: Protect and Improve Water Quality in The New York City Coastal Area

Policy 5.1: Manage direct or indirect discharges to waterbodies.

Policy Considerations:

A) Minimize the negative impacts to fish and wildlife habitats caused by artificial input of large quantities of freshwater into tidal or brackish waterbodies and enhances freshwater inputs when it can be demonstrated that there will be ecological benefits.
B) Minimize the negative impacts to fish and wildlife habitats caused by effluent discharge that result in thermal changes from steam generating, heating, air conditioning, and industrial facilities.
C) Limit discharge of vessel wastewaters into waterways by providing adequate pumpout facilities.

While the Proposed Development would not involve industrial use that would result in a new direct or indirect discharge into water bodies, the Proposed Action will be required to ensure that the site would not be impacted by hazardous materials. In the event that hazardous materials are identified on the site, the Proposed Action would require remediation which

would prevent further discharge of such contamination into the groundwater and waterways. Therefore, the Proposed Action would minimize the negative impacts on fish and wildlife habitats caused by effluent discharge.

Policy 5.2: Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

Policy Considerations:

A) Use sustainable stormwater management strategies, such as green infrastructure, use of permeable surfaces, on-site detention, and the preservation and enhancement of vegetation, wetlands, and ecosystems to minimize nonpoint discharge into coastal waters of excess nutrients, organics, eroded soils, and pollutants, and to control stormwater runoff from roadways and other developed areas.
B) Minimize nonpoint source pollution of coastal waters using the following approaches listed in order of priority: (1) avoid pollution by limiting sources; or (2) reduce pollutant loads to recipient waters by managing unavoidable sources.
C) Limit sources of atmospheric deposition of pollutants to New York City waterbodies and streams, particularly from nitrogen sources, which may deteriorate water quality or impair aquatic habitats.
D) As described in WRP Policy 7.1, use accepted best management practices to prevent the run-off of pollutants and potentially contaminated sediment into waterways.

As further described under Policy 7.1, the development and any required remediation of the site would occur in accordance with accepted best management practices to avoid runoff of pollutants and contaminated sediment into waterways. Remediation of Projected Development Site 1 would occur pursuant to applicable City, State, and Federal regulatory guidance. All control measures will comply with the Stormwater Pollution Prevention Plan (SWPPP). Control measures, such as an Erosion and Sediment Control Plan during site remediation and construction, and additional measures shall be implemented if conditions change or warrant additional control measures. With these stormwater management provisions in place, pollution and discharge into coastal waters will be managed to avoid impact. Accordingly, the Proposed Action is consistent with Policy 5.1.

Policy 6: Minimize Loss of Life, Structures, Infrastructure, and Natural Resources Caused by Flooding and Erosion, And Increase Resilience to Future Conditions Created by Climate Change.

6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.

Projected Development Site 1 is located within the 2007 FEMA Flood Insurance Rate Map (FIRMs) and 2015 Preliminary Flood Insurance Rate Maps (PFIRMs) .2% annual chance floodplain (500-year flood zone) and would be within the 1% annual chance floodplain (100-year flood zone) based on 2050 future floodplain projections. Under Policy 6, the primary goal for projects within flood hazard areas is to reduce the risks posed by current and future flood events, mainly major storms that are likely to increase due to climate change and sea-level rise.

As Projected Development Site 1 falls within the 0.2% annual chance floodplain, the proposed building would not be subject to compliance with NYC Building Code Appendix G (per G201.2 Definitions). Appendix G requires owners of severely damaged or destroyed buildings in the 1% annual chance floodplain to comply with the flood-resistant construction standards of the Building Code when they rebuild. The same requirements are applicable to any new development, or substantially improved properties, whether the development is located in whole or in part within the 1% annual chance floodplain. The developer has been informed of future best management practices as they relate to dry-floodproofing building features that are below-grade to protect the critical features (mechanical and utility systems) contained within the cellar level. Therefore, the Proposed Project would meet the requirements of building-scale resiliency measures to reduce the risks of damage from current and future coastal hazards and would be consistent with Policy 6.1.

Policy 6.2: Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms) into the planning and design of projects in the city's Coastal Zone.

The following assessment was prepared in accordance with *The New York City Waterfront Revitalization Program: Climate Change Adaptation Guidance Document for Policy 6.2.* The three basic steps to assessing an action's consistency with Policy 6.2 of the Waterfront Revitalization Program include identifying vulnerabilities and consequences, identifying adaptive strategies, and evaluating policy consistency.

Policy 6.2 Detailed Methodology

1. Identify Vulnerabilities and Consequences

a) Assess the Project Area's Exposure to current and future flood risk (Flood-Evaluation Worksheet)

The information in the following subsections is based on the results of the completed flood evaluation worksheet.

According to the New York City Flood Hazard Mapper, the Projected Development Site is projected to be entirely within the 1% chance annual floodplain by the 2050s under future flood projections.

The Projected Development Site's ground floor level (base plane) is located approximately 16.8 feet in elevation above grade (NAVD88 Datum). The building's vulnerable or critical features, which are most likely to be impacted by future flood events, are located in the cellar level. The cellar level is located 8 feet above sea level (NAVD88 Datum).

Regulatory floodplains are defined by the elevation of the base flood (BFE) in relation to the elevation of the ground. According to datum (NAVD88) obtained from the National Oceanic and Atmospheric Administration (NOAA) website for the nearest NOAA station – Kingsborough Station (Station ID 8517756) - the mean of the higher high-water height (MHHW) is 2.13 feet. Based on the 2015 PFIRMs, the 1% flood height for the nearest AE zone is 11 feet. **Figure 2.1-4** below shows the mean higher high-water line plus sea level rise.

Figure 2.1-3: Flood Elevation and Sea Level Rise Projections

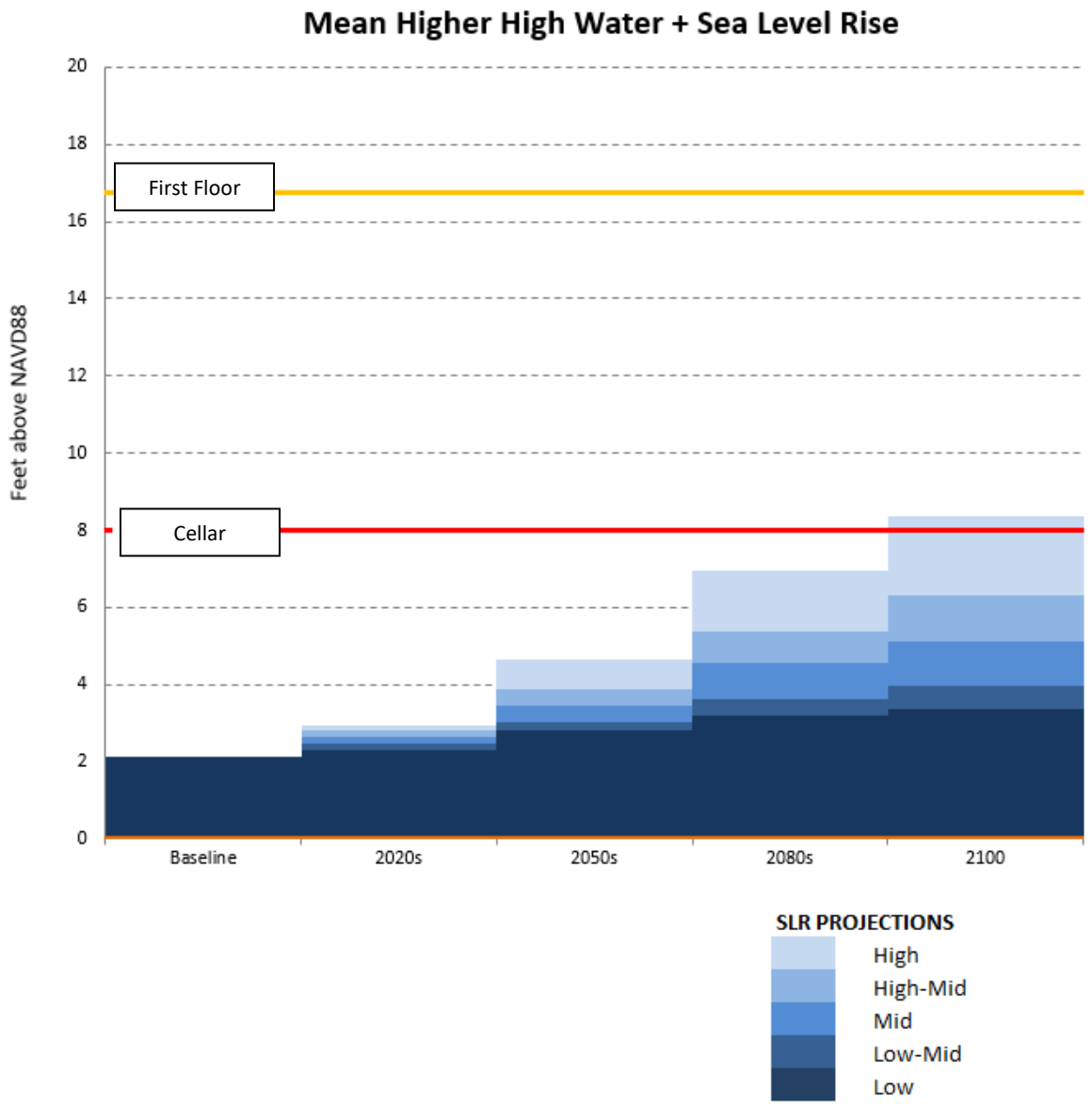
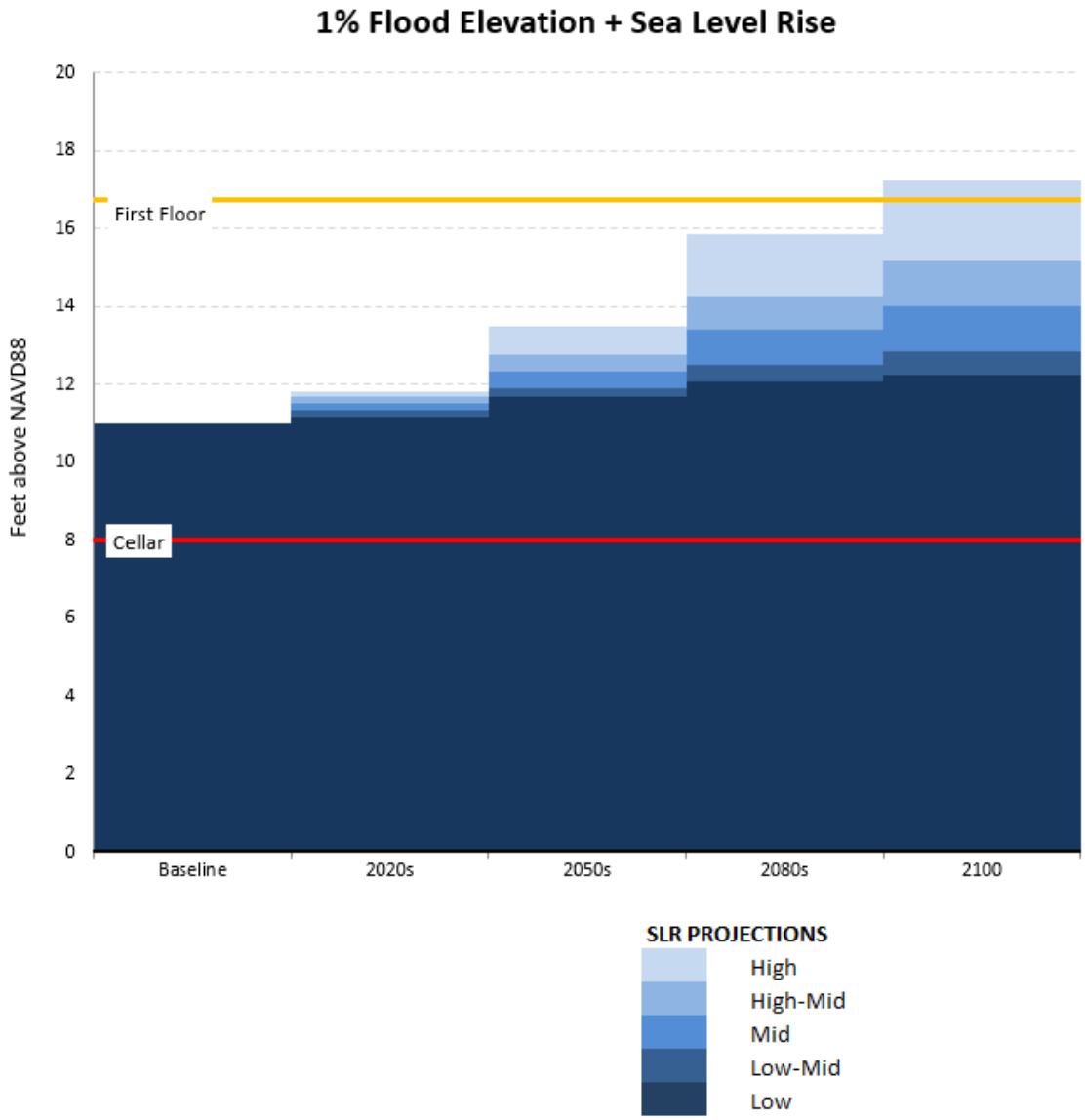


Figure 2.1-4: 1% Flood Elevation and Sea Level Rise



b) Identify any Project Features that may be located below the elevation of the 1% floodplain over the lifespan of the project under any SLR scenario:

As indicated in **Figure 2.1-4** above, the Projected Development Site's cellar level is currently within the 1% annual chance floodplain under low SLR projections and the first floor will be within the 1% annual chance floodplain under high SLR projections by the 2100s. As the building is not currently within the 1% annual chance floodplain, the building is not required to comply with the provisions of the DOB building code Appendix G: Flood Resistant Construction.

c) Identify any vulnerable, critical, or potentially hazardous features that may be located below the elevation of Mean Higher High Water over the lifespan of the project under any sea level rise scenario.

The Development's ground floor level would not be impacted by the MHHW under any SLR projections. However, by 2100 under high SLR projections the Development's cellar level has the potential to be impacted by MHHW.

d) Identify if the project or action would facilitate the development of any vulnerable, critical, or potentially hazardous features, as defined under "Key Terms" below, within areas exposed to flooding from Mean Higher High Water or 1% Annual Chance Flood by the 2050s under the 90th percentile of sea level rise projections:

Vulnerable, Critical or Potentially Hazardous Features Pursuant to Policy 6.2 guidance:

- ***Vulnerable Features if damaged have the potential to incur significant damage if flooded.***

  These include any form of enclosed space within a building, including residential, commercial, industrial, or community facility land uses; enclosed parking structures; storage areas; enclosed recreational facilities; and bulkheads, revetments, piers, platforms, and other in-water infrastructure elements.

- ***Critical Features if damaged, would have severe impacts on the project and its ability to function.***

  The project features that if damaged, would have severe impacts on the project and its ability to function as designed. Examples include electrical utilities, building heating and cooling systems, telephone and data connection and distribution rooms, and other supporting and related building technology and utility spaces

- ***Potentially Hazardous Features, if damaged or made insecure by flooding, could potentially adversely affect the health and safety of the public and the environment.***

Examples include hazardous materials, including highly volatile, flammable, explosive, toxic, or water-reactive materials; and materials that have the potential to become waterborne in the event of a flood and would be dangerous to the health and safety of the public and the environment, such as the storage of construction materials, demolition debris, and aggregate materials.

The proposed development would not introduce any hazardous features, materials or substances that if made insecure, would result in a threat to public health or the environment.

The Following are Vulnerable and Critical Features Project Features:

- **The Cellar Level:** The cellar level, located at an elevation of 8 feet (NAVD88), is subject to flooding from the 1% annual chance flood elevation currently, and under the MHHW by 2100 under high SLR projections.

  The cellar level will contain an electrical meter room and gas meter room. These features, if flooded, could be significantly damaged, resulting in the potential disruption of the building's mechanical functions.

  Vulnerable features, if not protected from flooding, include parking, exercise rooms, showers, and storage space.

  To protect these features from damage related to future flood events The Applicant has been informed of dry-floodproofing techniques including by means of a waterproofing membrane at the full height of the foundation wall around the perimeter of the building.

- **The Ground Floor Level:** The ground-floor level, located at an elevation of 16.8 feet (NAVD88), will contain a residential lobby and commercial/ambulatory diagnostic space. The ground floor level would be subject to flooding from the 1% annual chance flood by the 2100, but is not projected to be impacted by the MHHW for any of the projected years.

2. Identify Adaptive Strategies

The goal of Step 2 under WRP Policy 6.2 is to assess how the vulnerabilities and consequences identified in Step 1 are addressed through the project's design and planning. Assess how applicable codes and regulations, planned flood damage reduction elements and adaptive measures, or likely future infrastructure investments (beyond the scope of the proposed project), would or would not reduce potential flood damage for any proposed vulnerable, critical, or potentially hazardous features.

Because the Projected Development Site is susceptible to the impacts of sea level rise and future flood events, it is recommended that building scale resiliency measures and flood mitigation strategies be considered. Pursuant to *Policy 6.2: Climate Change Adaptation Guidance*, consideration of climate change projections for coastal flooding and sea level rise should be incorporated into the design and planning of projects. The development should identify potential vulnerabilities to and consequences of sea level rise and coastal flooding over its lifespan and identify and incorporate design techniques to address these risks.

Recommendations

As indicated above in Policy 6.0, and under Policy 6.2, Step 1(d), The Applicant has been informed of dry-floodproofing construction measures to protect the vulnerable and critical building features within the cellar level. The Proposed Project should consider employing future building-scale resiliency measures for the cellar level to avoid the potential risks related to future coastal flooding. Site-specific vulnerable or critical features include electrical utilities, flooring, and walls. Based on the flood projections above, measures should be considered to increase cellar level building-scale resilience to future flood conditions.

a) Flood Damage Reduction Elements/Controls:

Building Scale Resilience Measures
The following are recommendations for flood resilience techniques and controls will minimize future damage and vulnerability to the subject building:

- Water-resistant flooring with waterproof adhesive or pressure-treated subfloor;
- Rigid, closed-cell foam insulation;
- Removable or hinged wainscot panels;
- Elevated outlets;
- Chair rail molding over a gap in the wallboard to prevent wicking; and
- Extra-wide snap-on baseboard.

While not required, these building-scale resiliency controls, if implemented, will protect the cellar's vulnerable features and reduce the susceptibility of water damage to the interior commercial space and building mechanicals. The Applicant has been educated about flood risks and mitigation measures and may consider the implementation of the above listed future adaptive flood damage reduction elements.

b) Flood Protection of Adjacent Sites:

The Proposed Development would not substantially increase stormwater runoff and would not introduce any hazardous features that would impact the health, safety, or welfare of surrounding residents in the event of a flood. The proposed lot coverage, and resulting

impervious surface, is permitted as-of-right by the underlying zoning. Therefore, the Proposed Action would not affect the flood protection of adjacent sites.

3. Assess Policy Consistency

Pursuant to Policy 6.2 Guidance:

A project or action would advance the policy when:

- *No new vulnerable, critical, or potentially hazardous features would be located within area flooded by current or future high tide, or current or future 1% annual chance flood, over the project's lifespan, or*
- *All new vulnerable, critical or potentially hazardous features would be protected through flood damage reduction elements or future adaptive measures within the timeframe that they would be needed.*

A project or action would hinder the policy when:

- *Vulnerable, critical or potentially hazardous features would be introduced in areas that will be flooded by high tide during the project's lifespan and adaptive measures are not feasible.*
- *Industrial development would not be protected from 2050s high tides or the current 1% annual chance flood.*
- *Critical infrastructure would not be protected to the elevation of the 1% annual chance storm over its lifespan.*
- *Shoreline structures would not function as intended with increases in sea levels projected over their lifespan.*

Construction and any required remediation of the site would be performed pursuant to applicable Local, State, Federal regulations and laws. The Applicant would consider the employment of future building scale resiliency measures for the cellar level based on the future flood projections related to the 1% annual chance flood elevation. These future building-scale resiliency measures and adaptive strategizes would minimize the potential damage to site-specific vulnerable or critical features. Therefore, the Proposed Action is consistent with Policy 6.2 of the Waterfront Revitalization Program and would not jeopardize the intent of the WRP.

Policy 7: Minimize Environmental Degradation and Negative Impacts on Public Health from Solid Waste, Toxic Pollutants, Hazardous Materials, and Industrial Materials that May Pose Risks to the Environment and Public health and safety.

Policy 7.1: Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and unenclosed storage of industrial materials to protect public health, control pollution, and prevent degradation of coastal ecosystems.

a) Prevent release of toxic pollutants, radioactive materials, or substances hazardous to the environment that would have a deleterious effect on fish and wildlife and human resources. Limit discharges of persistent bioaccumulating and toxic substances. Minimize resuspension of toxic pollutants and hazardous substances and wastes and reentry of bioaccumulative substances into the food chain for existing environmental sources. Limit use of pesticides, herbicides, insecticides, and fertilizers and to prevent direct or indirect entry into waterways.

b) Remediate inactive hazardous waste disposal sites and brownfields to ensure that the public health and the waters, wetlands, and habitats are protected. Utilize best practices during the remediation process to ensure safe containment of contaminants in the event of a coastal storm.

c) To the extent required by NYC Community Right to Know Law and local and state water quality improvement programs, integrate consideration of pollution prevention, good housekeeping and control of hazardous wastes, toxic pollutants, and substances hazardous to the environment into the planning and design of any facility using such materials.

d) Use accepted best design and management practices, including industrial pollution prevention, for the siting of hazardous materials, toxic pollutants, and other materials that may pose risks to the environment and public health and safety. Use best site design practices to prevent the runoff of pollutants and potentially contaminated sediment into waterways. The NYS Dept. of Environmental Conservation's New York State Stormwater Management Design Manual should be used as a reference.

e) Provide adequate wastewater collection facilities to the extent practicable to prevent direct discharge of treated sewage by vessels into the waterways.

f) Pursuant to WRP Policy 6.2, incorporate consideration of climate change and sea level rise into the planning and design of projects which involve the siting of materials storage which may pose risks to public health and the environment. Projects should consider potential risks to features specific to each project, including but not limited to temporary and long-term waste storage areas, fuel storage tanks, and hazardous material storage.

Policy 7.2: Prevent and remediate discharge of petroleum products.

a) Minimize negative impacts from potential oil spills by the appropriate siting of petroleum off-loading facilities and use of best practices.

b) Follow best practices for the prevention and control of petroleum discharges from any major petroleum-related facility. Clean up and remove any petroleum discharge in

accordance with the guidelines contained in the New York State Water Quality Accident Contingency Plan and Handbook.

c) *Follow approved methods for handling and storage and use approved design and maintenance principles for storage facilities to prevent discharges of petroleum products.*

Policy 7.3: Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

a) *Use routes and methods for transporting solid waste and hazardous materials that protect the coastal environment and the safety and general welfare of the public.*

b) *Site and design solid and hazardous waste facilities so that they will not adversely affect protected natural areas, including Significant Coastal Fish and Wildlife. Habitats, habitats and wetlands critical to vulnerable species, rare ecological communities, surface waters, and aquifer recharge areas.*

c) *Give priority to waterborne transport of waste materials and substances when siting solid and hazardous waste facilities within the coastal area where practical and economically feasible.*

No hazardous materials impacts were identified for the site, and the Proposed Action is consistent with Policy 7 of the WRP.

Conclusion

The Proposed Action would be consistent with the applicable policies of the WRP and the surrounding land uses in the area. The Proposed Action would not create a land use conflict and would not itself conflict with public policies and plans for the site or surrounding area. The project would also not result in significant materials changes to existing regulations or policy. Therefore, there would be no significant adverse impacts to Public Policy as a result of the Proposed Action, and further analysis is not required.

2.2 Transportation

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

Methodology

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

- 50 peak hour vehicle trips;
- 200 peak hour subway/rail or bus transit riders; or
- 200 peak hour pedestrian trips.

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

Analysis

Description of the Rezoning Area

The Rezoning Area is in the Gravesend neighborhood of Brooklyn Community District 11. Lot 109 runs along Cropsey Avenue, and is 220.5 feet wide and 200.65 feet in depth. Lots 55 and 13 also run along Cropsey Avenue and are between 201 feet and 203 feet in depth and range from 225 to 422 feet in width (frontage). All lots are currently zoned R6. The Rezoning Area is bounded by Cropsey Avenue to the southeast, Belt Parkway to the southwest, and Bay Parkway to the Northwest. The traffic grid is irregular with disjointed collector roads dead ending at Cropsey Avenue. The Rezoning Area is bounded by Bay Parkway to the north, Belt Parkway to the west, 24th Avenue to the south, and Cropsey Avenue to the east. Bay Parkway (100 feet wide) is a southwest-northeast road with three moving lanes of traffic in each direction. Belt Parkway (300+ feet wide) is a southeast-northwest road with three moving lanes in each direction and an exit ramp adjacent to the Rezoning Area which feeds into Bay Parkway. 24th

Avenue (60 feet wide) is a southwest-northeast road with one moving lane of traffic and curbside parking. Cropsey Avenue (120 feet wide) is a southeast-northwest road with two moving lanes in each direction and curbside parking. Bay Parkway, Belt Parkway, and Cropsey Avenue are classified as Principal Arterial roadways.

Future No-Action Conditions

Under future conditions absent the Proposed Action, the proposed building on The Applicant's lot (Block 6471, Lot 109) would be completed. Without the C2-4 commercial overlay the ground floor use of the proposed building would instead be community facility (UG 4 medical office) use. Within the 329,522 GSF structure there would be 219,755 GSF of residential uses (154 dwelling units) and 109,767 GSF of community facility (UG 4 medical) uses.

Future With-Action Conditions

The With-Action RWCDS would be the same as the No-Action scenario, except that the ground floor uses would be a mix of UG 4 ambulatory diagnostic and a food store. The same 23-story, 293-foot-tall, 329,522 GSF structure would be built. The floor area breakdown would be 219,755 gsf of residential (154 dwelling units), 74,520 gsf of community facility (ambulatory diagnostic), and 35,247 gsf of commercial[1].

No other development is anticipated to occur as a result of the Proposed Action.

Preliminary Assessment

The Rezoning Area is located in CEQR traffic zone four (4). Pursuant to Table 16-1 of the 2020 CEQR Technical Manual, a development that exceeds either 200 dwelling units or 10,000 square feet of additional local retail space would exceed the threshold for warranting further analysis of potential transportation impacts.

The Incremental Development that could be effectuated by the Proposed Action is 35,247 GSF of commercial (local retail) floor area. Therefore, a Tier 1 trip generation is required.

Tier 1 Trip Generation Screening Assessment

The following analysis assesses the incremental difference between the With-Action and the No-Action Scenarios, in order to determine the potential effects of the Proposed Action on traffic conditions. The analysis assesses conditions such as traffic flow, parking, pedestrian conditions, ingress, egress, and circulation. Data sources include field observations, information provided by the project sponsor, the 2020 CEQR Technical Manual, U.S. Census data, factors

[1] As local retail results in more trips than a supermarket, local retail was conservatively evaluated for the 35,247 GSF of commercial use under future with action conditions.

developed for recent environmental reviews, and other references as described below. These factors form the basis for the travel demand forecast which analyzes peak hours and projected mode of travel, as well as person, pedestrian and vehicular trip-ends.

The trip generation analysis provides the estimated number of person trip-ends expected to be generated by the proposed project over the course of the entire day, as well as during the peak analysis hours. The classification of a proposed project's daily trip-ends by hour of the day is also referred to as its temporal distribution. Modal split refers to the travel modes likely to be used by persons going to and from the proposed project, including autos, taxis and delivery services, subways, buses, ferries, commuter rail, bicycles, and walking. These modes are considered in terms of percentages—i.e., what percent of the total number of people traveling to and from the site would travel by that particular mode. The modal split percentages are then applied to the hourly trip generation estimates to determine the number of persons traveling to and from the site by each mode for each of the analysis peak hours. A 25% linked trip credit was applied to the local retail component of the trip generation.

All Trip Generation Planning Factors are described below and shown in **Table 2.2-1**.

Table 2.2-1: Transportation Planning Factors

	Local Retail		Medical Office	
Trip Generation	(1)		(3)	
Weekday	205		Equation = 66.626x + 141.77	
Saturday	240			
	per 1,000 sf		per 1,000 sf	
Linked-trip	25%			
Temporal Distribution	(1)		(3)	
AM	3.00%		11.00%	
MD	19.00%		13.00%	
PM	10.00%		9.00%	
Sat MD	10.00%		17.00%	
Modal Splits	(3)		(3)	
Auto	11.00%		24.00%	
Taxi	0.00%		6.00%	
Bus	2.00%		9.00%	
Subway	3.00%		59.00%	
Walk/Other	84.00%		2.00%	
In/Out Splits	In (2)	Out (2)	In (3)	Out (3)
AM	50%	50%	62%	38%
MD	50%	50%	47%	53%
PM	50%	50%	35%	65%
Sat MD	55%	45%	49%	51%
Vehicle Occupancy	(3)		Weekday (3)	Sat (3)
Auto	1.20		1.50	1.50
Taxi	1.20		1.50	1.50
Truck Trip Generation	(1)		(2)	
Weekday	0.35		0.29	
Saturday	0.04		0.29	
Temporal Distribution	(1)		(2)	
AM	8.00%		3.00%	
MD	11.00%		11.00%	
PM	2.00%		1.00%	
Saturday	11.00%		0%	
In/Out Splits	In (2)	Out (2)	In (2)	Out (2)
AM/MD/PM/Sat	50.00%	50.00%	50.00%	50.00%

1 = CEQR TM; 2 = East New York FEIS; 3 = Based on NYCDOT survey data

Table 2.2-2: Tier 1 Analysis

	Local Retail		Medical Office	
Size/Units	35,247 gsf		35,247 gsf	
Peak Hour Trips				
AM	217		-274	
MD	1373		-324	
PM	723		-224	
Sat MD	723		-234	
Person Trips				
AM	In	Out	In	Out
Auto	9	9	-41	-25
Taxi	0	0	-10	-6
Bus	2	2	-15	-9
Subway	2	2	-100	-61
Walk/Other	68	68	-3	-2
Total	81	81	-170	-104
MD	In	Out	In	Out
Auto	57	57	-37	-41
Taxi	0	0	-9	-10
Bus	10	10	-14	-15
Subway	15	15	-90	-101
Walk/Other	432	432	-3	-3
Total	515	515	-152	-172
PM	In	Out	In	Out
Auto	30	30	-19	-35
Taxi	0	0	-5	-9
Bus	5	5	-7	-13
Subway	8	8	-46	-86
Walk/Other	228	228	-2	-3
Total	271	271	-78	-146
Saturday	In	Out	In	Out
Auto	33	27	-27	-29
Taxi	0	0	-7	-7
Bus	6	5	-10	-11
Subway	9	7	-68	-70
Walk/Other	250	205	-2	-2
Total	298	244	-115	-119
Vehicle Trips				
AM	In	Out	In	Out
Auto	7	7	-27	-17
Taxi	0	0	-6	-7

Taxi Balanced	0	0	-12	-14
Truck	0	0	0	0
Total	8	8	-39	-30
MD	In	Out	In	Out
Auto	47	47	-24	-27
Taxi	0	0	-6	-7
Taxi Balanced	0	0	-12	-14
Truck	0	0	0	0
Total	47	47	-37	-41
PM	In	Out	In	Out
Auto	25	25	-13	-23
Taxi	0	0	-3	-6
Taxi Balanced	0	0	-6	-12
Truck	0	0	0	0
Total	25	25	-19	-35
Saturday	In	Out	In	Out
Auto	27	22	-18	-19
Taxi	0	0	-5	-5
Taxi Balanced	0	0	-9	-10
Truck	0	0	0	0
Total	27	22	-27	-29

Table 2.2-3: Tier 1 Pedestrian Trips

	Local Retail		Medical Office		Total		
AM	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	10	10	-14	-15	-3	-5	-9
Subway	15	15	-90	-101	-74	-86	-160
Walk/Other	432	432	-3	-3	429	429	858
Total	458	458	-107	-120	352	338	690
MD	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	10	10	-14	-15	-3	-5	-9
Subway	15	15	-90	-101	-74	-86	-160
Walk/Other	432	432	-3	-3	429	429	858
Total	458	458	-107	-120	352	338	690
PM	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	5	5	-7	-13	-2	-8	-9
Subway	8	8	-46	-86	-38	-78	-116
Walk/Other	228	228	-2	-3	226	225	451
Total	241	241	-55	-102	186	139	325
Saturday	In	Out	In	Out	Total In	Total Out	Total In/Out
Bus	6	5	-10	-11	-4	-6	-10
Subway	9	7	-68	-70	-59	-63	-122
Walk/Other	250	205	-2	-2	248	202	451
Total	265	217	-80	-83	185	134	319

Tier 1: Trip Generation Assessment Conclusion

As further discussed below, the following Peak Hours (*Identified in orange in Table 2.2-4*) exceed the applicable thresholds for a Tier 1: Trip Generation Assessment and warrant further analysis (*Tier 2: Project Generated Trip Assignment*):

Table 2.2-4: Trip Generation Totals

Peak Hour	AM Peak Hour	Midday Peak Hour	PM Peak Hour	Saturday Peak Hour
Total Walk Only Trip-Ends	131	858	451	451
Total Subway Trip-Ends	-157	-160	-116	-122
Subway Threshold	200	200	200	200
Total MTA Bus Trip-Ends	-21	-9	-9	-10
MTA Bus Threshold	200	200	200	200
Total Pedestrian Trip-Ends	-47	690	325	319
Pedestrian Threshold	200	200	200	200
Vehicular Trip-Ends	-55	17	-4	-6
Vehicular Threshold	50	50	50	50

Orange denotes threshold exceedances per the CEQR Technical Manual

Tier 1: Vehicular Trip Generation Threshold

The preliminary screening thresholds in the 2020 CEQR Technical Manual suggest that any project which generates 50 or more peak hour incremental vehicle trip-ends is likely to warrant a Level 2: Vehicular Assignment to the Local Network. Conversely, projects that are anticipated to generate fewer than 50 peak hour incremental vehicle trip-ends do not warrant detailed traffic assessments, and potential traffic impacts are not expected. As indicated in **Table 2.2-4** above, the Proposed Action is anticipated to result in fewer than 50 peak hour incremental project-generated vehicular trip-ends during all of the peak hours identified. Further analysis of vehicular trip generation is not required.

Tier 1: Pedestrian Trip Generation Threshold

The 2020 CEQR Technical Manual indicates that a Tier 2: Pedestrian Trip Assignment to the Local Network Assessment be performed for projects that are likely to generate 200 or more incremental pedestrian trips during any peak hour. Additionally, the CEQR Technical Manual suggests that a detailed pedestrian analysis be performed for projects that are likely to generate 200 or more incremental pedestrian trips during any peak hour on any one pedestrian element (i.e., a crosswalk, street corner, or sidewalk) based on the results of the Tier 2: Pedestrian Trip Assignment. As shown in **Table 2.2-4** above, the Proposed Action is projected to generate greater than 200 combined (i.e., the combined total of subway, bus, and walk trips) incremental project-generated pedestrian trips-ends during the Weekday MD peak hour, the Weekday PM peak hour, and the Saturday peak hour, therefore, a Pedestrian Trip Assignment Assessment is warranted.

Tier 2: Trip Assignments

Pursuant to Section 320 of the CEQR Technical Manual, when a proposed project exceeds 50 peak hour vehicle trip-ends, or 200 peak hour pedestrian or transit trips as determined by the Tier 1 Trip Generation Screening Assessment, a *Level 2 Project Generated Trip Assignment* should be prepared to determine whether a detailed assessment of any technical areas is warranted. Accordingly, based on the *Level 1 Trip Generation Screening Assessment*, project generated vehicle, and pedestrian trips-ends were assigned to the traffic network for all peak hours in which exceedances to the above thresholds are projected.

Project Generated Trip Assignment Assumptions

Projected Site 1 has approximately 220.5 ft of frontage along Cropsey Avenue. Cropsey Avenue is a two-way highway that runs in a north-west-south-east direction with its intersections controlled by traffic lights. Per The Applicant's proposed building there will be several ingresses/egresses to and from the building. The Level 2 Pedestrian Assignment assumptions are based on the *Tier 1 Trip Generation* split between walk-only-, bus-, and rail-derived pedestrian trips.

Walk-Only Trips

Walk only pedestrian trips were assigned based on the distance and likely travel patterns that would occur from the surrounding residential neighborhoods.

Study Area

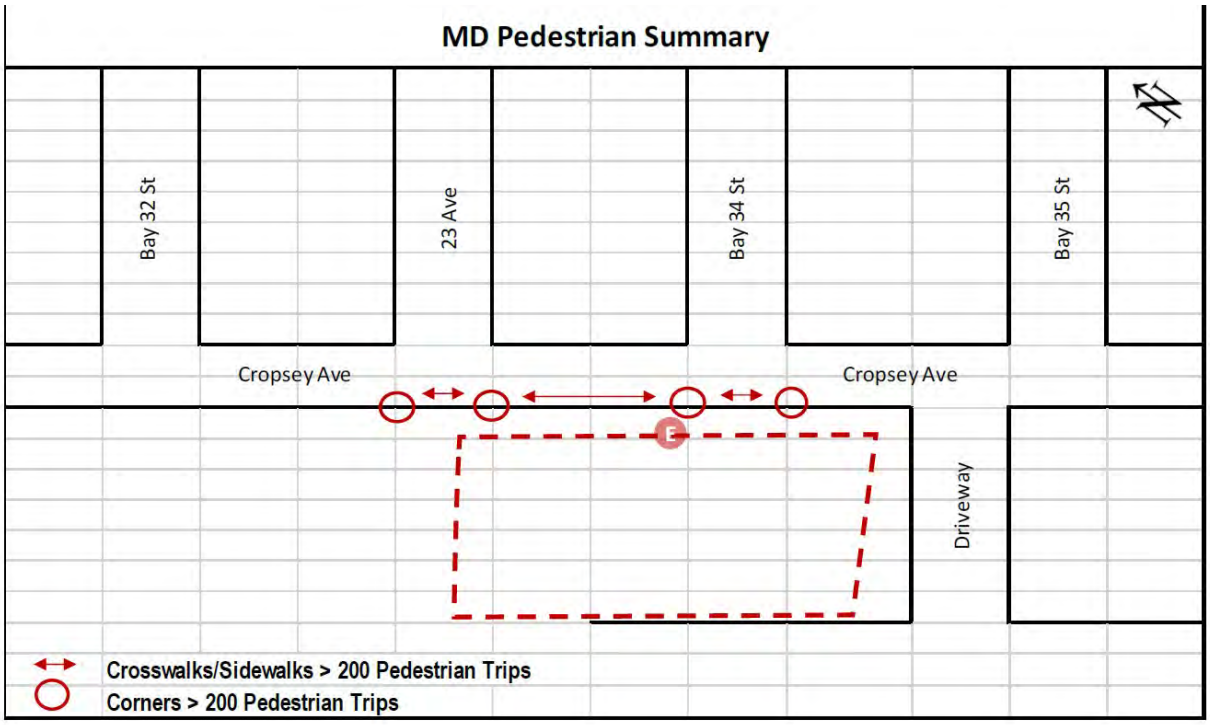
An approximately half-mile study area, which represents about a 10-minute walk from the point of origin to the point of destination was utilized.

Assessment

According to the *CEQR Technical Manual*, projected pedestrian volume increases of less than 200 pedestrians per hour at any sidewalk, crosswalk, or intersection corner would not typically be considered a significant impact and would not require a detailed analysis. Additionally, increases of less than 50 vehicles per intersection would not typically be considered a significant impact and would not require a detailed analysis.

The MD time slot will require a detailed LOS analysis based on the findings of the Tier 2 Trip Assignments, which are appended to this document. The sidewalk segments where trips are in exceedance of relevant thresholds is indicated below in **Figure 2.2-1.** The remaining time slots indicate no increase in pedestrian volume in exceedance of the 200 pedestrians per hour threshold, therefore, a detailed analysis is not required.

Figure 2.2-1: MD Pedestrian Threshold Exceedances



Detailed Level of Service Analysis

Based on the findings of the Tier 2 analysis above, a detailed level of service analysis is required for four crosswalk queueing segments and three sidewalk segments. The assumptions for the detailed level of service analysis are listed below.

General Assumptions

- 3.5 ft/s assumed for all walk speeds
- Shy widths assumed to be 1.5 ft. Minimum width allowed is 5 ft.
- No obstructions assumed at corners and sidewalks for analysis.
- Sidewalk volumes are an average of counts taken on Wednesday, 10/27/2021 and Thursday, 10/28/2021.
- Crosswalk and conflicting vehicle volumes taken on Wednesday, 10/27/2021.

Intersection 1 – Cropsey Avenue & Bay 34th Street

- SW Corner is the sum of movements of adjacent sidewalk (see Ped LOS for more details)
- SE Corner is the sum of movements of adjacent sidewalk (see Ped LOS for more details)
- 15 ft. used for N-S sections of the corner to represent "box" of crosswalk in T-intersection.
- N-S sidewalk on SW corner used to represent segment between SW corner and SE corner.
- 0 walk time given to South crosswalk for calculation purposes. In reality, there is no crosswalk, just a sidewalk there.

Intersection 2 – Cropsey Avenue & 23rd Avenue

- SW Corner is the sum of movements of adjacent sidewalk (see Ped LOS for more details)
- SE Corner is the sum of movements of adjacent sidewalk (see Ped LOS for more details)
- 15 ft. used for N-S sections of the corner to represent "box" of crosswalk in T-intersection.
- N-S sidewalk on SW corner used to represent segment between SW corner and SE corner.
- 0 walk time given to South crosswalk for calculation purposes. There is no actual crosswalk at this location, only a sidewalk.

The level of service table with the conclusions of the analysis is below.

Table 2.2-5: Level of Service Table

	Existing		No Build		Build	
	LOS	**Average Ped Space sf/ped**	**LOS**	**Average Ped Space**	**LOS**	**Average Ped Space**
Cropsey Avenue and Bay 34th Street						
Southeast Corner	A	1093.2	A	1082.3	A	225.4
Southwest Corner	A	928.0	A	918.0	A	161.6
South Sidewalk	A	1866.6	A	1848.1	B	247.6
Southwest Sidewalk	A	1050.0	A	1039.5	B	223.0
Cropsey Avenue and 23rd Avenue						
Southeast Corner	A	558.2	A	552.6	A	99.7
Southwest Corner	A	605.8	A	599.7	A	178.3
South Sidewalk	A	660.4	A	653.8	B	181.0
Southeast Sidewalk	A	656.2	A	649.7	B	139.2

Conclusion

Based on the findings of the detailed level of service analysis above and the previous Tier 1 and 2 analyses, there would be no significant impacts to transportation as a result of the Proposed Action, and no mitigation is required.

2.3 Air Quality

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

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

Project Description

The Rezoning Area, located in the Gravesend neighborhood of Brooklyn, Community District 11, is comprised of 3 lots on Block 6471 and Block 6925. Projected Development Site 1 is the Applicant owned property. The rest are the Other Affected Sites.

Projected Development Site 1 is projected to be developed with a 329,522-GSF, 23-story, 293-foot-tall mixed-use building. The floor area breakdown would be 219,755 GSF of residential uses (154 dwelling units), 74,520 GSF of community facility uses (ambulatory diagnostic), and 35,247 GSF of commercial use (supermarket). Under with-action condition, there will be no incremental increase in parking, as the community facility and commercial use require the same 1 parking stall per 1,000 sf of use, with 35 parking stalls required.

The building's HVAC equipment would operate on Fuel Oil #2 under the RWCDS.

The Other Affected Sites under Reasonable Worst-Case Development Scenarios (RWCDS) would remain the same as the existing condition. The buildings' HVAC systems operate on Fuel Oil #2. **Table 2.3-1** summarizes the Rezoning Area.

Table 2.3-1: The RWCDS of the Rezoning Area

Site ID	Block	Lot	Building Height (feet)	Gross Floor Area
Projected Development Site 1	6471	109	293	329,522
Other Affected Site 1	6471	13	105	120,618
Other Affected Site 2	6925	55	85	127,728

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

Methodology & Standards

Air Pollutants and Applicable Standards/Guidelines

National Air Quality Standards

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

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

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

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

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

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

- *Sulfur Dioxide (SO_2) emission is principally associated with stationary sources that burn oil or coal. These fuels contain sulfur that bond to oxygen atoms in the burning process.*

As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The NO_2, $PM_{2.5}$, and SO_2 standards— the criteria pollutants of main concern for HVAC systems fueled by Fuel Oil #2—together with their health-related averaging periods are presented in **Table 2.3-2**.

Table 2.3-2: National and New York State Ambient Air Quality

Pollutant	Averaging Period	National and State Standards
NO_2	Maximum 1-Hour Concentration	0.10 ppm (188 µg/m^3)
	Annual Arithmetic Average	0.053 ppm (100 µg/m^3)
$PM_{2.5}$	24-Hour Concentration	35 µg/m^3
	Average of 3 Consecutive Annual Means	12 µg/m^3
SO_2	Maximum 1-Hour Concentration	75 ppb (196 µg/m^3)
	Annual Arithmetic Mean	30 ppb (80 µg/m^3)

NO_2 NAAQS

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

The 1-hour NO_2 NAAQS standard of 0.100 ppm (188 ug/m^3) is the 3-year average of the 98th percentile (8th Highest) of daily maximum 1-hour average concentrations in a year. For determining compliance with this standard, the EPA has developed a modeling approach for estimating 1-hour NO_2 concentrations that is comprised of 3 tiers: Tier 1, the most conservative approach, assumes a full (100%) conversion of NO_x to NO_2; Tier 2 applies a conservative ambient NO_x/NO_2 ratio of 80% to the NO_x estimated concentrations; and Tier 3, which is the most precise approach, employs AERMOD's PVMRM module. The PVMRM accounts for the

chemical transformation of NO emitted from the stack to NO_2 within the source plume using hourly ozone background concentrations. When Tier 3 is utilized, AERMOD generates 8th highest daily maximum 1-hour NO_2 concentrations or total 1-hour NO_2 concentrations if hourly NO_2 background concentrations are added within the model.

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

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

New York State Standards

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

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

NYC Interim Guidelines

In addition to the NAAQS, the *CEQR Technical Manual* requires that projects subject to CEQR apply a $PM_{2.5}$ significant impact criteria (based on concentration increments). These criteria are called *de minimis* and they are more stringent than the NAAQS and the state standards as the criteria set a maximum increase of pollutant concentration that is below the national standard. If the estimated impacts of a proposed project are less than the *de minimis* criteria, the impacts are not considered to be significant. As outlined in the *CEQR Technical Manual,* $PM_{2.5}$ significant impacts are evaluated as follow:

- *Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or*

- *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 µg/m^3 at any receptor location for stationary sources.*

Background Concentrations

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

Background concentrations of NO_2, SO_2, and $PM_{2.5}$—the criteria pollutants relevant for HVAC system fueled by natural gas or fuel oil #2 analysis—were obtained from the NYSDEC's annual report for 2019 at the nearest monitoring stations. **Table 2.3-3** shows the background concentrations.

Table 2.3-3: Background Concentration at the Nearest Monitoring Station (NYSDEC 2019 Report)

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
NO_2	98th Percentile of Daily Maximum 1-hour averaged over last 3 years	188 µg/m^3	55.1 ppb (103.6 µg/m^3)	Queens College
	Annual Arithmetic Mean	100 µg/m^3	14.18 ppb (26.7 µg/m^3)	
SO_2	99th Percentile of Daily Maximum 1-hour averaged over last 3 years	196 µg/m^3	5.17 ppb (13.5 µg/m^3)	Queens College
	Annual Arithmetic Mean	80 µg/m^3	0.36 ppb (0.94 µg/m^3)	
$PM_{2.5}$	24-Hour average of 98th percentile for last 3 years	35 µg/m^3	19.4 µg/m^3	Port Richmond
	Average of last 3 years annual means	12 µg/m^3	7.5 µg/m^3	

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

- 24-hour $PM_{2.5}$ 7.80 µg/m^3;
- Annual $PM_{2.5}$ 0.3 µg/m^3.

Analysis

Mobile Sources

According to the *CEQR Technical Manual*, projects, whether site- specific or generic, may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic; create any other mobile sources of pollutants (such as diesel trains, helicopters etc.); or add new uses near mobile sources (roadways, garages, parking lots, etc.). Projects requiring further assessment include:

- *Projects that would result in placement of operable windows, balconies, air intakes or intake vents generally within 200 feet of an atypical source of vehicular pollutants.*

- *Projects that would result in the creation of a fully or partially covered roadway, would exacerbate traffic conditions on such a roadway, or would add new uses near such a roadway.*

- *Projects that would generate peak hour auto traffic or divert existing peak hour traffic of 170 or more auto trips in this area of the City.*

- *Projects that would generate peak hour heavy- duty diesel vehicle traffic or its equivalent in vehicular emissions resulting from 12 or more heavy-duty diesel vehicles (HDDVs) for paved roads with average daily traffic of fewer than 5,000 vehicles, 19 or more HDDVs for collector roads, 23 or more HDDVs for principal and minor arterials, or 23 or more HDDVs for expressways and limited-access roads.*

- *Projects that would result in new sensitive uses (e.g., schools or hospitals) adjacent to large existing parking facilities or parking garage exhaust vents.*

- *Projects that would result in parking facilities or applications requesting the grant of a special permit or authorization for parking facilities; or projects that would result in a sizable number of other mobile sources of pollution (e.g., a heliport or a new railroad terminal).*

- *Projects that would substantially increase the vehicle miles traveled in a large area.*

The Proposed Action would not result in creation of a covered roadway or affect any covered roadway. Peak hour trip generation is far below the 170-car threshold, as per *Chapter 2: Transportation*. The project would not result in any other mobile sources of pollution, and would not significantly increase vehicle miles traveled in a large area.

According to *CEQR Technical Manual*, mobile source impact analysis for air quality does not rely on the pedestrian trips but the incremental vehicle trip-ends generated by the project. As per

Chapter 2: Transportation **Table 2.2-4** the incremental vehicle trip-ends during the Weekday MD peak hour would increase 17 trips while the incremental vehicle trip-ends during the Weekday AM, Weekday PM, and Saturday MD peak hours would decrease with the Proposed Action, which would not negatively impact the air quality of the surrounding area.

Per NYS DOT Functional Classification, the Rezoning Area is bounded by Cropsey Avenue (principal arterial) to the north, 24th Avenue (local road) to the east, Belt Parkway (principal expressway) to the south, and Bay Parkway (principal arterial) to the west. As per *Chapter 2: Transportation* **Table 2.2-4**, the incremental vehicle trip-ends would only increase by 17 trips during the Weekday MD peak hour with the Proposed Action. Using the worksheet provided in the *CEQR Technical Manual* Section 210, the vehicle trip-ends for paved roads with average daily traffic of fewer than 5,000 vehicles are equivalent to 8 HDDVs during the Weekday MD peak hour. Given that the screening threshold for paved roads is 12 HDDVs, the vehicular trips during Weekday MD peak hour pass the screening for $PM_{2.5}$.

However, the Proposed Action would result in operable windows or air intakes within 200 feet of an atypical roadway, Belt Parkway. Therefore, a detailed analysis is required.

Belt Parkway Analysis

Per the *CEQR Technical Manual*, a detailed analysis is required for projects that would result in placement of sensitive receptors generally within 200 feet of an atypical source of vehicular emission. Projected Development Site 1, located at 2300 Cropsey Avenue (Block 6471, Lot 109), is situated approximately 100 feet from the Belt Parkway westbound traveling lanes. Therefore, a detailed analysis is required.

The EPA's Mobile Vehicle Emission Simulator 2014 (MOVES2014b version) was utilized to predict vehicular emissions. Dust generated by vehicle travelling on paved roadways were added to MOVES emissions to estimate total short-term PM_{10} or $PM_{2.5}$ emissions. CAL3QHCR was used to predict pollutants concentrations. Impact concentrations were evaluated with the National Ambient Air Quality Standards (NAAQS) and the NYC Guidelines, *de minimis*, threshold standard.

Air Pollutants – Background Concentrations and Standards

The EPA has identified six pollutants, known as criteria pollutants, which are of concern nationwide. As required by the Clean Air Act, National Ambient Air Quality Standards (NAAQS) have been established for the criteria pollutants by EPA, and New York State has adopted the NAAQS as the State ambient air quality standards. The NAAQS primary standards are designed to protect public health with adequate margin of safety. The NAAQS secondary standards are designed to protect the public welfare from adverse effects, including those related to effects on soils, water, vegetation, visibility, and other aspects. The primary NAAQS and background

concentrations from the nearest federally-mandated monitoring station(s) of the pollutant(s) that a detailed analysis was conducted for are presented in **Table 2.3-4**.

Table 2.3-4: The NAAQS, 2019 Background Concentrations

Pollutant	Averaging Period	National and State Standards	Background Concentration	Monitoring Station
CO	1-Hour	35 ppm	1.51 ppm	Queens College
	8-Hour	9 ppm	1.10 ppm	
$PM_{2.5}$	24-Hour	35 µg/m^3	19.4 µg/m^3	Port Richmond
	Annual	12 µg/m^3	7.5 µg/m^3	
PM_{10}	24-Hour	150 µg/m^3	43 µg/m^3	Division Street

The City's *de minimis* criteria set allowable incremental increase in CO and $PM_{2.5}$ concentrations that would result as a consequence of a proposed project. CO criteria set the minimum change in 8-hour average CO concentration that constitutes a significant environmental impact. Significant increase of CO concentrations in New York City are:

- *An increase of 0.5 parts per million (ppm) or more in the maximum 8-hour average CO concentration at a location where the predicted No-Action 8-hour concentration is equal to 8 ppm or between 8 ppm and 9 ppm; or*

- *An increase of more than half the difference between baseline (i.e., No-Action) concentrations and the 8-hour standard, when No-Action concentrations are below 8 ppm.*

The following criteria are used for determination of significant adverse $PM_{2.5}$ incremental impacts for projects subject to the CEQR:

- *Predicted 24-hour maximum $PM_{2.5}$ concentration increase of more than half the difference between the 24-hour background concentration and the 24-hour standard; or*

- *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.1 µg/m^3 at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources; or for mobile sources, at a distance from a roadway corridor similar to the minimum distance defined for locating neighborhood scale monitoring stations); or*

- *Predicted annual average $PM_{2.5}$ concentration increments greater than 0.3 µg/m^3 at any receptor location for stationary sources.*

Relevant to the analysis, the 8-hour CO *de minimis* is 3.95 ppm and 24-hour $PM_{2.5}$ *de minimis* is 7.8 µg/m^3.

Methodology and Databases

Emissions of vehicular mechanical components (exhaust, crank case, break ware, and tire wear) were generated with the EPA's MOVES version 2014b. Fugitive road dust emissions were added to estimate total particulate matter emissions for the short-term periods. Pollutants' concentrations at sensitive receptors were modeled with the EPA's CAL3QHCR Gaussian dispersion model. The Belt Parkway is a three lane in each direction roadway. Exit 5 offramp from the westbound roadway, which is near the Projected Development Site 1, was included in the modeling. The roadways are generally at grade.

The EPA's MOVES2014b emission factor algorithm was used to compile the CO, PM_{10}, and $PM_{2.5}$ emission factors. MOVES can be used to calculate emissions of criteria air pollutants, greenhouse gas emissions, and some hazardous air pollutants for both on-road motor vehicles and non-road equipment. Emissions are calculated at the national, county, or project level by use of databases and by specifying the characteristics (Run Specification) of the scenario that is modeled. For microscale (project level) analyses, MOVES require the use of traffic and roadways characteristics for each link (roadway segment) that is modeled and county data.

Hourly traffic counts and classifications were obtained from the New York State Department of Transportation (NYSDOT) for station 020903 (Belt Parkway). Exit 5 vehicle count was obtained from NYSDOT station 023045, and vehicle classification was assumed to be similar to the Belt Parkway westbound traffic. The *CEQR Technical Manual*, Table 16-4: Annual Background Growth Rates, of 0.5 percent was used to account for the general background traffic growth in the area. Weekday (Tuesday-Thursday vehicle speed at each period of a day were obtained from UBER Movement.[2] During the PM peak-hour period of 5:00-6:00 PM the combined traffic (eastbound and westbound) on the Belt Parkway will be 9,859 vehicles. Combined Daily (ADT) and annual (AADT) traffic counts will be 128,484 and 115,439 vehicles per day, respectively. Approximately 10,000 vehicles traverse Exit 5 daily.

County database for the MOVES model was obtained from the NYSDEC. The county data included inspection and maintenance, passenger car/truck distribution, fuel data (fuel properties, distribution, and engine technology), age distribution, and meteorology data. Vehicles age distribution was projected using the EPA tool.[3] MOVES was run at the project scale for primary total CO, $PM_{2.5}$, and PM_{10} and primary $PM_{2.5}$ species running and crankcase exhaust, with primary $PM_{2.5}$ and PM_{10} brake and tire wear emissions. The NYSDEC county database (MOVES input file for the borough of the Kings) was used to further characterize vehicle types

2 https://movement.uber.com/?lang=en-US
3 https://www.epa.gov/moves/tools-develop-or-convert-moves-inputs

and engine technologies. Elevation points[4] on the roadways were used to account for links' (roadway segments) gradients.

Peak-hour emission factors were compiled for winter and summer season during the PM peak-hour period. The resulting greatest emission factors, for each pollutant independently, were used in the dispersion analyses. The peak-hour period traffic condition was applied in the short-term analyses. Annual $PM_{2.5}$ emission factors were compiled for January weekday (wintertime emission (January) is greater than summertime emission) and for the five periods of the day (early morning, AM, Midday, PM, and evening), and the hourly weighted average emission factors of each link calculated. Dust generated by vehicles traveling on paved roadways were added to estimate total particulate matter emissions for the short-term analysis (annual fugitive dust emission is negligible, based on similar types of projects in the city). A silt loading factor of 0.015 g/m^2 (for arterial roadways) was applied, based on the *CEQR Technical Manual* and the roadways' classifications. In addition, conservative assumptions of "dry" road conditions were used for the short-term calculations (precipitation reduced silt loading).

Dispersion analysis was conducted using the EPA's CAL3QHCR dispersion model version 13196. $PM_{2.5}$ concentrations were predicted with model-ready meteorology data of JFK airport, obtained from New York City Department of City Planning (DCP) for a similar type of project. One-hour CO and 1-hour PM_{10} concentrations were predicted using the emulate CAL3QHC meteorology data, specifying 10-deg incremental wind vector direction, 1-meter per second wind speed, natural stability, and 285.5 Kelvin, and 1,000-meter mixing height. All models specified settling and deposition velocities of 0-meter per second, 60-minute averaging time, and urban surface roughness of 108-centimeter. The surface roughness corresponds to single family residential land-use, which generally is the most conservative. Persistence factor of 0.7 was applied to the 1-hour CO concentration to predict the 8-hour CO concentration. Persistence factor of 0.4 was applied to the 1-hour PM_{10} concentration to predict the 24-hour PM_{10} concentration.

Receptors at the Projected Development Site 1 were placed on the wall façade facing the highway at spaced intervals from 6 feet above grade to the rooftop height. The map application built into CALRoad View, Lakes Environmental, Inc. commercial version of CAL3QHCR, was used to spatially locate links and receptors.

Belt Parkway Analysis Results

The predicted concentrations of the 24-hour $PM_{2.5}$ and CO 8-hour were evaluated with the *de minimis*. The 24-hour PM_{10}, annual $PM_{2.5}$ and CO 1-hour predicted concentrations were added to the background concentrations, and results evaluated with the NAAQS. **Table 2.3-5** shows the dispersion analysis results.

4 City of New York (2014). NYC Planimetric Database. *Elevation Points*. <https://data.cityofnewyork.us/Transportation/Elevation-points/szwg-xci6>, Sep. 21st, 2021

Table 2.3-5: Belt Parkway Dispersion Analysis Results

Pollutant and Averaging Time	Modeled Concentration	Background Concentration	Evaluated Concentration	Threshold Concentration	Threshold Standard
$PM_{2.5}$ 24-hour	1.78 µg/m^3	N.A.	1.78 µg/m^3	7.8 µg/m^3	*de minimis*
$PM_{2.5}$ Annual	0.106 µg/m^3	7.5 µg/m^3	7.6 µg/m^3	12 µg/m^3	NAAQS
PM_{10} 24-hour	8.96 µg/m^3	43 µg/m^3	52 µg/m^3	150 µg/m^3	NAAQS
CO 1-hour	0.389 ppm	1.51 ppm	1.90 ppm	35 ppm	NAAQS
CO 8-hour	0.27 ppm	N.A.	0.27 ppm	3.95 ppm	*de minimis*

As seen in **Table 2.3-5**, the 24-hour $PM_{2.5}$ and 8-hour CO concentrations do not exceed the *de minimis,* and PM_{10}, annual $PM_{2.5}$, and CO 1-hour concentrations are within the NAAQS.

Conclusion

No significant adverse air quality impact was predicted in the analysis. Therefore, there is no reason to believe that mobile source emissions at the Belt Parkway would result in any potentially significant adverse air quality impacts to the Proposed Action, and further assessment is not warranted.

Stationary Sources

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

The stationary source analysis will study the potential impacts of the proposed building at Projected Development Site 1 on nearby receptors. As described above, Projected Development Site 1 would be developed with a 329,522-GSF, 23-story, 293-foot-tall mixed-use building. The floor area breakdown would be 219,755 GSF of residential uses (154 dwelling units), 74,520 GSF of community facility uses (ambulatory diagnostic), and 35,247 GSF of commercial uses (supermarket).

Project HVAC Systems Analysis

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

As outlined in the *CEQR Technical Manual*, the analysis of buildings' HVAC systems follows stationary sources methodology and based on CEQR guidelines, a preliminary screening analysis is to be conducted as a first step to predict whether the potential impacts of the heat and hot

water system boiler emissions can be significant. This CEQR screening procedure is applicable to buildings that are not less than 30 feet from the nearest building of similar or greater height. Otherwise, a detailed dispersion analysis is required.

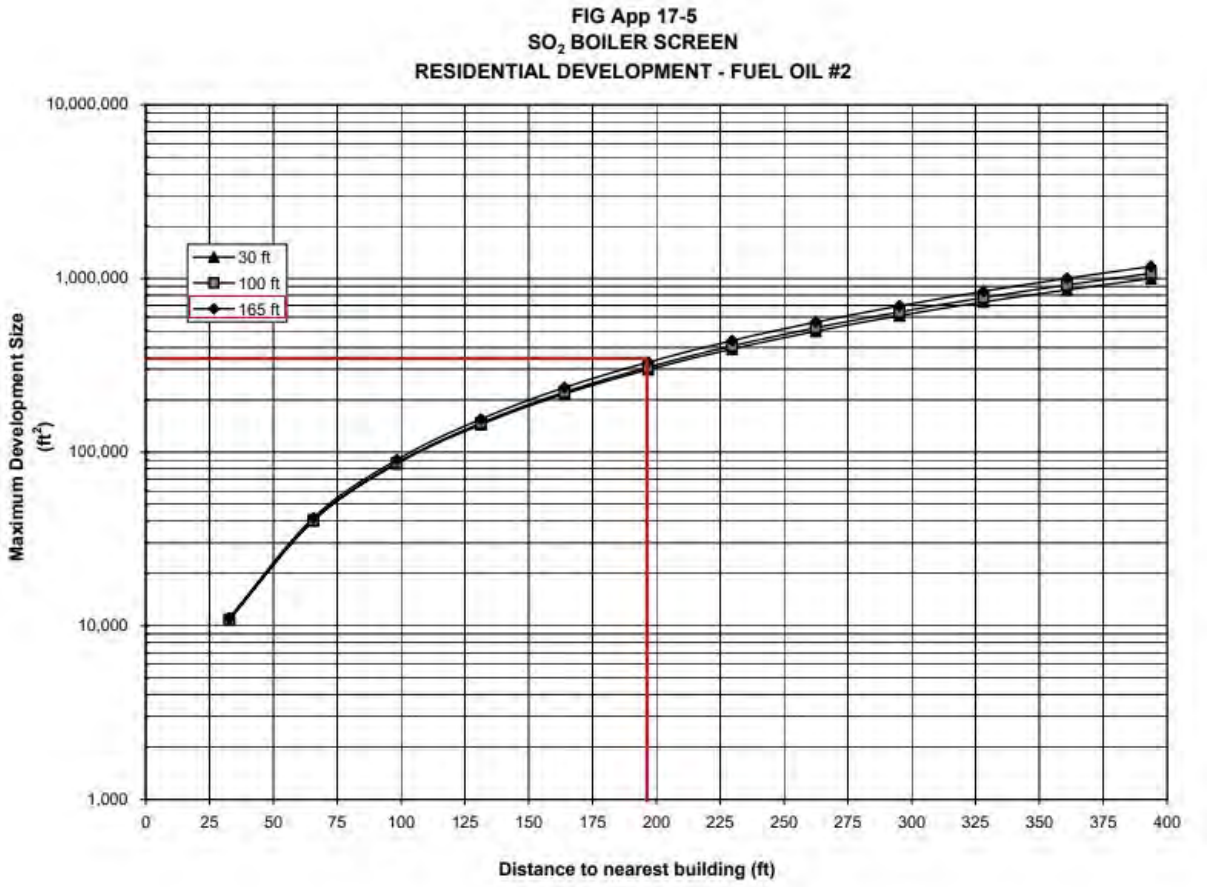
The anticipated development within the proposed rezoning area would consist of one single building, which would be equipped with its own separate Fuel Oil #2-fueled heat and hot water system. Therefore, screening analyses were performed for fuel use only.

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

- Projected Development Site 1 has a building height of 293 feet and 329,522 GSF of floor area. The stack height of the proposed building is assumed to be 3 feet above the building's roof height, which is 296 (293+3) feet accordingly.

Per the *CEQR Technical Manual*, the CEQR nomographs depicted on Figure 17-5 of the *CEQR Technical Manual* Appendix for a 165-foot stack height was applied as the 165 feet curve height is closest to but not higher than the proposed stack height of the proposed building. The Stationary Source Screen Figure 17-5 referenced in the *Appendices* of the *CEQR Technical manual* is a generic screen assuming the HVAC system is fueled by Fuel Oil #2. In addition, per *CEQR Technical Manual*, the distance to the nearest building of similar or greater height was assumed to be 400 feet if the actual distance is greater. **Figure 2.3-1** (*CEQR Figure 17-5*) shows the Projected Development Site 296-foot-tall building screening analysis.

Figure 2.3-1: Projected Development Site 1 HVAC Screening



The screening analysis **Figure 2.3-1** nomograph shows that a detailed analysis would be required for any existing land uses that are 296 feet or taller and at a distance of less than 190 feet from Projected Development Site 1.

A review of existing land uses around Projected Development Site 1 shows that the nearest building of similar or greater height is the 24-story, 211-foot-tall mixed residential and commercial building, located at 3385 Neptune Avenue (Block 6979, Lot 200), which is approximately 6,000 feet southwest of Projected Development Site 1. The building footprint data geo metadata, used to assess buildings' roof heights, was obtained from the NYC Open Data Building Footprints Shapefile[5]. In addition, a review of planned land use applications shows that there are no planned developments within the 400-foot study area.

5 https://data.cityofnewyork.us/Housing-Development/Building-Footprints/nqwf-w8eh/data.

Table 2.3-6: Screening Analysis Results

Source Building Site ID	Heated Area (sq. ft.)	Screen Distance (ft.)	Receiving Building (Site ID or Block/Lot)	Receiving Building Distance (ft.)	Pass/ Fail
Project-on-Existing and/or Planned Land Uses (293-foot Proposed Development)					
Projected Development Site 1	329,522	190	Existing Land use (6979/200)	> 400	Pass

Table **2.3-6** shows the screening analysis framework and result for the analysis scenario.

Per DCP's guidance, the proposed project is an existing building where a commercial overlay enables expanded use on the ground floor. As such, an (E) designation is not implemented for the HVAC system associated with the With-Action development.

Industrial Emissions

The Proposed Action would introduce a sensitive land use into the area. Accordingly, a preliminary screening was conducted to determine if there are any potential sources of industrial process emissions that could affect project occupants. Industrial sources were identified through a site visit within a 400-foot study area and the DEP CATS search.

400-Foot Study Area

The Rezoning Area is located within a R6 zoning district, and the surrounding area is primarily medium-density residential, commercial, and community facility uses. The 400-foot radius was screened for potential sources of industrial emissions and is shown below in **Figure 2.3-2**. Based on field observations and reviews of DCP land use maps, only one (1) source was identified as potentially manufacturing or industrial in nature as identified as ID Number 1 in **Figure 2.3-2**. The use was screened further using Google and in field assessment on multiple occasions. **Table 2.3-7** shows the property information that was screened as potentially industrial or manufacturing sites. The site was further reviewed for permit activity by reviewing the DEP CATS Database. No active permit was identified within the search area. Therefore, there is no potential for impact to the Proposed Development from industrial sources in the surrounding area.

Table 2.3-7: Industrial Sites within 400 feet of Rezoning Area

Site ID	Block	Lot	Address	Active Permits
1	6491	190	1728 Shore Parkway	None

1,000-Foot Study Area

A search of the EPA Envirofacts ICIS-AIR database and the Toxics Release Inventory (TRI) was conducted for all parcels within the 400 and 1000-foot Study Area. The Envirofacts ICIS Air Database contains compliance and permit data for stationary sources of air pollution (such as electric power plants, steel mills, factories, and universities) regulated by EPA, state and local air pollution agencies. The Toxics Release Inventory (TRI) is a publicly available database containing information on toxic chemical releases and other waste management activities in the United States.

The search did not identify any large sources of industrial emissions or odor-producing facilities within 1,000 feet of the Projected Development Site. As such, no further analysis of large emissions sources is warranted.

Conclusion

As indicated above, there are no active industrial emissions permits or large industrial emission sources within the 400- or 1,000-foot study areas. Additionally, there is no evidence present to conclude that there are illegal, unpermitted air emissions present in the study area. Therefore, there does not appear to be any potentially significant impact in terms of air toxics to project occupants.

Figure 2.3-2: Industrial Emissions Screening

2.4 Noise

Noise Monitoring was conducted by Equity Environmental Engineering, LLC (Equity) personnel to support the Proposed Project, located at 2300 Cropsey Avenue, Brooklyn, NY (Block 6471, Lot 109), within the Gravesend neighborhood of Brooklyn, NY ("Projected Development Site 1"). Projected Development Site 1 is generally bounded by Bayview place to the north, Cropsey Avenue to the east, 24th Avenue to the south, and Shore Parkway to the west. Bayview Place is two-way road with its intersection controlled by a stop sign. Cropsey Avenue is a two-way road with its intersections controlled by traffic lights. 24th Avenue is a one-way road with its intersection controlled by a traffic light. Shore Parkway is a two-way road with its intersections controlled by stop signs. The area in which the site is located consists primarily of multi-family residential uses.

Vehicular traffic is the predominant source of noise in this area. Therefore, the Proposed Action warrants an assessment of the potential for adverse effects on the occupants from ambient noise. The Proposed Action would not create a significant stationary noise generator. Additionally, project-generated traffic would not double vehicular traffic on nearby roadways, and therefore would not result in a perceptible increase in vehicular noise. This noise assessment is limited to an assessment of ambient noise that could adversely affect occupants of the development.

Methodology

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

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

Noise is measured in sound pressure level (SPL), which is converted to a decibel scale. The decibel is a relative measure of the sound level pressure with respect to a standardized reference quantity. Decibels on the A-weighted scale are termed "dB(A)." The A-weighted scale is used for evaluating the effects of noise in the environment because it most closely approximates the response of the human ear. On this scale, the threshold of discomfort is 120 dB(A), and the threshold of pain is about 140 dB(A). **Table 2.4-1** shows the range of noise levels for a variety of indoor and outdoor noise levels.

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

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

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

Mobile Sources

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

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

The *CEQR Technical Manual* provides noise exposure guidelines in terms of L_{eq} and L_{10} for the maximum amount of allowable noise under existing regulations. L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating sound pressure levels is averaged over time to create a single number to describe the mean energy or intensity level. High noise levels during a measurement period will have greater effect on the L_{eq} than low noise levels. The L_{eq} has an advantage over other descriptors because L_{eq} values from different noise sources can be added and subtracted to determine cumulative noise levels. In comparison, L_{10} is the SPL exceeded 10 percent of the time. Similar descriptors include the L_{50}, L_{01}, and L_{90} values.

Table 2.4-1: Sound Pressure Level & Loudness of Typical Noises in Indoor & Outdoor Environments

Noise Level dB(A)	Subjective Impression	Typical Sources		Relative Loudness (Human Response
		Outdoor	Indoor	
120-130	Uncomfortably Loud	Air raid siren at 50 feet (threshold of pain)	Oxygen torch	32 times as loud
110-120	Uncomfortably Loud	Turbo-fan aircraft at take-off power at 200 feet	Riveting machine Rock band	16 times as loud
100-110	Uncomfortably Loud	Jackhammer at 3 feet		8 times as loud
90-100	Very Loud	Gas lawn mower at 3 feet Subway train at 30 feet Train whistle at crossing Wood chipper shredding trees Chain saw cutting trees at 10 feet	Newspaper press	4 times as loud
80-90	Very Loud	Passing freight train at 30 feet Steamroller at 30 feet Leaf blower at 5 feet Power lawn mower at 5 feet	Food blender Milling machine Garbage disposal Crowd noise at sports event	2 times as loud
70-80	Moderately Loud	NJ Turnpike at 50 feet Truck idling at 30 feet Traffic in downtown urban area	Loud stereo Vacuum cleaner Food blender	Reference loudness (70 dB(A))
60-70	Moderately Loud	Residential air conditioner at 100 feet Gas lawn mower at 100 feet Waves breaking on beach at 65 feet	Cash register Dishwasher Theater lobby Normal speech at 3 feet	2 times as loud
50-60	Quiet	Large transformers at 100 feet Traffic in suburban area	Living room with TV on Classroom Business office Dehumidifier Normal speech at 10 feet	1/4 as loud
40-50	Quiet	Bird calls Trees rustling Crickets Water flowing in brook	Folding clothes Using computer	1/8 as loud
30-40	Very quiet		Walking on carpet Clock ticking in adjacent room	1/16 as loud
20-30	Very quiet		Bedroom at night	1/32 as loud
10-20	Extremely quiet		Broadcast and recording studio	
0-10	Threshold of Hearing			

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

Stationary Sources

The *CEQR Technical Manual* states that based upon previous studies, unless existing ambient noise levels are very low and/or stationary source levels are very high (and there are no structures that provide shielding), it is unusual for stationary sources to have significant impacts at distances beyond 1,500 feet. A detailed analysis may be appropriate if the proposed project would: cause a substantial stationary source (i.e., unenclosed mechanical equipment for manufacturing or building ventilation purposes, playground, etc.) to be operating within 1,500 feet of a receptor, with a direct line of sight to that receptor; or introduce a receptor in an area with high ambient noise levels resulting from stationary sources, such as unenclosed manufacturing activities or other loud uses. Machinery, mechanical equipment, heating, ventilating and air-conditioning units, loudspeakers, new loading docks, and other noise associated with building structures may also be considered in a stationary source noise analysis. Impacts may occur when a stationary noise source is near a sensitive receptor, and is unenclosed. No unenclosed specific stationary noise sources of concern were observed during field inspection. As the Projected Development Site is not subject to high ambient noise levels from any nearby stationary source, no stationary source noise impacts from surrounding uses are anticipated. Additionally, as the proposed project would not introduce a new stationary noise source, no significant adverse stationary source impacts are anticipated because of the Proposed Action, and no further analysis is warranted.

In 1983, the New York City Department of Environmental Protection (NYCDEP) adopted the City Environmental Protection Order-City Environmental Quality Review (CEPO-CEQR) noise standards at the exterior façade to achieve interior noise levels of 45 dB(A) or below. CEPO-CEQR Noise Standards classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. As noted in the *CEQR Technical Manual*, these standards are the basis for classifying noise exposure into the following categories based on the L_{10} measured directly outside the projected development site:

Table 2.4-2: Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				**Clearly Unacceptable**
Noise Level with Proposed Project	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[1]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	$36 + (L_{10} - 80)^2$ dB(A)

Source: *CEQR Technical Manual*
Notes:
[1] The above composite window-wall attenuation values are for residential dwellings. Commercial office space 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.
[2] Required attenuation values increase by 1 dB(A) increments for L_{10} values greater than 80 dBA.

Table 2.4-3: Noise Levels of Common Sources

Sound Source	SPL (dB(A))
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
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0
Notes: A change in 3dB(A) is a just noticeable change in SPL. A change in 10 dB(A) Is perceived as a doubling or halving in SPL. *Source: 2020 CEQR Technical Manual*	

Sound is often measured and described in terms of its overall energy, taking all frequencies into account. However, the human hearing process is not the same at all frequencies. Humans are less sensitive to low frequencies (less than 250 Hz) than mid-frequencies (500 Hz to 1,000 Hz) and are most sensitive to frequencies in the 1,000- to 5,000-Hz range. Therefore, noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common weighting networks used are the A- and C- weighting networks. These weight scales were developed to allow sound level meters, which use filter networks to approximate the characteristic of the human hearing mechanism, to simulate the frequency sensitivity of human hearing. The A-weighted network is the most commonly used, and sound levels measured using this weighting are denoted as dBA. The letter "A" indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. C-weighting gives nearly equal emphasis to sounds of most frequencies. Mid-range frequencies approximate the actual (unweighted) sound level, while the very low and very high frequency bands are significantly affected by C-weighting.

The following is typical of human response to relative changes in noise level:

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

The SPL that humans experience typically varies from moment to moment. Therefore, various descriptors are used to evaluate noise levels over time. Some typical descriptors are defined below.

- L_{eq} is the continuous equivalent sound level. The sound energy from the fluctuating SPLs is averaged over time to create a single number to describe the mean energy, or intensity, level.

High noise levels during a measurement period will have a greater effect on the L_{eq} than low noise levels. L_{eq} has an advantage over other descriptors because L_{eq} values from various noise sources can be added and subtracted to determine cumulative noise levels.

- $L_{eq}(24)$ is the continuous equivalent sound level over a 24-hour time period.

The sound level exceeded during a given percentage of a measurement period is the percentile-exceeded sound level (L_X). Examples include L_{10}, L_{50}, and L_{90}. L_{10} is the A-weighted sound level that is exceeded 10% of the measurement period.

The decrease in sound level caused by the distance from any single noise source normally follows the inverse square law (i.e., the SPL changes in inverse proportion to the square of the distance from the sound source). In a large open area with no obstructive or reflective surfaces, it is a general rule that at distances greater than 50 feet, the SPL from a point source of noise drops off at a rate of 6 dB with each doubling of distance away from the source. For "line" sources, such as vehicles on a street, the SPL drops off at a rate of 3 dBA with each doubling of the distance from the source. Sound energy is absorbed in the air as a function of temperature, humidity, and the frequency of the sound. This attenuation can be up to 2 dB over 1,000 feet. The drop-off rate also will vary with both terrain conditions and the presence of obstructions in the sound propagation path.

Measurement Location and Equipment

Because the predominant noise sources in the area of the proposed project are vehicular movements, noise monitoring was conducted during peak vehicular travel periods, 07:30 am-09:00 am, 12:00 pm-1:30 pm, and 4:30 pm-6:00 pm. Pursuant to CEQR Technical Manual methodology, readings on all frontages were conducted for periods of 1-hour during three peak periods of vehicular travel. Noise monitoring was conducted using a Type 1 Casella CEL-633 sound meter with wind screen. The monitor was placed on a tripod at a height of approximately three feet above the ground, away from any other noise-reflective surfaces. The monitor was calibrated prior to and following each monitoring session. Periods of peak vehicular around the Rezoning Area constitute a worst-case condition for noise at the Projected Development Site. **Figure 2.4-1** and **Photos 2.4-1 & 2.4-2** below show the monitoring locations.

Figure 2.4-1 Noise Monitoring Locations

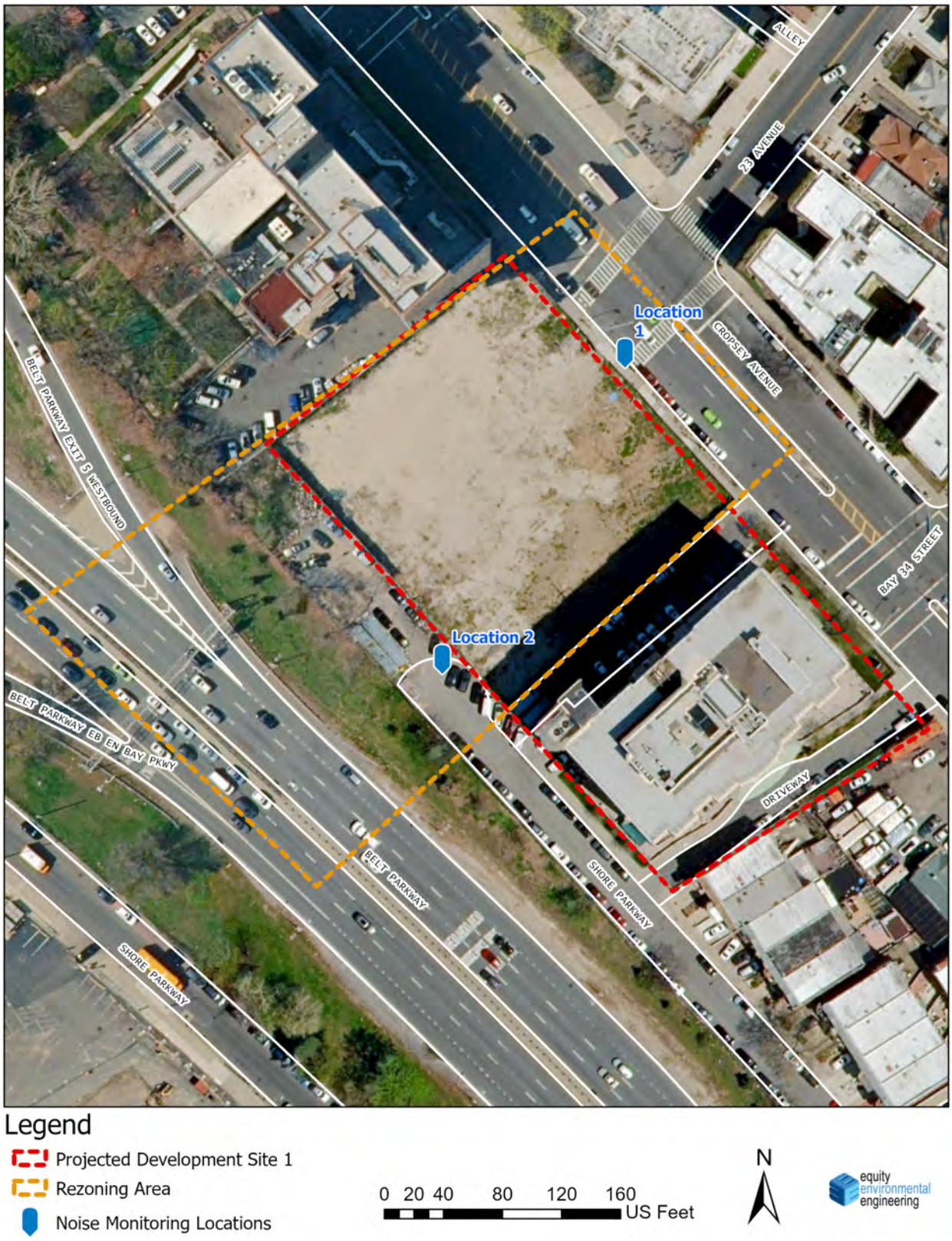


Photo 2.4-1

Location 1: *Center of frontage on Cropsey Avenue*

Photo 2.4-2

Location 2: *Center of frontage on Shore Parkway*

Measurement Conditions

Monitoring was conducted during typical midweek conditions, on Tuesday May 6, 2019. The weather was approximately 60^0-70^0 Fahrenheit and wind speeds were mild during monitoring. Traffic volumes and vehicle classification were documented during the noise monitoring.

Existing Conditions

Based on the noise measurements taken at the Rezoning Area, the predominant source of noise at the site is vehicular traffic.

Table 2.4-4 *and* ***Table 2.4-5*** *below contain the results for the measurements taken at the Projected Development Site:*

Note: **Bold** denotes L_{10} noise level exceedances, according to **Table 19-2** of the CEQR Technical Manual.

Table 2.4-4

Location 1: *Noise Levels (dB) at frontage of Cropsey Avenue*

Tuesday, May 6, 2019			
Time	7:29 am – 7:50 am	12:00 pm – 12:20 pm	4:30 pm – 4:50 pm
L_{max}	92.7	87.0	96.2
L_{10}	**75.1**	**73.8**	**73.1**
L_{eq}	73.3	70.5	71.6
L_{50}	67.6	65.3	63.3
L_{90}	61.3	59.3	55.3
L_{min}	57.5	55.5	51.8

Table 2.4-5

Location 2: *Noise Levels (dB) at frontage of Shore Parkway*

Tuesday, May 6, 2019			
Time	7:57 am – 8:17 am	12:31 pm – 12:51 am	4:58 pm – 5:18 pm
L_{max}	81.5	100.8	81.8
L_{10}	69.6	68.9	67.6
L_{eq}	68.5	69.4	66.3
L_{50}	68.0	66.9	65.7
L_{90}	66.8	65.1	63.1
L_{min}	64.4	62.6	59.8

Table 2.4-6 through 2.5-8 *below contain the traffic volumes (vehicle counts) and vehicle classifications for the morning, noon, and evening monitoring sessions, respectively.*

Table 2.4-6: Morning Traffic Volumes and Vehicle Classifications

	Location 1	Location 2
Car/Taxi	84	0
Van/Light Truck/SUV	109	0
Medium Truck	16	0
Heavy Truck	26	0
Bus	46	0

Table 2.4-7: Mid-Day Traffic Volumes and Vehicle Classifications

	Location 1	Location 2
Car/Taxi	78	0
Van/Light Truck/SUV	81	0
Medium Truck	23	0
Heavy Truck	32	0
Bus	16	0

Table 2.4-8: Evening Traffic Volumes and Vehicle Classifications

	Location 1	Location 2
Car/Taxi	97	0
Van/Light Truck/SUV	120	0
Medium Truck	12	0
Heavy Truck	10	0
Bus	24	0

Conclusion

The 2020 *CEQR Technical Manual* Table 19-2 contains noise exposure guidelines. For a residential use such as would occur under the proposed action, an L_{10} of between 65 and 70 dB(A) is identified as marginally acceptable general external exposure. An L_{10} of between 70 and 80 dB(A) is identified as marginally unacceptable general external exposure. The highest recorded L_{10} during the day at Location One (1) of the Projected Development Site was 75.1 dB(A) during the morning period. The highest recorded L_{10} during the day at Location Two (2) of the Projected Development Site was 69.6 dB(A) during the morning period. Based on these results, a composite window-wall attenuation level of 31 dBA window/wall attenuation on the facades facing Cropsey Avenue and 28 dBA of attenuation on the facades facing Bayview Place within 50 feet of Cropsey Avenue and the facades facing 24th Avenue within 50 feet of Cropsey Avenue. No other building facades require attenuation. With this level of noise attenuation, there would be no potential for adverse impacts related to noise on the residential and community facility uses of the Proposed Project.

As per DCP guidance, the Proposed Project could be treated as an existing building. Therefore, an (E) designation for window/wall attenuation requirements would not be mapped on the development site.

2.5 Neighborhood Character

According to the 2020 CEQR Technical Manual, a neighborhood character assessment considers how elements of the environment combine to create the context and feeling of a neighborhood and how a project may affect that context and feeling. Thus, to determine a project's effects on the neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered together. These elements may include land use, zoning, public policy, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation and noise. The study area for a preliminary analysis of neighborhood character is typically consistent with the study areas of the relevant technical areas under CEQR that contribute to the defining elements of the neighborhood. The study area should generally extend to a 400-foot radius around the Rezoning Area.

Preliminary Analysis

Future No-Action Conditions

Under Future No-Action Conditions, Projected Development Site 1 would be developed with a 329,522 GSF mixed-use residential and community facility building that is already under construction. There are no other active construction projects within the Study Area. Conditions in the Study Area are expected to generally remain the same and conform with current zoning regulations.

Future With-Action Conditions

Under Future With-Action Conditions, the same 23-story, 293-foot-tall, 329,522 gsf structure would be built as in the No-Action Scenario, except that the ground floor would replace 35,247 gross square feet of community facility use (ambulatory diagnostic) with commercial use (supermarket). The proposed development would be a 23-story, 293-foot-tall, 329,522 GSF structure with 219,755 GSF of residential floor area (154 dwelling units), 74,520 GSF of community facility floor area, and 35,247 GSF of commercial floor area. Conditions in the Study Area are expected to generally remain the same and conform with current zoning regulations.

In order to determine the Proposed Action's potential effects on neighborhood character, the elements that contribute to a neighborhood's context and feeling are considered both separately and cumulatively. The examination focuses on whether a defining feature of the neighborhood's character may be significantly affected, as further described below:

- Land Use, Zoning, and Public Policy: The Proposed Actions would not adversely impact the neighborhood in terms of land use, zoning or public policy – as the land uses and zoning proposed are similar to adjacent land uses and would not alter the overall land use patterns in the area.

- Open Space: The Proposed Actions would not adversely impact either access to or significantly reduce the open space ratio available to residents in the neighborhood.

- Shadows: The Proposed Actions would not result in significant adverse impacts from shadows.

- Historic and Cultural Resources: The Proposed Action would effectuate commercial use to occupy a portion of the ground floor of an existing building (Projected Development Site 1). Therefore, the Proposed Actions would not introduce any impacts to Historic or Cultural Resources.

- Urban Design and Visual Resources: The Proposed Action would effectuate commercial use to occupy a portion of the ground floor of an existing building (Projected Development Site 1). Therefore, the Proposed Actions would not adversely impact the constituent elements of Urban Design or Visual Resources as

- Traffic: The Proposed Actions would not result in a development that would have a significant adverse impact on transportation within the study area pursuant to the findings of the detailed transportation analysis.

- Noise: The Proposed Actions would not result in a development that would produce a significant source of noise or experience unacceptable noise levels at the development's sensitive receptors.

Combination of Moderate Effects: Based on the above findings, there would be no combination of moderate effects to two or more of the above elements that cumulatively may affect neighborhood character.

Conclusion

As discussed above, the Proposed Actions would not result in a significant impact to the neighborhood character due to an adverse impact in a single contributing element, nor would cumulative effects of two or more of the contributing elements be sufficient to adversely impact the neighborhood character.

2.6 Construction

According to the 2020 CEQR Technical Manual, construction impacts may be analyzed for any project that involves construction or could induce construction. For construction activities not related to in-ground disturbance, short-term construction generally does not warrant a detailed construction analysis. For example, the use of a property for construction staging activities is likely to only warrant analysis if this activity continues for a period of several years. Consideration of several factors, including the location and setting of the project in relation to other uses and intensity of construction activities are used to determine if a project's construction activities warrant analysis in one or more of the following technical areas:

- Transportation
- Air Quality or Noise
- Historic and Cultural Resources
- Hazardous Materials
- Natural Resources
- Open Space
- Socioeconomic Conditions
- Community Facilities
- Land Use and Public Policy
- Neighborhood Character
- Infrastructure

A preliminary construction analysis may be required because the proposed development would result in the following:

- Construction activities are considered long-term (Last longer than two years); or
- Short term construction activities would directly affect a technical area, such as impeding the operation of a community facility.
- Result in the closing, narrowing, impeding of traffic, transit, or obstruction of pedestrian or vehicular routes in proximity to critical land uses.
- Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out.
- The operation of several pieces of diesel equipment in a single location at peak construction.
- Closure of a community facility or disruption in its services.
- Disturbance of a site containing or adjacent to a site containing natural resources.
- Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall.

Analysis Framework

Future No-Action Conditions

Projected Development Site 1 (Block 6471, Lot 109)

The Projected Development Site is undergoing active construction, which began in January 2019. Under Future No-Action Conditions, Projected Development Site 1 would be developed with a 329,522 GSF mixed-use residential and community facility building that is already under construction.

Future With-Action Conditions

Projected Development Site 1 (Block 6471, Lot 109)

Under Future With-Action Conditions, the same 23-story, 293-foot-tall, 329,522 gsf structure would be built as in the No-Action Scenario, except that the ground floor would replace 35,247 gross square feet of community facility use (ambulatory diagnostic) with commercial use (supermarket). The proposed development would be a 23-story, 293-foot-tall, 329,522 GSF structure with 219,755 GSF of residential floor area (154 dwelling units), 74,520 GSF of community facility floor area, and 35,247 GSF of commercial floor area.

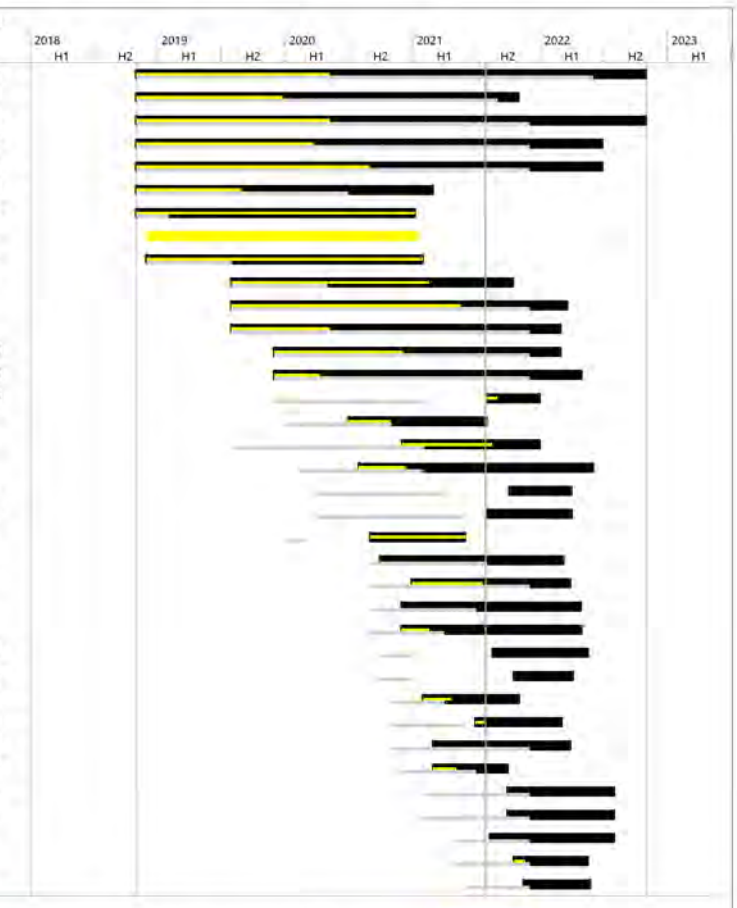
Build Year

The analysis year for the Proposed Actions is 2023 based on an 18-month period for environmental review and ULURP processes, and 4 months for the interior build-out of the ground floor commercial space on Projected Development Site 1.

As discussed above, and shown below, the Applicant Development of Projected Development Site 1 began in 2019 and is anticipated to be complete by March 2022. Pursuant to the Proposed Action, following an 18-month period for environmental review and ULURP processes, approximately four months would be required for the interior build out of the ground floor commercial space effectuated by the Proposed Actions. The construction schedule for the as-of-right No-Action building is provided below.

As shown below, demolition, excavation, and foundation activities, which often generate the highest levels of air emissions, have already been completed. The 24 foot superstructure is nearly compete, with an anticipated completion date of 10/15/2021.

ID	Item No.	Task Name	% Comple	Duration	Remaining Duration	Start	Finish	Baseline Start
1	25	1 Insurance	38%	1043 days	646.66 days	Thu 11/1/18	Mon 10/31/22	Thu 11/1/18
2	1.4	2 Site Safety Manager	38%	783 days	485.46 days	Thu 11/1/18	Sun 10/31/21	Thu 11/1/18
3	24	3 General Conditions	38%	1043 days	646.66 days	Thu 11/1/18	Mon 10/31/22	Thu 11/1/18
4	23	4 Overhead	38%	954 days	591.48 days	Thu 11/1/18	Tue 6/28/22	Thu 11/1/18
5	1.1	5 Site Work: Fencing & Survey	50%	954 days	477 days	Thu 11/1/18	Tue 6/28/22	Thu 11/1/18
6	1.3	6 Temp Facilities: Temp. power & water	35%	608 days	395.2 days	Thu 11/1/18	Sun 2/28/21	Thu 11/1/18
7	2.0	7 SOE & Pile Installation	100%	570 days	0 days	Thu 11/1/18	Wed 1/6/21	Thu 11/1/18
8	2.0	8 Excavation & Soil Disposal	100%	555 days	0 days	Sat 12/1/18	Fri 1/15/21	Sat 12/1/18
9	2.0	9 Foudation	100%	566 days	0 days	Sat 12/1/18	Fri 1/29/21	Sat 12/1/18
12	3.0	12 Superstructure 1-24 Floors	70%	577 days	173.1 days	Thu 8/1/19	Fri 10/15/21	Thu 8/1/19
14	5.0	14 Scaffold & Sidewalk	68%	688 days	220.16 days	Thu 8/1/19	Sat 3/19/22	Thu 8/1/19
15	19.1, 15	15 Electrical & Fire Alarm	30%	673 days	471.1 days	Thu 8/1/19	Mon 2/28/22	Thu 8/1/19
10	17.1	10 Plumbing Sprinkler & Gas	45%	586 days	322.3 days	Mon 12/2/19	Mon 2/28/22	Mon 12/2/19
17	18.0	17 Mechanical (HVAC & Exhaust)	15%	630 days	535.5 days	Mon 12/2/19	Fri 4/29/22	Mon 12/2/19
18	12.2	18 Curtain Wall, Windows, Balcony enclosure & railing	20%	111 days	88.8 days	Sat 7/31/21	Fri 12/31/21	Mon 12/2/19
16	7.0	16 Metals: Stairs & Railings	30%	284 days	198.8 days	Wed 7/1/20	Sat 7/31/21	Wed 1/1/20
13	4.0	13 Hoist	65%	283 days	99.05 days	Wed 12/2/20	Fri 12/31/21	Thu 8/1/19
19	8.0	19 Interior Framing (Metal stud, wall & ceiling)	20%	479 days	383.2 days	Sat 8/1/20	Wed 6/1/22	Sat 2/1/20
20	8.0	20 Sub-floor & Installation	0%	126 days	126 days	Thu 10/7/21	Thu 3/31/22	Wed 4/1/20
21	8.0	21 Gypsum Board & Installation (Wall & Ceiling)	0%	175 days	175 days	Mon 8/2/21	Fri 4/1/22	Wed 4/1/20
11	20	11 Water & Sewer Main	100%	194 days	0 days	Wed 9/2/20	Mon 5/31/21	Thu 1/2/20
22	8.0	22 Millwork (Kitchen & Bathroom)	0%	374 days	374 days	Thu 10/1/20	Tue 3/8/22	Tue 9/1/20
23	16.1	23 Elevator, Parking Car Lift & Signoff	44%	323 days	180.88 days	Thu 12/31/20	Mon 3/28/22	Tue 9/1/20
24	12.1	24 Entrance & Storefronts	0%	368 days	368 days	Tue 12/1/20	Thu 4/28/22	Tue 9/1/20
25	9.1	25 Building Waterproofing & Insulation	15%	369 days	313.65 days	Tue 12/1/20	Fri 4/29/22	Tue 9/1/20
26	16.2	26 Trash Chutes / Linen	0%	195 days	195 days	Wed 8/18/21	Tue 5/17/22	Thu 10/1/20
27	9.2	27 Roofing	0%	121 days	121 days	Mon 10/18/21	Mon 4/4/22	Thu 10/1/20
28	6.0	28 Masonry / Stucco	30%	196 days	137.2 days	Mon 2/1/21	Mon 11/1/21	Sun 11/1/20
29	11.0	29 Metal Panel	10%	178 days	160.2 days	Wed 6/30/21	Fri 3/4/22	Sun 11/1/20
30	8.0	30 Wall & Ceiling Finishes (Paint, tiles..,etc)	0%	281 days	281 days	Mon 3/1/21	Mon 3/28/22	Sun 11/1/20
31	22.0	31 Swimming Pool & Gym	30%	154 days	107.8 days	Mon 3/1/21	Thu 9/30/21	Tue 12/1/20
32	13.1	32 Tiling (allowance)	0%	217 days	217 days	Fri 10/1/21	Mon 8/1/22	Mon 2/1/21
33	13.2	33 Flooring (allowance)	0%	217 days	217 days	Fri 10/1/21	Mon 8/1/22	Mon 2/1/21
34	17.2	34 Pluming Fixtures Installation	0%	255 days	255 days	Tue 8/10/21	Mon 8/1/22	Sat 5/1/21
35	19.2	35 Lighting Fixtures Installation	15%	152 days	129.2 days	Tue 10/19/21	Wed 5/18/22	Sat 5/1/21
36	15.1	36 Residential Appliances (allowance)	0%	135 days	135 days	Tue 11/16/21	Mon 5/23/22	Tue 6/1/21



Project: Cropsey Construction S
Date: Thu 7/29/21

Task | Inactive Task | Manual Summary Rollup | External Milestone | Progress
Split | Inactive Milestone | Manual Summary | Deadline | Manual Progress
Milestone | Inactive Summary | Start-only | Baseline
Summary | Manual Task | Finish-only | Baseline Milestone
Project Summary | Duration-only | External Tasks | Baseline Summary

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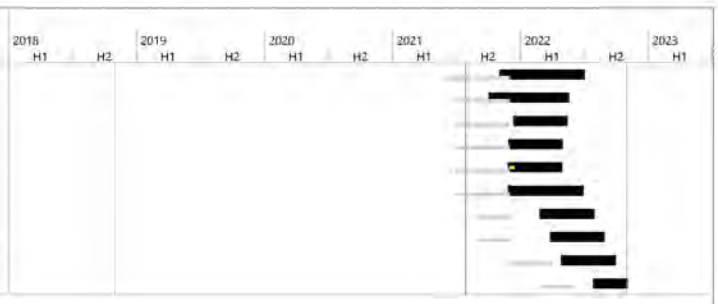
ID	Item No.	Task Name	% Comple	Duration	Remaining Duration	Start	Finish	Baseline Start
37	15.2	37 Residential Kitchen Cabinet & Countertop (allowanc	0%	171 days	171 days	Sat 11/6/21	Fri 7/1/22	Tue 6/1/21
39	14.1	39 Specialities: Signage (allowance)	0%	159 days	159 days	Thu 10/7/21	Tue 5/17/22	Thu 7/1/21
40	14.2	40 Specialities: Fire Extinguishers & Cabinets (allowanc	0%	107 days	107 days	Thu 12/16/21	Fri 5/13/22	Thu 7/1/21
41	14.3	41 Specialities: Mailboxes (allowance)	0%	107 days	107 days	Thu 12/2/21	Fri 4/29/22	Thu 7/1/21
42	10.0	42 Doors, Frames, & Hardwares (allowance)	10%	107 days	96.3 days	Wed 12/1/21	Thu 4/28/22	Thu 7/1/21
38	13.3	38 Wall: Stain, Painting & Polishing (allowance)	0%	150 days	150 days	Wed 12/1/21	Tue 6/28/22	Thu 7/1/21
43	21.0	43 Sidewalk	0%	109 days	109 days	Tue 3/1/22	Fri 7/29/22	Wed 9/1/21
44	1.2	44 Sitework: Trees	0%	107 days	107 days	Thu 3/31/22	Fri 8/26/22	Wed 9/1/21
45	35.0	45 Inspections & Signoff	0%	109 days	109 days	Sun 5/1/22	Wed 9/28/22	Wed 12/1/21
46	36.0	46 TCO & CO	0%	66 days	66 days	Mon 8/1/22	Mon 10/31/22	Tue 3/1/22



Project: Cropsey Construction S
Date: Thu 7/29/21

Task | Inactive Task | Manual Summary Rollup | External Milestone | Progress
Split | Inactive Milestone | Manual Summary | Deadline | Manual Progress
Milestone | Inactive Summary | Start-only | Baseline
Summary | Manual Task | Finish-only | Baseline Milestone
Project Summary | Duration-only | External Tasks | Baseline Summary

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Transportation

According to the *CEQR Technical Manual*, a number of factors should be considered before determining whether a preliminary assessment of the effect of construction on transportation is needed including:

- Whether the project's construction would be located in a Central Business District (CBD) or along an arterial or major thoroughfare;
- Whether the project's construction activities would require closing, narrowing, or otherwise impeding moving lanes, roadways, key pedestrian facilities, parking lanes and/or parking spaces, bicycle routes and facilities, bus lanes or routes, or access points to transit; and
- Whether the project would involve construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap, and last for more than two years overall.

Projected Development Site 1 began construction as-of-right in 2019. The construction of the development site requires the temporary closing of the sidewalk along Cropsey Avenue. The sidewalk adjacent to the site is to be reconstructed (anticipated start of 3/1/2022 for 109 days duration), which may temporarily impact pedestrian flow and the availability of parking spaces along these streets. However, changes to moving traffic lanes are not likely.

Located within a 400-foot radius of the Projected Development Sites, important community facilities in the area include two nursing homes, King David Center for Nursing and Rehabilitation, and Haym Salomon Home for Nursing & Rehabilitation, located on either side of the Projected Development Site. The Projected Development Site would have minimal effects on the sidewalks adjacent to the community facilities. Closure of the sidewalks adjacent to the Projected Development Site associated with the as-of-right construction of the building would be considered a routine closure that would be addressed by a permit and pedestrian access plan issued by NYC DOT Office of Construction Mitigation and Coordination at the time of closure.

Construction activities on Projected Development Site 1 would be considered short term (less than two years). On the basis of the above, construction of the proposed project would not be expected to result in significant adverse impacts on transportation.

Air Quality and Noise

According to the *CEQR Technical Manual*, an assessment of air quality and noise for construction activities is likely not warranted if the project's construction activities:

- Are considered short-term (less than two years);
- Are not located near sensitive receptors; and

- Do not involve construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out.

The proposed development would not result in the construction of multiple buildings where there is a potential for on-site receptors on buildings to be completed before the final build-out. Demolition, excavation, and foundation activities, which often generate the highest levels of air emissions and noise, have already been completed. Therefore, no further assessment is warranted.

Historic and Cultural Resources

As discussed above, construction of Projected Development Site 1 began as-of-right in 2019. The Proposed Action would effectuate a change of use within a portion of the first floor of the completed building from ambulatory diagnostic, to a supermarket. Accordingly, no impact to historic or cultural resources would occur as a result of the Proposed Actions.

Conclusion

Construction activities at Projected Development Site 1 would be completed in a 4-month timeline by 2023 following Environmental Review and ULURP and would consist of a single phase of construction. Construction activities on the Projected Development Site would be limited to the interior build-out of the ground floor commercial space. Construction would be performed subject to relevant EPA, DEP, DOT and DOB codes and regulations to ensure minimal construction impacts. Accordingly, no impacts to transportation, air quality, noise, or historic buildings would occur.

On the basis of the above analysis, the Proposed Actions would not have any potentially significant adverse construction impacts, and further analysis would not be warranted.

Appendix A: WRP Assessment

FOR INTERNAL USE ONLY	WRP No. 19-027
Date Received: _____	DOS No. _____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's Coastal Zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)* which has been approved as part of the State's Coastal Management Program.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, the New York City Department of City Planning, or other city or state agencies in their review of the applicant's certification of consistency.

A. APPLICANT INFORMATION

Name of Applicant: Cropsey Partners LLC

Name of Applicant Representative: Equity Environmental Engineering

Address: 500 International Drive, Suite 150, Mt. Olive, New Jersey 07828

Telephone: 973-527-7451x204 Email: amber.kartalyan@equityenvironmental.com

Project site owner (if different than above): N/A

B. PROPOSED ACTIVITY

If more space is needed, include as an attachment.

1. Brief description of activity

The Applicant, Cropsey Partners LLC, requests approval of a zoning map amendment to facilitate the development of Block 6471, Lot 109 (the project site) with 35,247 gross square feet (gsf) of first floor commercial uses. The project site would be a new 23-story plus cellar mixed-use building with approximately 329,522 gsf of floor area, 219,755 gsf of residential floor area containing 154 dwelling units; 35,247 gsf of first floor commercial uses, and 74,520 gsf of community facility uses. 234 parking spaces would be required, and 234 parking spaces are proposed.

2. Purpose of activity

To allow 35,247 gsf of local retail instead of the currently approved 35,247 gsf of community facility (medical office- UG 4) use.

C. PROJECT LOCATION

Borough: Brooklyn Tax Block/Lot(s): Block 6471, Lot 109 p/o Lot 13; Block 6925 p/o Lot 55

Street Address: 2300 Cropsey Avenue

Name of water body (if located on the waterfront): _____

D. REQUIRED ACTIONS OR APPROVALS

Check all that apply.

City Actions/Approvals/Funding

City Planning Commission ☑ Yes ☐ No

- ☐ City Map Amendment
- ☑ Zoning Map Amendment
- ☐ Zoning Text Amendment
- ☐ Site Selection – Public Facility
- ☐ Housing Plan & Project
- ☐ Special Permit (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____
- ☐ Zoning Certification
- ☐ Zoning Authorizations
- ☐ Acquisition – Real Property
- ☐ Disposition – Real Property
- ☐ Other, explain: _____
- ☐ Concession
- ☐ UDAAP
- ☐ Revocable Consent
- ☐ Franchise

Board of Standards and Appeals ☐ Yes ☑ No

- ☐ Variance (use)
- ☐ Variance (bulk)
- ☐ Special Permit (if appropriate, specify type: ☐ Modification ☐ Renewal ☐ other) Expiration Date: _____

Other City Approvals

- ☐ Legislation
- ☐ Rulemaking
- ☐ Construction of Public Facilities
- ☐ 384 (b) (4) Approval
- ☐ Other, explain: _____
- ☐ Funding for Construction, specify: _____
- ☐ Policy or Plan, specify: _____
- ☐ Funding of Program, specify: _____
- ☐ Permits, specify: _____

State Actions/Approvals/Funding

- ☐ State permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Federal Actions/Approvals/Funding

- ☐ Federal permit or license, specify Agency: _____ Permit type and number: _____
- ☐ Funding for Construction, specify: _____
- ☐ Funding of a Program, specify: _____
- ☐ Other, explain: _____

Is this being reviewed in conjunction with a Joint Application for Permits? ☐ Yes ☑ No

E. LOCATION QUESTIONS

1.	Does the project require a waterfront site?	☐ Yes	☑ No
2.	Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land under water or coastal waters?	☐ Yes	☑ No
3.	Is the project located on publicly owned land or receiving public assistance?	☐ Yes	☑ No
4.	Is the project located within a FEMA 1% annual chance floodplain? *(6.2)*	☐ Yes	☑ No
5.	Is the project located within a FEMA 0.2% annual chance floodplain? *(6.2)*	☑ Yes	☐ No
6.	Is the project located adjacent to or within a special area designation? *See Maps – Part III of the NYC WRP. If so, check appropriate boxes below and evaluate policies noted in parentheses as part of WRP Policy Assessment (Section F).*	☐ Yes	☑ No

- ☐ Significant Maritime and Industrial Area (SMIA) *(2.1)*
- ☐ Special Natural Waterfront Area (SNWA) *(4.1)*
- ☐ Priority Maritime Activity Zone (PMAZ) *(3.5)*
- ☐ Recognized Ecological Complex (REC) *(4.4)*
- ☐ West Shore Ecologically Sensitive Maritime and Industrial Area (ESMIA) *(2.2, 4.2)*

F. WRP POLICY ASSESSMENT

Review the project or action for consistency with the WRP policies. For each policy, check Promote, Hinder *or* Not Applicable (N/A). *For more information about consistency review process and determination, see* ***Part I*** *of the NYC Waterfront Revitalization Program. When assessing each policy, review the full policy language, including all sub-policies, contained within* ***Part II*** *of the WRP. The relevance of each applicable policy may vary depending upon the project type and where it is located (i.e. if it is located within one of the special area designations).*

For those policies checked Promote *or* Hinder, *provide a written statement on a separate page that assesses the effects of the proposed activity on the relevant policies or standards. If the project or action promotes a policy, explain how the action would be consistent with the goals of the policy. If it hinders a policy, consideration should be given toward any practical means of altering or modifying the project to eliminate the hindrance. Policies that would be advanced by the project should be balanced against those that would be hindered by the project. If reasonable modifications to eliminate the hindrance are not possible, consideration should be given as to whether the hindrance is of such a degree as to be substantial, and if so, those adverse effects should be mitigated to the extent practicable.*

		Promote	Hinder	N/A
1	**Support and facilitate commercial and residential redevelopment in areas well-suited to such development.**	☑	☐	☐
1.1	Encourage commercial and residential redevelopment in appropriate Coastal Zone areas.	☑	☐	☐
1.2	Encourage non-industrial development with uses and design features that enliven the waterfront and attract the public.	☐	☐	☑
1.3	Encourage redevelopment in the Coastal Zone where public facilities and infrastructure are adequate or will be developed.	☑	☐	☐
1.4	In areas adjacent to SMIAs, ensure new residential development maximizes compatibility with existing adjacent maritime and industrial uses.	☐	☐	☑
1.5	Integrate consideration of climate change and sea level rise into the planning and design of waterfront residential and commercial development, pursuant to WRP Policy 6.2.	☑	☐	☐

		Promote	Hinder	N/A
2	**Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.**	☐	☐	☑
2.1	Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.	☐	☐	☑
2.2	Encourage a compatible relationship between working waterfront uses, upland development and natural resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
2.3	Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas or Ecologically Sensitive Maritime Industrial Area.	☐	☐	☑
2.4	Provide infrastructure improvements necessary to support working waterfront uses.	☐	☐	☑
2.5	Incorporate consideration of climate change and sea level rise into the planning and design of waterfront industrial development and infrastructure, pursuant to WRP Policy 6.2.	☐	☐	☑
3	**Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation.**	☐	☐	☑
3.1.	Support and encourage in-water recreational activities in suitable locations.	☐	☐	☑
3.2	Support and encourage recreational, educational and commercial boating in New York City's maritime centers.	☐	☐	☑
3.3	Minimize conflicts between recreational boating and commercial ship operations.	☐	☐	☑
3.4	Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.	☐	☐	☑
3.5	In Priority Marine Activity Zones, support the ongoing maintenance of maritime infrastructure for water-dependent uses.	☐	☐	☑
4	**Protect and restore the quality and function of ecological systems within the New York City coastal area.**	☐	☐	☑
4.1	Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas.	☐	☐	☑
4.2	Protect and restore the ecological quality and component habitats and resources within the Ecologically Sensitive Maritime and Industrial Area.	☐	☐	☑
4.3	Protect designated Significant Coastal Fish and Wildlife Habitats.	☐	☐	☑
4.4	Identify, remediate and restore ecological functions within Recognized Ecological Complexes.	☐	☐	☑
4.5	Protect and restore tidal and freshwater wetlands.	☐	☐	☑
4.6	In addition to wetlands, seek opportunities to create a mosaic of habitats with high ecological value and function that provide environmental and societal benefits. Restoration should strive to incorporate multiple habitat characteristics to achieve the greatest ecological benefit at a single location.	☐	☐	☑
4.7	Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.	☐	☐	☑
4.8	Maintain and protect living aquatic resources.	☐	☐	☑

		Promote	Hinder	N/A
5	**Protect and improve water quality in the New York City coastal area.**	☑	☐	☐
5.1	Manage direct or indirect discharges to waterbodies.	☑	☐	☐
5.2	Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.	☑	☐	☐
5.3	Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.	☐	☐	☑
5.4	Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.	☐	☐	☑
5.5	Protect and improve water quality through cost-effective grey-infrastructure and in-water ecological strategies.	☐	☐	☑
6	**Minimize loss of life, structures, infrastructure, and natural resources caused by flooding and erosion, and increase resilience to future conditions created by climate change.**	☑	☐	☐
6.1	Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the site, the use of the property to be protected, and the surrounding area.	☑	☐	☐
6.2	Integrate consideration of the latest New York City projections of climate change and sea level rise (as published in *New York City Panel on Climate Change 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms*) into the planning and design of projects in the city's Coastal Zone.	☑	☐	☐
6.3	Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.	☐	☐	☑
6.4	Protect and preserve non-renewable sources of sand for beach nourishment.	☐	☐	☑
7	**Minimize environmental degradation and negative impacts on public health from solid waste, toxic pollutants, hazardous materials, and industrial materials that may pose risks to the environment and public health and safety.**	☑	☐	☐
7.1	Manage solid waste material, hazardous wastes, toxic pollutants, substances hazardous to the environment, and the unenclosed storage of industrial materials to protect public health, control pollution and prevent degradation of coastal ecosystems.	☐	☐	☑
7.2	Prevent and remediate discharge of petroleum products.	☑	☐	☐
7.3	Transport solid waste and hazardous materials and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.	☑	☐	☐
8	**Provide public access to, from, and along New York City's coastal waters.**	☐	☐	☑
8.1	Preserve, protect, maintain, and enhance physical, visual and recreational access to the waterfront.	☐	☐	☑
8.2	Incorporate public access into new public and private development where compatible with proposed land use and coastal location.	☐	☐	☑
8.3	Provide visual access to the waterfront where physically practical.	☐	☐	☑
8.4	Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.	☐	☐	☑

		Promote	Hinder	N/A
8.5	Preserve the public interest in and use of lands and waters held in public trust by the State and City.	☐	☐	☑
8.6	Design waterfront public spaces to encourage the waterfront's identity and encourage stewardship.	☐	☐	☑
9	**Protect scenic resources that contribute to the visual quality of the New York City coastal area.**	☐	☐	☑
9.1	Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.	☐	☐	☑
9.2	Protect and enhance scenic values associated with natural resources.	☐	☐	☑
10	**Protect, preserve, and enhance resources significant to the historical, archaeological, architectural, and cultural legacy of the New York City coastal area.**	☐	☐	☑
10.1	Retain and preserve historic resources, and enhance resources significant to the coastal culture of New York City.	☐	☐	☑
10.2	Protect and preserve archaeological resources and artifacts.	☐	☐	☑

G. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Amber Kartalyan

Address: 500 International Drive, Suite 150, Mt. Olive, NJ 07836

Telephone: (973) 527-7451 Email: amber.kartalyan@equityenvironmental.co

Applicant/Agent's Signature: Amber Kartalyan Digitally signed by Amber Kartalyan Date: 2021.09.24 14:37:01 -04'00'

Date: 9/24/21

Submission Requirements

For all actions requiring City Planning Commission approval, materials should be submitted to the Department of City Planning.

For local actions not requiring City Planning Commission review, the applicant or agent shall submit materials to the Lead Agency responsible for environmental review. A copy should also be sent to the Department of City Planning.

For State actions or funding, the Lead Agency responsible for environmental review should transmit its WRP consistency assessment to the Department of City Planning.

For Federal direct actions, funding, or permits applications, including Joint Applicants for Permits, the applicant or agent shall also submit a copy of this completed form along with his/her application to the NYS Department of State Office of Planning and Development and other relevant state and federal agencies. A copy of the application should be provided to the NYC Department of City Planning.

The Department of City Planning is also available for consultation and advisement regarding WRP consistency procedural matters.

New York City Department of City Planning
Waterfront and Open Space Division
120 Broadway, 31st Floor
New York, New York 10271
212-720-3696
wrp@planning.nyc.gov
www.nyc.gov/wrp

New York State Department of State
Office of Planning and Development
Suite 1010
One Commerce Place, 99 Washington Avenue
Albany, New York 12231-0001
518-474-6000
www.dos.ny.gov/opd/programs/consistency

Applicant Checklist

- ☐ Copy of original signed NYC Consistency Assessment Form
- ☐ Attachment with consistency assessment statements for all relevant policies
- ☐ For Joint Applications for Permits, one (1) copy of the complete application package
- ☐ Environmental Review documents
- ☐ Drawings (plans, sections, elevations), surveys, photographs, maps, or other information or materials which would support the certification of consistency and are not included in other documents submitted. All drawings should be clearly labeled and at a scale that is legible.
- ☐ Policy 6.2 Flood Elevation worksheet, if applicable. For guidance on applicability, refer to the WRP Policy 6.2 Guidance document available at www.nyc.gov/wrp

NYC Waterfront Revitalization Program - Policy 6.2 Flood Elevation Workhsheet

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

Enter information about the project and site in highlighted cells in Tabs 1-3. Tab 4, "Summary Charts" contains primary results. Tab 5, "0.2%+SLR" produces charts to be used for critical infrastructure or facilities. Tab 6, "Calculations" contains background computations. Appendix A contains tide elevations for station across the city to be used for the elevation of MHHW if a site survey is not available. Non-highlighted cells have been locked.

Background Information	
Project Name	2300 Cropsey Avenue Rezoning
Location	2300 Cropsey Avenue, Brooklyn, NY
Type(s)	☑ Residential, Commercial, Community Facility ☐ Parkland, Open Space, and Natural Areas ☐ Tidal Wetland Restoration ☐ Critical Infrastructure or Facility ☐ Industrial Uses ☐ Over-water Structures ☐ Shoreline Structures ☐ Transportation ☐ Wastewater Treatment/Drainage ☐ Coastal Protection
Description	The applicant, Cropsey Partners LLC, requests approval of a zoning map amendment to facilitate the development of Block 6471, Lot 109 (the projected development site) with 35,247 gsf of first floor commercial uses. The project site would be a new 23-story plus cellar mixed-use building with approximately 329,522 gsf of floor area, 219,755 gsf of residential floor area containing 154 dwelling units; 35,247 gsf of first floor commercial uses, and 74,520 gsf of community facility uses. .
Planned Completion Date	2023
Expected Project Lifespan	99 years

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

For technical assistance on using this worksheet, email wrp@planning.nyc.gov, using the message subject "Policy 6.2 Worksheet."

Last update: Sept. 7, 2018

Establish current tidal and flood heights.

	FT (NAVD88)	Feet	Datum	Source
MHHW	2.13	**2.13**	**NAVD88**	*Appendix A (Station 8517756)*
1% flood height	11.00	**11.00**	**NAVD88**	*2015 PFIRM*
Design flood elevation	-->			
As relevant:				
0.2% flood height	11.00	11.00	**NAVD88**	*NYC Flood Hazard Mapper*

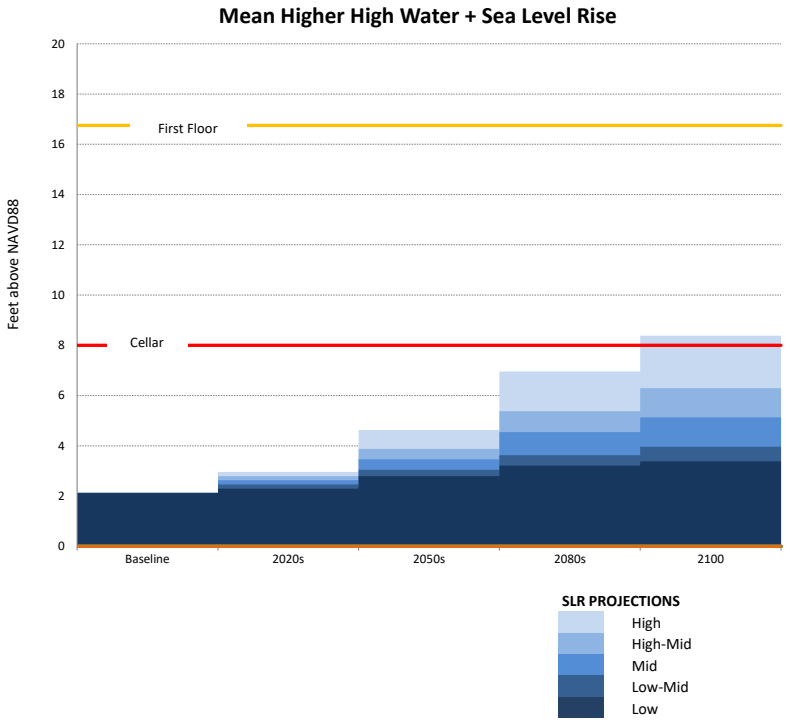
Data will be converted based on the following datums:

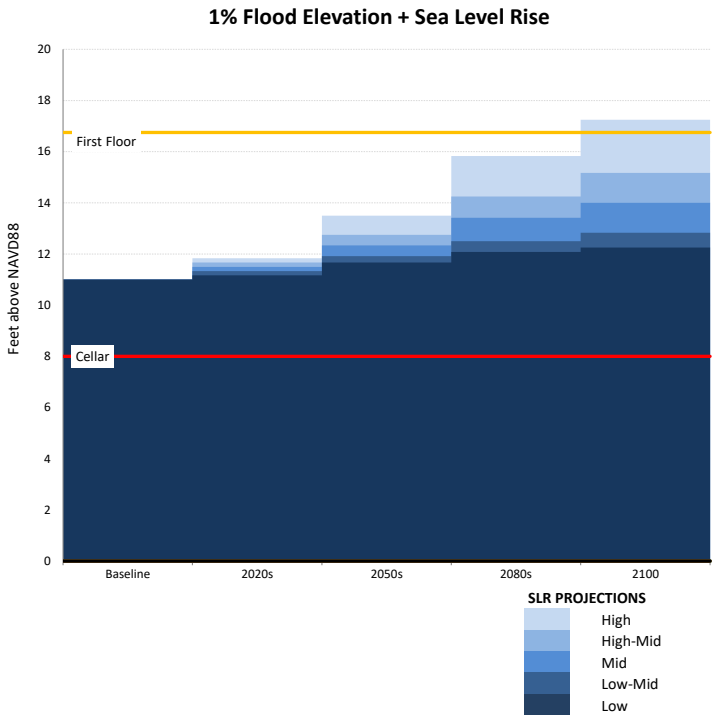
Datum	FT (NAVD88)
NAVD88	*0.00*
NGVD29	*-1.10*
Manhattan Datum	*1.65*
Bronx Datum	*1.51*
Brooklyn Datum (Sewer)	*0.61*
Brooklyn Datum (Highway)	*1.45*
Queens Datum	*1.63*
Richmond Datum	*2.09*

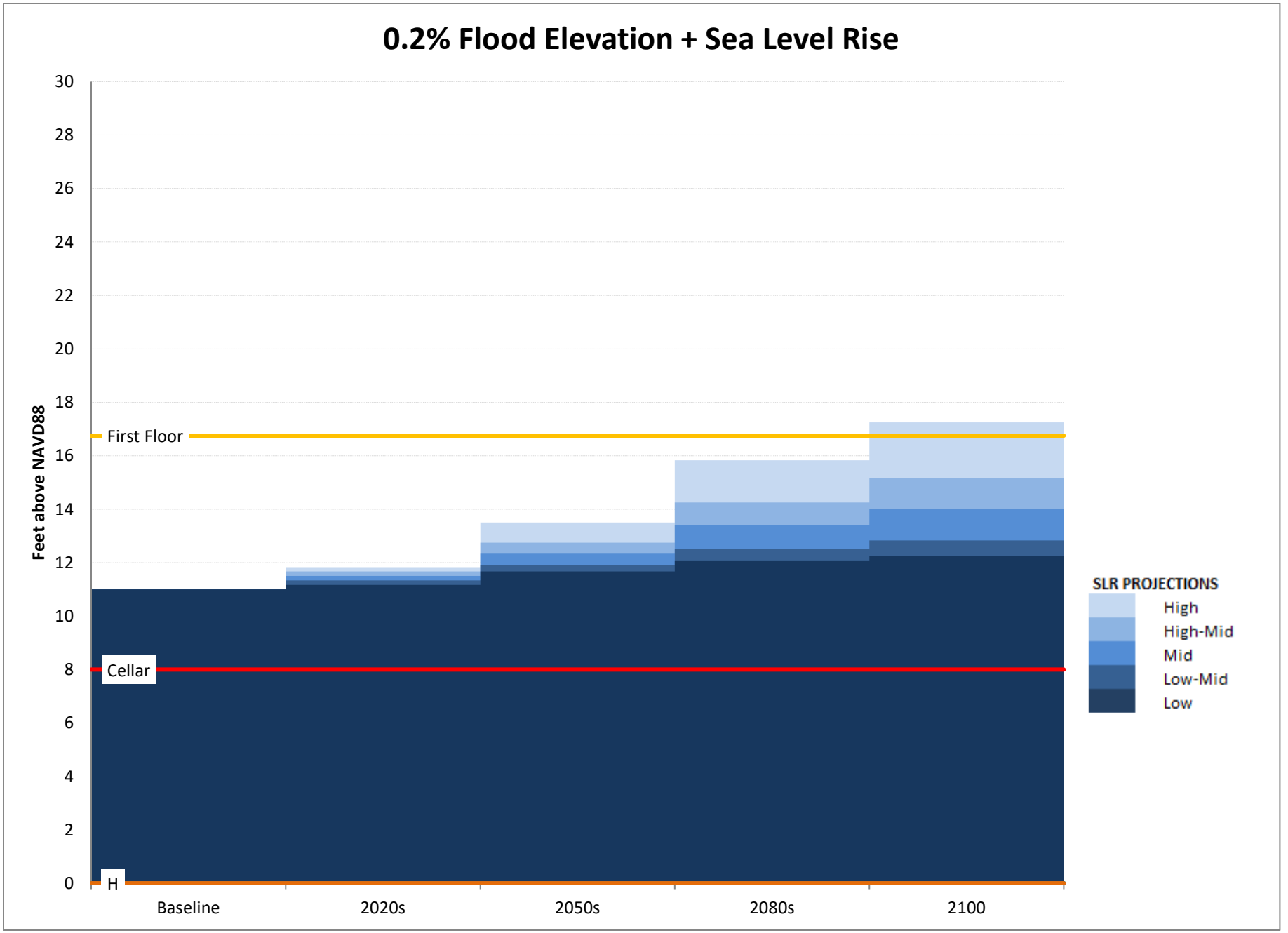
Describe key physical features of the project.

Feature *(enter name)*	Feature Category	Lifespan	Elevation	Units	Datum	Ft	Ft Above NAVD88	Ft Above MHHW	Ft Above 0.2% flood height
Cellar	☐ Vulnerable ☑ Critical ☐ Potentially Hazardous ☐ Other	99	8.0	Feet	NAVD88	*8.0*	*8.0*	*5.9*	*-3.0*
Exercise room, showers, storage, electrical meter room, water meter room, gas meter room, parking									
First Floor	☑ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other	99	16.8	Feet	NAVD88	*16.8*	*16.8*	*14.6*	*5.8*
Residential lobby and commercial space									
C	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
D	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
E	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
F	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
G	☐ Vulnerable ☐ Critical ☐ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									
H	☐ Vulnerable ☐ Critical ☑ Potentially Hazardous ☐ Other			Feet	NAVD88				
Description of Planned Uses and Materials									

Assess project vulnerability over a range of sea level rise projections.






0.2% Flood Elevation + Sea Level Rise
Feet above NAVD88
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
First Floor
Cellar
H
Baseline
2020s
2050s
2080s
2100
SLR PROJECTIONS
High
High-Mid
Mid
Low-Mid
Low

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

	MHHW+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	2.13	2.13	2.13	2.13	2.13
2020s	2.30	2.46	2.63	2.80	2.96
2050s	2.80	3.05	3.46	3.88	4.63
2080s	3.21	3.63	4.55	5.38	6.96
2100	3.38	3.96	5.13	6.30	8.38

	1%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

	0.2%+SLR (ft above NAVD88)				
	Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
Baseline	11.00	11.00	11.00	11.00	11.00
2020s	11.17	11.33	11.50	11.67	11.83
2050s	11.67	11.92	12.33	12.75	13.50
2080s	12.08	12.50	13.42	14.25	15.83
2100	12.25	12.83	14.00	15.17	17.25

	0	1
Cellar	8	8
First Floor	17	16.75
C	0	0
D	0	0
E	0	0
F	0	0
G	0	0
H	0	0
DFE	0.00	0.00

SLR (in)				
Low	**Low-Mid**	**Mid**	**High-Mid**	**High**
0	0	0	0	0
2	4	6	8	10
8	11	16	21	30
13	18	29	39	58
15	22	36	50	75

NOAA Tide Station Data

(to be used only when a site survey is unavailable)

Station ID	*Station Name*	*Source MHHW (Feet, NAVD88)**	*Adjusted MHHW (Feet, NAVD88)**
8518687	Queensboro Bridge	2.27	2.60
8530095	Alpine	2.11	2.44
8516614	Glen Cove	3.72	4.05
8516990	Willets Point	3.72	4.05
8518639	Port Morris	3.33	3.66
8518699	Williamsburg Bridge	2.14	2.47
8518750	The Battery	2.28	2.61
8531680	Sandy Hook	2.41	2.74
8518490	New Rochelle	3.71	4.04
8531545	Keyport	2.66	2.99
8516891	Norton Point	2.08	2.41
8517201	North Channel	2.72	3.05
8517137	Beach Channel	2.10	2.43
8517756	Kingsborough	2.13	2.46
8519436	Great Kills	2.22	2.55
8531142	Port Reading	2.82	3.15
8519483	Bergen Point	2.56	2.89
8519050	USCG	2.28	2.61
8518902	Dyckman St	2.01	2.34
8517251	Worlds Fair Marina	3.59	3.92
8518668	Horns Hook	2.54	2.87
8518643	Randalls Island	2.60	2.93
8518526	Throggs Neck	3.68	4.01

* MHHW values include an addition 0.33 feet to account for changes in sea level since the 1983-20(

Source
NOAA Tides and Currents
NOAA Tides and Currents
NOAA Tides and Currents
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NOAA Tides and Currents

)1 tidal epoch.

Alpine
8530095
New
Rochelle
8518490
Dyckman St
8518902
Glen Cove
8516614
Randalls
Island
8518643
Port
Morris
8518639
Throggs
Neck
8518526
Willets
Point
8516990
Worlds Fair
Marina
8517251
Queensboro
Bridge
8518687
Horns Hook
8518668
Williamsburg
Bridge
8518699
The Battery
8518750
North
Channel
8507201
Norton
Point
8516891
Beach
Channel
8517137
Kingsborough
8517756
Sandy Hook
8531680

Appendix B: Noise Data

Location 1 AM

Summary			
Filename	LxT_Data.035		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 7:29:58		
Stop	2019/05/07 7:50:00		
Duration	0:20:02.0		
Run Time	0:20:02.0		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 6:21:31		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.1 dB		
	A		**C**
Under Range Peak	**97.4**		94.4
Under Range Limit	**46.4**		44.4
Noise Floor	33.3		34.0
Results			
LAeq	73.3 dB		
LAE	104.1 dB		
EA	2.876 mPa²h		
EA8	68.917 mPa²h		
EA40	344.583 mPa²h		
LApeak (max)	2019/05/07 7:45:07		104.3
LASmax	2019/05/07 7:45:08		92.7

LASmin	2019/05/07 7:48:44		57.5
SEA	-99.9	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	9		12.9
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	73.3		73.3
LCeq	78.7	dB	
LAeq	73.3	dB	
LCeq - LAeq	5.4	dB	
LAIeq	75.8	dB	
LAeq	73.3	dB	
LAIeq - LAeq	2.5	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	1		
OBA Overload Duration	2.0	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	0.02		0.06
Projected Dose	0.49		1.42
TWA (Projected)	51.6		59.3
TWA (t)	28.7		36.4
Lep (t)	59.5		59.5
Statistics			
LAS5.00	78.0	dB	
LAS10.00	75.1	dB	
LAS33.30	69.8	dB	
LAS50.00	67.6	dB	
LAS66.60	65.1	dB	
LAS90.00	61.3	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3
PRMLxT2	2019/01/10 12:44:39	-46.8
PRMLxT2	2019/01/10 12:22:17	-46.9
PRMLxT2	2019/01/10 11:58:03	-47.1
PRMLxT2	2019/01/10 8:51:46	-46.9

Location 1 MD

Summary			
Filename	LxT_Data.037		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 11:59:54		
Stop	2019/05/07 12:19:55		
Duration	0:20:01.3		
Run Time	0:20:01.3		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 11:55:11		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.2 dB		
	A		**C**
Under Range Peak	**97.4**		94.4
Under Range Limit	**46.4**		44.4
Noise Floor	33.3		34.0
Results			
LAeq	70.5 dB		
LAE	101.3 dB		
EA	1.486 mPa²h		
EA8	35.625 mPa²h		
EA40	178.126 mPa²h		
LApeak (max)	2019/05/07 12:02:40		99.2
LASmax	2019/05/07 12:02:39		87.0

LASmin	2019/05/07 12:18:32		55.5
SEA	-99.9	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	6		3.6
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	70.5		70.5
LCeq	77.6	dB	
LAeq	70.5	dB	
LCeq - LAeq	7.1	dB	
LAIeq	72.6	dB	
LAeq	70.5	dB	
LAIeq - LAeq	2.1	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	0		
OBA Overload Duration	0.0	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	-99.9		0.02
Projected Dose	-99.9		0.56
TWA (Projected)	-99.9		52.6
TWA (t)	-99.9		29.7
Lep (t)	56.7		56.7
Statistics			
LAS5.00	76.4	dB	
LAS10.00	73.8	dB	
LAS33.30	68.2	dB	
LAS50.00	65.3	dB	
LAS66.60	63.2	dB	
LAS90.00	59.3	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 11:55:06	-47.5
PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3
PRMLxT2	2019/01/10 12:44:39	-46.8
PRMLxT2	2019/01/10 12:22:17	-46.9
PRMLxT2	2019/01/10 11:58:03	-47.1

Location 1 PM

Summary			
Filename	LxT_Data.039		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 16:30:46		
Stop	2019/05/07 16:51:06		
Duration	0:20:19.7		
Run Time	0:20:19.7		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 16:22:14		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.7 dB		
	A		**C**
Under Range Peak	**98.0**		95.0
Under Range Limit	**47.0**		45.0
Noise Floor	33.9		34.5
Results			
LAeq	71.6 dB		
LAE	102.4 dB		
EA	1.948 mPa²h		
EA8	45.992 mPa²h		
EA40	229.960 mPa²h		
LApeak (max)	2019/05/07 16:32:50		107.5
LASmax	2019/05/07 16:32:50		96.2

LASmin	2019/05/07 16:32:21		51.8
SEA	-99.9	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	3		5.3
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	71.6		71.6
LCeq	80.6	dB	
LAeq	71.6	dB	
LCeq - LAeq	9.0	dB	
LAIeq	74.1	dB	
LAeq	71.6	dB	
LAIeq - LAeq	2.5	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	1		
OBA Overload Duration	2.6	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	0.01		0.04
Projected Dose	0.22		1.05
TWA (Projected)	45.8		57.1
TWA (t)	23.0		34.3
Lep (t)	57.8		57.8
Statistics			
LAS5.00	76.6	dB	
LAS10.00	73.1	dB	
LAS33.30	66.7	dB	
LAS50.00	63.3	dB	
LAS66.60	59.0	dB	
LAS90.00	55.3	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 16:22:11	-48.0
PRMLxT2	2019/05/07 12:31:18	-47.9
PRMLxT2	2019/05/07 11:55:06	-47.5
PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3
PRMLxT2	2019/01/10 12:44:39	-46.8

Location 2 AM

Summary			
Filename	LxT_Data.036		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 7:57:15		
Stop	2019/05/07 8:17:16		
Duration	0:20:01.2		
Run Time	0:20:01.2		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 6:21:31		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.1 dB		
	A		**C**
Under Range Peak	**97.4**		94.4
Under Range Limit	**46.4**		44.4
Noise Floor	33.3		34.0
Results			
LAeq	68.5 dB		
LAE	99.3 dB		
EA	954.857 µPa²h		
EA8	22.894 mPa²h		
EA40	114.468 mPa²h		
LApeak (max)	2019/05/07 8:04:03		94.4
LASmax	2019/05/07 7:57:35		81.5

LASmin	2019/05/07 8:06:22		64.4
SEA	-99.9	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	0		0.0
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	68.5		68.5
LCeq	75.1	dB	
LAeq	68.5	dB	
LCeq - LAeq	6.5	dB	
LAIeq	69.2	dB	
LAeq	68.5	dB	
LAIeq - LAeq	0.6	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	0		
OBA Overload Duration	0.0	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	-99.9		0.00
Projected Dose	-99.9		0.01
TWA (Projected)	-99.9		20.9
TWA (t)	-99.9		-2.0
Lep (t)	54.7		54.7
Statistics			
LAS5.00	70.1	dB	
LAS10.00	69.6	dB	
LAS33.30	68.5	dB	
LAS50.00	68.0	dB	
LAS66.60	67.6	dB	
LAS90.00	66.8	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3
PRMLxT2	2019/01/10 12:44:39	-46.8
PRMLxT2	2019/01/10 12:22:17	-46.9
PRMLxT2	2019/01/10 11:58:03	-47.1
PRMLxT2	2019/01/10 8:51:46	-46.9

Location 2 MD

Summary			
Filename	LxT_Data.038		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 12:31:56		
Stop	2019/05/07 12:51:59		
Duration	0:20:02.6		
Run Time	0:20:02.6		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 12:31:22		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.6 dB		
	A		**C**
Under Range Peak	**97.9**		94.9
Under Range Limit	**46.9**		44.9
Noise Floor	33.8		34.4
Results			
LAeq	69.4 dB		
LAE	100.2 dB		
EA	1.151 mPa²h		
EA8	27.559 mPa²h		
EA40	137.794 mPa²h		
LApeak (max)	2019/05/07 12:39:17		131.2
LASmax	2019/05/07 12:39:17		100.8

LASmin	2019/05/07 12:51:22		62.6
SEA	141.2	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	2		1.4
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	69.4		69.4
LCeq	75.4	dB	
LAeq	69.4	dB	
LCeq - LAeq	6.0	dB	
LAIeq	77.2	dB	
LAeq	69.4	dB	
LAIeq - LAeq	7.9	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	2		
OBA Overload Duration	4.6	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	0.01		0.01
Projected Dose	0.16		0.19
TWA (Projected)	43.5		44.8
TWA (t)	20.6		21.9
Lep (t)	55.6		55.6
Statistics			
LAS5.00	70.0	dB	
LAS10.00	68.9	dB	
LAS33.30	67.5	dB	
LAS50.00	66.9	dB	
LAS66.60	66.2	dB	
LAS90.00	65.1	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 12:31:18	-47.9
PRMLxT2	2019/05/07 11:55:06	-47.5
PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3
PRMLxT2	2019/01/10 12:44:39	-46.8
PRMLxT2	2019/01/10 12:22:17	-46.9

Location 2 PM

Summary			
Filename	LxT_Data.040		
Serial Number	2230		
Model	SoundTrack LxT®		
Firmware Version	2.302		
User			
Location			
Job Description			
Note			
Measurement Description			
Start	2019/05/07 16:58:42		
Stop	2019/05/07 17:18:51		
Duration	0:20:09.5		
Run Time	0:20:09.5		
Pause	0:00:00.0		
Pre Calibration	2019/05/07 16:58:31		
Post Calibration	None		
Calibration Deviation	---		
Overall Settings			
RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Fast		
Preamp	PRMLxT2		
Microphone Correction	Off		
Integration Method	Linear		
OBA Range	Low		
OBA Bandwidth	1/1 Octave		
OBA Freq. Weighting	Z Weighting		
OBA Max Spectrum	Bin Max		
Overload	141.6 dB		
	A		**C**
Under Range Peak	**97.9**		94.9
Under Range Limit	**46.9**		44.9
Noise Floor	33.8		34.4
Results			
LAeq	66.3 dB		
LAE	97.2 dB		
EA	578.681 µPa²h		
EA8	13.779 mPa²h		
EA40	68.896 mPa²h		
LApeak (max)	2019/05/07 16:59:41		110.5
LASmax	2019/05/07 16:59:41		81.8

LASmin	2019/05/07 17:13:26		59.8
SEA	-99.9	dB	
LAS > 85.0 dB (Exceedence Counts / Duration)	0		0.0
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0
Community Noise	**Ldn**		**LDay 07:00-22:00**
	66.3		66.3
LCeq	75.8	dB	
LAeq	66.3	dB	
LCeq - LAeq	9.4	dB	
LAIeq	69.1	dB	
LAeq	66.3	dB	
LAIeq - LAeq	2.8	dB	
# Overloads	0		
Overload Duration	0.0	s	
# OBA Overloads	2		
OBA Overload Duration	4.3	s	
Dose Settings			
Dose Name	OSHA-1		OSHA-2
Exch. Rate	5		5
Threshold	90		80
Criterion Level	90		90
Criterion Duration	8		8
Results			
Dose	-99.9		0.00
Projected Dose	-99.9		0.02
TWA (Projected)	-99.9		27.9
TWA (t)	-99.9		5.0
Lep (t)	52.6		52.6
Statistics			
LAS5.00	68.5	dB	
LAS10.00	67.6	dB	
LAS33.30	66.3	dB	
LAS50.00	65.7	dB	
LAS66.60	64.8	dB	
LAS90.00	63.1	dB	
Calibration History			
Preamp	**Date**		**dB re. 1V/Pa**

PRMLxT2	2019/05/07 16:58:27	-47.9
PRMLxT2	2019/05/07 16:22:11	-48.0
PRMLxT2	2019/05/07 12:31:18	-47.9
PRMLxT2	2019/05/07 11:55:06	-47.5
PRMLxT2	2019/05/07 6:21:31	-47.4
PRMLxT2	2019/01/15 16:28:14	-47.3
PRMLxT2	2019/01/15 12:01:40	-47.3
PRMLxT2	2019/01/15 7:51:05	-47.2
PRMLxT2	2019/01/10 17:11:43	-46.9
PRMLxT2	2019/01/10 16:49:29	-47.0
PRMLxT2	2019/01/10 16:28:37	-47.3

7th of MAY 2013

2300 Cropsey Avenue Noise

Location 1: 7:30 - 7:50
@ Cropsey & 23rd Ave

Cars	SUVs	M. Trucks	H. Trucks	Bus
84	109	16	26	46

BELT PKWY

Location 2: 7:58 - 8:18 @ Shore Pkwy
no traffic - @ dead end

Location 1: 12:00 - 12:20
@ Cropsey & 23rd Ave

Cars	SUVs	M. Trucks	H. Trucks	Bus
78	81	23	32	16

Location 2: 12:32 - 12:52
no traffic (other than Belt Pkwy)
@ 7 minutes, man touches/taps noise meter

continued on next pg. →

Cropsey Ave & Bay Ridge Ave Noise PM

Location #1:
16:30 - 16:50

Cars	SUVs	M. Trucks	H. Trucks	Bus
97	120	12	10	24

Location #2 Shore Pkwy (Belt Pkwy)
16:58 - 17:18
No vehicular traffic
(other than on the Belt. Pkwy)

Appendix C: Architectural Drawings (For Illustrative Purposes Only)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK CITY BUILDING CODES.

2. CONTRACTOR TO CHECK AND VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE BEFORE COMMENCING THE WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY UNUSUAL CONDITIONS.

3. CONTRACTOR IS TO FILE WORKMAN'S COMPENSATION AND TO SECURE ALL PERMITS BEFORE THE START OF WORK.

4. THE CONTRACTOR SHALL NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS. IF THERE IS A DISCREPANCY ON OR LACK OF DIMENSION, THE ARCHITECT SHALL BE NOTIFIED AND THE INFORMATION WILL BE PROVIDED

5. THE ENGINEER/ ARCHITECT HAS NOT BEEN RETAINED FOR FIELD SUPERVISION OR INSPECTION.

6. THE CONTRACTOR IS TO RETAIN A LICENSED PROFESSIONAL ENGINEER AS PART OF HIS CONTRACT, ON BEHALF OF THE OWNER TO PERFORM ALL REQUIRED CONTROLLED INSPECTION WORK AS MAY BE REQUIRED.

7. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THE SAFETY AFFECTED BY THIS WORK.

8. FIVE DAYS PRIOR NOTICE SHALL BE GIVEN TO THE ADJOINING PROPERTY OWNERS AFFECTED BY THIS WORK.

9. THERE ARE NO STRUCTURAL CHANGES TO BE MADE UNDER THIS APPLICATION.

10. DRAPES, CURTAINS,DECORATIONS, SCENERY TO BE FLAME PROOF AS PER B.S.A. CAL. 21 SEC C19-161-1

11. ALL MATERIALS, ASSEMBLIES, FORMS, AND METHODS OF CONSTRUCTION & SERVICE EQUIPMENT SHALL MEET THE FOLLOWING REQUIREMENTS:
    A) IT SHALL HAVE BEEN ACCEPTED PRIOR TO THE EFFECTIVE DATE OF CODE.
    B) IT SHALL HAVE BEEN ACCEPTED FOR USE UNDER THE PRESCRIBED CODE TEST METHOD BY THE COMMISSIONER.
    C) IT SHALL HAVE BEEN APPROVED BY THE BOARD OF STANDARDS AND APPEAL.

SEISMIC NOTES

L.L. 17/95

K. BUILDING SEPARATIONS.
ALL STRUCTURES SHALL BE SEPARATED FROM ADJOINING STRUCTURES. SEPARATION DUE TO SEISMIC FORCES SHALL ALLOW FOR 1 INCH DISPLACEMENT FOR EACH 50 FEET OF TOTAL BUILDING HEIGHT. SMALLER SEPARATION MAY BE PERMITTED WHEN THE EFFECTS OF POUNDING CAN BE ACCOMMODATED WITHOUT COLLAPSE OF THE BUILDING.

HOUSING MAINTENANCE NOTES

1. BUILDING SHALL COMPLY WITH SEC. D26-16.03 H.M.C. : DRAINAGE OF ROOFS AND COURTYARDS
2. BUILDING SHALL COMPLY WITH SEC. D26-17.01 H.M.C. : CENTRAL HEATING
3. BUILDING SHALL COMPLY WITH SEC. D26-17.07 H.M.C. : SUPPLY HOT WATER
4. BUILDING SHALL COMPLY WITH SEC. D26-17.09 H.M.C. : GAS FIRE OR ELECTRIC HEATER WHERE PERMITTED.
5. BUILDING SHALL COMPLY WITH SEC. D26-19.07 H.M.C. : LIGHTS IN ENTRANCE WAYS AND AT YARDS AND COURTS.
6. BUILDING SHALL COMPLY WITH SEC. D26-19.05 H.M.C. : LIGHTING PUBLIC HALLS AND STAIRS
7. BUILDING SHALL COMPLY WITH SEC. D26-20.01 H.M.C. : PEEPHOLES IN ENTRANCE DOORS TO APARTMENTS.
8. BUILDING SHALL COMPLY WITH SEC. D26-20.03 H.M.C. : MIRRORS IN SELF SERVICE ELEVATORS
9. BUILDING SHALL COMPLY WITH SEC. D26-21.01 H.M.C. : MAIL SERVICE
10. BUILDING SHALL COMPLY WITH SEC. D26-21.03 H.M.C. : FLOOR SIGNS TO INDICATE FLOORS
11. BUILDING SHALL COMPLY WITH SEC. D26-21.05 H.M.C. : STREET NUMBERS ON THE DWELLING
12. BUILDING SHALL COMPLY WITH SEC. D26-22.03 H.M.C. : JANITORIAL SERVICES.
13. BUILDING SHALL COMPLY WITH SEC. D26-30.07 H.M.C. : LIGHTING AND VENTILATION OF LIVING ROOMS.
14. BUILDING SHALL COMPLY WITH SEC. D26-41.17 H.M.C. : REGISTRATION, TIME TO FILE
15. BUILDING SHALL COMPLY WITH SEC. D26-41.17 H.M.C. : IDENTIFICATION OF MANAGING AGENT OR OWNER.
16. BUILDING SHALL COMPLY WITH SEC. D26-41.5 H.M.C. : POSTING OF SERIAL NUMBER
17. BUILDING SHALL COMPLY WITH SEC. D26-14.03 H.M.C. : RECEPTACLES FOR GARBAGE
18. BUILDING SHALL COMPLY WITH SEC. D26-14.05 H.M.C. : COLLECTION OF GARBAGE

CARBON MONOXIDE & SMOKE DETECTOR NOTES

1. DWELLING UNITS SHALL BE EQUIPPED WITH CARBON MONOXIDE & SMOKE DETECTING DEVICES RECEIVING THERI PRIMARY POWER FROM THE BUILDING WIRING AND THERE SHALL BE NO SWITCHES IN THE CIRCUIT OTHER THAN THE OVER CURRENT DEVICE PROTECTING THE BRANCH CIRCUIT.
2. ALL CARBON MONOXIDE & SMOKE DETECTING DEVICES REQUIRED TO BE PROVIDED AND INSTALLED WITHER BE ACCEPTED PRESENT TO RULES AND REGULATIONS PROMULGATED BY THE COMMISSIONER, APPROVED BY THE BOARD OF STANDARD APPEALS OR BE LISTED BY A NATIONALLY RECOGNIZED INDEPENDENT LATORATORY THAT MAINTAINS PERIODIC INSPECTIONS OF PRODUCTION OF LISTED EQUIPMENT AND WHOSE LISTING STATES THAT EQUIPMENT MEETS NATIONALLY RECOGNIZED STANDARDS.
3. NO DEVICE WHALL BE DEEMED TO BE IN COMPLIANCE UNLESS IT IS OF EITHER THE IONIZATION CHAMBER OR PHOTOELECTRIC TYPE. SUCH DEVICES SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF REFERENCE STANDARD RS-11 AND SHALL BE INSTALLED IN A MANNER CONSISTENT WITH THE REQUIREMENTS OF REFERENCE STANDARD RS-17-12.
4. HARDWIRED CARBON MONOXIDE DETECTORS SHALL COMPLY WITH RX17-13 AND INSTALLED IN ACCORDANCE WITH RS17-14. IT SHALL BE PROVIDED IN EVERY DWELLING UNIT WITHIN FIFTEEN FEET OF THE PRIMARY ENTRANCE OF EACH BEDROOM. HARDWIRE CARBON MONOXIDE DETECTORS SHALL BE PROVIDED OUTSIDE BOILER ROOM.
5. HARDWIRED CARBON MONOXIDE DETECTORS SHALL COMPLY WITH BC 907 AND INSTALLED IN ACCORDANCE WITH BC 907. IT SHALL BE PROVIDED IN EVERY DWELLING UNIT WITHIN FIFTEEN FEET OF THE PRIMARY ENTRANCE OF EACH BEDROOM.

ALLOWABLE HEIGHT AND BUILDING AREA

(TABLE 503)

OCCUPANCY GROUP		TYPE OF CONSTRUCTION	PROPOSED
		TYPE IB	TYPE IB
RESIDENTIAL (R-2)	HEIGHT	U.L.	241'-7"
	AREA	U.L.	165,198.76 S.F.
COMMERCIAL (M)	AREA	U.L.	35,227.62 S.F.
COMMUNITY FACILITY (B)	AREA	U.L.	38,999.69 S.F.

FIRE-RESISTANCE RATING REQUIREMENT FOR BUILDING ELEMENTS (HOURS)

(TABLE 601)

BUILDING ELEMENT	TYPE I
	B
STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS, TRUSSES	2
BEARING WALLS EXTERIOR INTERIOR	2 2
NONBEARING WALLS AND PARTITIONS EXTERIOR	SEE TABLE 602
NONBEARING WALLS AND PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	2
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	2

MULTIPLE DWELLING LAW OF .N.Y. STATES

MULTIPLE DWELLING SHALL COMPLY WITH CHAPTER 713 OF THE LAW OF 1929
AN ACT IN RELATION TO MULTIPLE DWELLINGS, CONSISTING CHAPTER SIXTY-ONE-A OF CONSOLIDATED LAWS BECAME A LAW APRIL 18, 1929, WITH THE APPROVAL OF GOVERNOR, PASSED THREE-FIFTHS BEING PRESENT. THE PEOPLE OF THE STATE OF NEW YORK, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

CHAPTER SIXTY-ONE-A OF THE CONSOLIDATED LAWS

ARTICLE

1. INTRODUCING PROVISIONS; DEFINITIONS [SECTIONS 1-4]
2. MISCELLANEOUS APPLICATION PROVISIONS [SECTIONS 8-14]
3. MULTIPLE DWELLINGS, GENERAL PROVISIONS [SECTIONS 25-94]
4. FIREPROOF MULTIPLE DWELLINGS [SECTIONS 100-117]

ARTICLE 1 INTRODUCTORY PROVISIONS; DEFINITIONS

SECTION 1. SHORT TITLE
SECTION 2. LEGISLATIVE FINDING
SECTION 3. APPLICATION TO CITIES, TOWNS AND VILLAGES
SECTION 4. DEFINITIONS

ARTICLE 2 MISCELLANEOUS APPLICATION PROVISIONS

SECTION 8. GENERAL APPLICATION OF CHAPTER TO DWELLINGS
SECTION 9. BUILDING CONVERTED OR ALTERED
SECTION 10. TIME FOR COMPLIANCE
SECTION 11. DWELLING DAMAGED OR MOVED
SECTION 12. PROHIBITED USED
SECTION 13. APPLICATION OF CHAPTER TO EXISTING DWELLINGS
SECTION 14. APPLICATION OF CHAPTER TO UNCOMPLETED DWELLINGS

ARTICLE 3 MULTIPLE DWELLINGS - GENERAL PROVISIONS

SECTION 25. APPLICATION OF ARTICLE 3
TITLE 1 - LIGHT AND AIR

SECTION 26. HEIGHT, BULK AND OPEN SPACE
SECTION 28. TWO OR MORE BUILDING ON THE SAME LOT.
SECTION 29. PAINTING OF COURTS AND SHAFTS
SECTION 30. LIGHTING AND VENTILATION OF ROOMS
SECTION 31. SIZE OF ROOMS
SECTION 32. ALCOVES
SECTION 33. COOKING SPACE
SECTION 34. ROOMS IN BASEMENTS OR CELLARS
SECTION 35. ENTRANCE DOORS AND LIGHTS
SECTION 36. WINDOWS AND SKYLIGHTS FOR PUBLIC HALLS AND STAIRS
SECTION 37. ARTIFICIAL HALL LIGHTING
TITLE 2 - FIRE PROTECTION AD SAFETY

SECTION 50. ENTRANCE HALLS
SECTION 50-B. ENTRANCES: DOOR, LOCKS, INTERCOMMUNICATION SYSTEMS
SECTION 50-C. RIGHT OF TENANTS TO OPERATE AND MAINTAIN A LOBBY ATTENDANT SERVICE
SECTION 51. SHAFTS, ELEVATORS AND DUMBWAITERS
SECTION 51-A. PEEPHOLES
SECTION 51-B. MIRROR IN CONNECTION WITH SELF-SERVICE ELEVATORS
SECTION 51-C. RIGHTS OF TENANTS TO INSTALL AND MAINTAIN A LOCKS IN CERTAIN ENTRANCE DOORS
SECTION 52. STAIRS
SECTION 53. FIRE-ESCAPES
SECTION 54. CELLAR ENTRANCE
SECTION 55. WAINSCOTING
SECTION 56. FRAME BUILDINGS AND EXTENSIONS
SECTION 57. BELLS; MAIL RECEPTACLES
SECTION 58. INCOMBUSTIBLE MATERIALS
SECTION 59. BAKERIES AND FAT BOILING
SECTION 60. MOTOR VEHICLES STORAGE
SECTION 61. BUSINESS USE
SECTION 62. PARAPETS, GUARD RAILINGS AND WIRES
SECTION 63. SUB-CURB USE
SECTION 64. LIGHTING; GAS METERS; GAS AND OIL APPLIANCES
SECTION 65. BOILER ROOMS
SECTION 66. LODGING HOUSES
SECTION 67. HOTEL AND CERTAIN OTHER CLASS A AND CLASS B DWELLINGS
SECTION 68. SMOKE DETECTING DEVICES
TITLE 3 - SANITATION AND HEALTH

SECTION 75. WATER SUPPLY
SECTION 76. WATER-CLOSET AND BATH ACCOMMODATIONS
SECTION 77. PLUMBING AND DRAINAGES
SECTION 78. REPAIRS
SECTION 79. HEATING
SECTION 80. CLEANLINESS
SECTION 81. RECEPTACLE FOR WASTE MATTER
SECTION 82. PRIVACY
SECTION 83. JANITOR OR HOUSEKEEPER
SECTION 84. CONSTRUCTION STANDARD FOR THE CONTROL OF NOISE

ARTICLE 4 FIREPROOF MULTIPLE DWELLINGS
TITLE 1 - FIRE PROTECTION

SECTION 101. REQUIREMENTS FOR FIREPROOF CONSTRUCTION
SECTION 102. STAIRS
SECTION 103. EGRESS FROM APARTMENTS
SECTION 104. BULKHEADS
SECTION 105. SEPARATION AND VENTILATION OF STAIRS
SECTION 106. CELLAR AND BASEMENT STAIRS
SECTION 107. PUBLIC HALLS
SECTION 108. PARTITIONS
TITLE 2 - SANITATION

SECTION 115. INTERIOR WATER-CLOSETS AND BATHROOMS
SECTION 116. WATER-CLOSETS IN CERTAIN CLASS B MULTIPLE DWELLINGS
SECTION 117. EMPLOYEES' WATER-CLOSETS

DEP NOTES (WASTE WATER)

THE FACILITIY DOES NOT CONTAIN ANY OF FOLLOWING:

* DENTAL FACILITIES
* WELLS
* WATER TANKS
* CAR WASH OR CAR REPAIR
* RESTAURANT OR FOOD PROCESSING AREA
* BIDETS
* IN-GROUND SPRINKLERS OR IRRIFATION
* CHEMICALLY TREATED BOILERS
* PHOTO PROCESSING FACILITY
* LAUNDROMAT
* DRY CLEANING FACILITIES

APPLICATION NOTES

1. SD1&2 IS FILED UNDER SEPARATE APPLICATION.
2. BUILDER'S PAVEMENT PLAN IS FILED UNDER SEPARATE APPLICATION.
3. ELEVATOR IS FILED UNDER SEPARATE APPLICATION.
4. DEMOLITION IS FILED UNDER #320988393
5. FIRE ALARM TO BE FILED UNDER SEPARATE APPLICATION.
6. SITE SAFETY PLAN TO BE FILED UNDER SEPARATE APPLICATION.
7. STRUCTURE FILED UNDER THIS APPLICATION. (DOC 02, NB# 320978064)
8. SOE FILED UNDER THIS APPLICATION. (DOC 03, NB# 320978064)
9. SPRINKLER, STANDPIPE & PLUMBING FILED UNDER THIS APPLICATION. (DOC 04, NB# 320978064)

2286 CROPSEY AVE

PROPERTY INFORMATION

2286 CROPSEY AVE, BROOKLYN, NEW YORK
BLOCK: 6471
LOT: 109
ZONING DISTRICT: C2-4 IN R6
ZONING MAP: 28c
CONSTRUCTION CLASS: IB
24 STORY RESIDENTIAL / COMMUNITY FACILITY USE MIXED BUILDING

THIS PROJECT DOES NOT CONTAIN MODULAR CONSTRUCTION

LEGEND

- NEW TREE W/ 5'-0" x 8'-0" TREE PIT (PER ZR 26-41 AND ZR 28-12)
- DETAIL (1 / A-101)
- ELEVATION (2 / A-101)
- BUILDING SECTION (3 / A-101)
- SD/CD — SMOKE DETECTOR WITH HARDWIRED CARBON MONOXIDE DETECTOR COMPLY WITH RS 17-13 AND INSTALLED IN ACCORDANCE WITH RS 17-14.
- EXIT LIGHT W/ SIGN. COMPLY WITH BC2014 SECTION 27-232.
- WALL TYPE
- DOOR TYPE (A)
- WINDOW TYPE (1)
- EXISTING HYDRANT (H)
- EXISTING TRAFFIC SIGN (S)
- EXISTING UTILITY POLE (U)
- GFI — GROUND-FAULT INTERRUPTER OUTLET
- ONE-WAY SWITCH (S1)
- TWO-WAY SWITCH (S2)
- MASTER SWITCH (M)

LIST OF DRAWINGS

1.	G-100.00	NOTES, LEGEND, LIST OF DRAWINGS
2.	Z-100.00	PLOT PLAN
3.	Z-101.00	ZONING CALCULATIONS
4.	Z-102.00	OPEN SPACE AND LOT COVERAGE DIAGRAMS
5.	Z-103.00	ZONING DIAGRAM - ELEVATION
6.	Z-104.00	ZONING DIAGRAM - FL1
7.	Z-105.00	ZONING DIAGRAM - FL2
8.	Z-106.00	ZONING DIAGRAM - FL3
9.	Z-107.00	ZONING DIAGRAM - FL4
10.	Z-108.00	ZONING DIAGRAM - FL5
11.	Z-109.00	ZONING DIAGRAM - FL6–20
12.	Z-110.00	ZONING DIAGRAM - FL21–22
13.	Z-111.00	ZONING DIAGRAM - FL23–ROOF
14.	A-001.00	EGRESS DIAGRAM - CEL–FL1
15.	A-002.00	EGRESS DIAGRAM - FL2–FL4
16.	A-003.00	EGRESS DIAGRAM - FL5–FL24
17.	A-101.00	CELLAR PLAN
18.	A-102.00	FL1 PLAN
19.	A-103.00	FL2 PLAN
20.	A-104.00	FL3 PLAN
21.	A-105.00	FL4 PLAN
22.	A-106.00	FL5 PLAN
23.	A-107.00	FL6 PLAN
24.	A-108.00	FL7– 21 PLANS
25.	A-109.00	FL22–23 PLANS
26.	A-110.00	ROOF & BULKHEAD PLANS
27.	A-201.00	CROPSEY AVE ELEVATION
28.	A-202.00	NORTH ELEVATION
29.	A-203.00	SHORE PARKWAY ELEVATION
30.	A-204.00	SECTION D / SOUTH ELEVATION
31.	A-205.00	SECTION A
32.	A-206.00	SECTION B
33.	A-207.00	SECTION C
34.	A-301.00	ACCESSIBILITY DETAILS
35.	A-302.00	DOOR & WINDOW SCHEDULES
36.	A-303.00	TYPICAL WALL DETAILS
37.	A-304.00	ACCESSIBLE KITCHEN TYPES
38.	EN-100.00	ENERGY COMPLIANCE REPORT

CONTROLLED INSPECTIONS

SITE STORM DRAINAGE DISPOSAL AND DETENTION SYSTEM INSTALLATION	BC 1704.20
FIRE STOPS, DRAFTSTOP, AND FIREBLOCK SYSTEMS	BC 1704.25
FIRE-RESISTANCE RATED CONSTRUCTION	BC 109.3.4
STRUCTURAL STEEL - WELDING	BC 1704.3.1
STRUCTURAL STEEL - ERECTION & BOLTING	BC 1704.3.2,BC 1704.3.3
MASONRY	BC 1704.5
SOILS -SITE PREPARATION	BC1704.7.1
UNDERPINNING	BC 1704.9.1
EXCAVATION - SHEETING, SHORING AND BRACING	BC 1704.19, BC 3304.4.1
FOOTING AND FOUNDATION	BC 109.3.1
MECHANICAL SYSTEMS	BC 1704.15
SPRINKLER SYSTEMS	BC 1704.21
HEATING SYSTEMS	BC 1704.23
CHIMNEYS	BC 1704.24
ENERGY CODE COMPLIANCE INSPECTIONS	BC 109.3.5
CONCRETE-CAST-IN-PLACE	BC 1704.4
SOILS-INVESTIGATIONS (BORINGS/TEST PITS)	BC 1704.7.4
CONCRETE TEST CYLINDERS (TR2)	BC 1905.6
TABLE REFERENCE IN 1RCNY 5S000-01/H(1) AND (2)	TR8 ITEMS
VESTIBULES	IIA9
FENESTRATION THERMAL VALUES AND RATINGS	(IIA3), (IIA3)
FENESTRATION RATINGS FOR AIR LEAKAGE	(IIA4),(IIA4)
HVAC AND SERVICE WATER HEATING EQUIPMENT	(IIB3), (IIB4)
HVAC AND SERVICE WATER HEATING SYSTEM CONTROLS	(IIB4),(IIB4)
DUCT PLENUM AND PIPING INSULATION AND SEALING	(IIB5),(IIB5)
DUCT LEAKAGE TESTING	(IIB6),(IIB6)
LIGHTING IN DWELLING UNITS	(IIC2),(IIC2)
LIGHTING CONTROLS	(IIC5)
FENESTRATION AREAS	(IIA5),(IIA5)
INTERIOR LIGHTING POWER	(IIC3)

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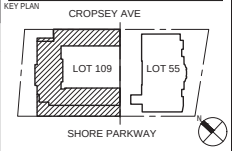
KEY PLAN



REV.//	DATE	DESCRIPTION

PROJECT

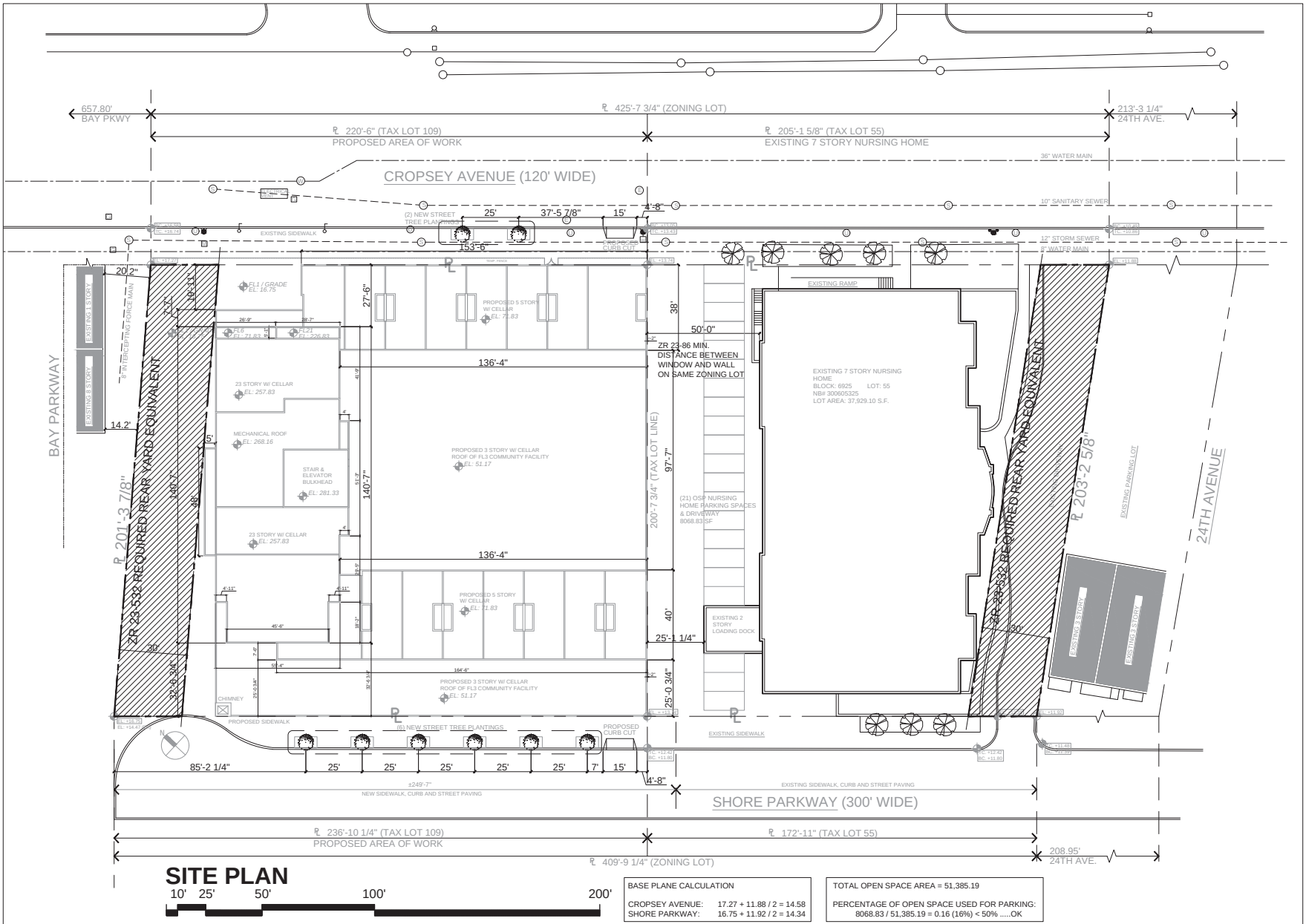
2286 CROPSEY AVE
BROOKLYN, NEW YORK

GENERAL NOTES & LEGEND

SEAL & SIGNATURE

DATE: 12/02/2015
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

G-100.00



SITE PLAN

10' 25' 50' 100' 200'

BASE PLANE CALCULATION		
CROPSEY AVENUE:	17.27 + 11.88 / 2 = 14.58	
SHORE PARKWAY:	16.75 + 11.92 / 2 = 14.34	

TOTAL OPEN SPACE AREA = 51,385.19

PERCENTAGE OF OPEN SPACE USED FOR PARKING:
8068.83 / 51,385.19 = 0.16 (16%) < 50% .....OK

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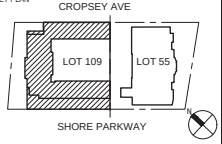
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

PLOT PLAN

SEAL & SIGNATURE

DATE:	12/02/2015
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	Z-100.00
PAGE No:	02 OF 38

ZONING CALCULATIONS

(SEE Z-102~Z-112 FOR ZONING DIAGRAM)

ADDRESS	2286 CROPSEY AVE, BROOKLYN, NY ONE ZONING LOT FOR TWO TAX LOTS (DOB #320484436)
BLOCK	6471 & 6925
	109 & 55 (THROUGH LOT)
ZONING DISTRICT	C2-4 IN R6
ZONING MAP	28c
AREA OF WORK	TAX LOT 109 ONLY

ZONING USE GROUP OCCUPANCY GROUP CONSTRUCTION CLASS NUMBER OF STORIES BUILDING HEIGHT LOT AREA	2 (RESIDENTIAL), 6 (COMMERCIAL/STORE), 4 (AMBULATORY DIAGNOSTIC) AND 2B (ACCESSORY PARKING GARAGE) R-2 (RESIDENTIAL), M (COMMERCIAL/STORE) & B (AMBULATORY DIAGNOSTIC) AND S-2 (ACCESSORY PARKING) IB 24 STORIES WITH CELLAR SHORE PARKWAY = 293'-0" CROPSEY AVE = 27'Z-10" LOT 55 + LOT 109 = 37,928.96 S.F. + 45,884.78 = 83,813.74 S.F. (PER ARCHITECTURAL SURVEY)
ZONING FLOOR AREA LOT 55 (EXISTING) LOT 109 (PROPOSED)	EXISTING NURSING HOME FLOOR AREA = 127,728.00 SF RESIDENTIAL ZONING FLOOR AREA= 165,198.76 AMBULATORY DIAGNOSTIC ZONING FLOOR AREA= 74,227.31
ZR 23-151	PROPOSED HEIGHT FACTOR FOR FAR: 8.0 HEIGHT FACTOR = RES. F.A. / RES. LOT COVERAGE: 165,198.76 / 19,564.75 = 8.44 (USE 8.0) PERMITTED RESIDENTIAL FAR = 2.30 PERMITTED RESIDENTIAL FLOOR AREA = 165,198.76 < 192.770.36 PROPOSED RESIDENTIAL FAR = 165,198.76 / 83,813.74 = 1.97 < 2.30.....O.K.
	PROPOSED HEIGHT FACTOR FOR OPEN SPACE HEIGHT FACTOR = TOTAL RESIDENTIAL FLOOR AREA / RESIDENTIAL LOT COVERAGE = 165,198.76 / 19,564.75 = 8.44 (USE 8.0) REQUIRED OPEN SPACE RATIO = 31.0% REQUIRED OPEN SPACE AREA = 165,198.76 x 31.0% = 51,211.62 PROPOSED OPEN SPACE AREA = 83,813.74 - 19,564.75 - 17,850.56 = 46,398.43 PERMITTED SHADED OPEN SPACE AREA = 51,211.62 x 10% = 5121.16 PROPOSED SHADED OPEN SPACE AREA = 4,898.33 < 5121.16 PROPOSED TOTAL OPEN SPACE AREA = 46,398.43 + 4,898.33 = 51,296.76 > 51,211.62 (31%).....O.K.
ZR 33-121	COMMUNITY FACILITY FLOOR AREA RATIO (C2-4 IN R6) = 4.80 PERMITTED FLOOR AREA: 83,813.74 X 4.80 = 402,305.95 PROPOSED FLOOR AREA (AMBULATORY DIAGNOSTIC) = 38,999.69 + 127,728.00 (EXT'G NURSING HOME) = 166,727.69 < 402,305.95 (1.99 FAR) .....OK COMMUNITY FACILITY LOT COVERAGE (THROUGH LOT) = 65% (REFER Z-102) PROPOSED LOT COVERAGE = PROPOSED BUILDING (LOT 109) + EXISTING BUILDING (LOT 55) EXISTING BUILDING (LOT 55) LOT COVERAGE = 17,850.56 SF PROPOSED BUILDING (LOT 109) LOT COVERAGE = 35,162.96 TOTAL LOT COVERAGE = 17,850.56 + 35,162.96 = 53,013.52 PROPOSED CF LOT COVER = 53,013.52 SF < 54,478.93 SF O.K. PROPOSED LOT COVERAGE RATIO = 53,013.52 / 83,813.74 = 63% < 65% .....O.K.
ZR 33-121	COMMERCIAL FLOOR AREA RATIO (C2-4 IN R6) = 2.00 PERMITTED FLOOR AREA: 83,813.74 X 2.00 = 167,627.48 PROPOSED FLOOR AREA (COMMERCIAL) = 35,227.62< 167,627.48 (0.42 FAR) .....OK
ZR 24-111	MAXIMUM FLOOR AREA RATIO FOR NURSING HOME: 2.43 EXISTING NURSING HOME FLOOR AREA: 127,728.00 (PER NB# 300605325) EXISTING NURSING HOME FAR: 127,728.00 / 83,813.74 = 1.52 < 2.43 .....OK
ZR 24-161 ZR 33-121	MAX. FLOOR AREA IN MIXED USE BUILDINGS THE TOTAL FLOOR AREA RATIOS FOR ZONING LOTS CONTAINING COMMUNITY FACILITY AND RESIDENTIAL USES DOES NOT EXCEED THE GREATEST FLOOR AREA RATIO PERMITTED FOR ANY SUCH USE ON THE ZONING LOT. AS SET FORTH IN THIS SECTION, WHICHEVER PERMITS THE GREATEST AMOUNT OF FLOOR AREA MAX. FAR FOR RESIDENTIAL USE, COMMERCIAL & COMMUNITY FACILITY USE IN C2-4 IN R6 = 4.80 PERMITTED RESIDENTIAL + COMMERCIAL + COMMUNITY FACILITY = 83,813.74 x 4.80 = 402,305.95 PROPOSED RESIDENTIAL + COMMERCIAL + COMMUNITY FACILITY + EXISTING NURSING HOME (LOT 55): (165,198.76 + 35,227.62 + 38,999.69 + 127,728) = 367,154.07 < 402,305.95.....OK PROPOSED FAR = 367,154.07 / 83,813.74 = 4.38 < 4.80.....OK

ZR 23-20 DENSITY REGULATIONS

	ZR SECTION	FACTOR FOR DWELLING UNITS	REQUIRED/ ALLOWED	PROPOSED	REMARK
MAX. NUMBER OR DWELLING UNIT	ZR 23-22	680	240	154	PERMITTED DU = 165,198.76 / 680 = 243 DU PROPOSED DU = 154 DU < 243 DU.....O.K.

ZR 23-32 MIN. LOT AREA OR LOT WIDTH FOR RESIDENCES

	ZR SECTION	MIN. LOT AREA		MIN. LOT WIDTH (FT)			REMARK
		PERMITTED	PROPOSED	PERMITTED	PROPOSED		
					CROPSEY AVE	SHORE PARKWAY	
RESIDENTIAL (R-2)	ZR 23-32	1,700	83,813.74	18	220'-6"	236'-10 1/4"	

ZR 23-40 YARD REGULATIONS

	ZR SECTION	REQUIRED	PROPOSED & EXISTING	REMARK
FRONT YARD	ZR 23-45	0	0	NO FRONT YARD IS REQUIRED
SIDE YARD	ZR 23-462 (C)	0	0	NO SIDE YARD IS REQUIRED
REAR YARD (THROUGH LOT)	ZR 23-532 (C)	30'-0" ALONG BOTH SIDE YARD LINE	ALONG SIDE EACH SIDE LOT LINE 30' SIDE YARD	ANY THROUGH LOT THAT IS 110'-0" OR MORE IN MAXIMUM DEPTH FROM STREET TO STREET, REAR YARD EQUIVALENTS SHALL BE PRROVIDED EXISTING DEPTH OF THROUGH LOT IS 200'-7" AND 201'-3 7/8"

ZR 23-632 ALTERNATE FRONT SETBACKS

MAX. HEIGHT ABOVE STREET LINE BEFORE SETBACK				HEIGHT ABOVE THE STREET LINE	SKY EXPOSURE PLANE (SLOPE OVER ZONING LOT)			
SHORE PARKWAY		CROPSEY AVE			ON WIDE ST (SHORE PARKWAY)		ON WIDE ST (CROPSEY AVE)	
PERMITTED	PROPOSED	PERMITTED	PROPOSED		PERMITTED	PROPOSED	PERMITTED	PROPOSED
60' OR 6 STORIES	60'	60' OR 6 STORIES	60'	60' OR 6 STORIES, WHICHEVER IS LESS	5.6 TO 1	5.6 TO 1	5.6 TO 1	5.6 TO 1

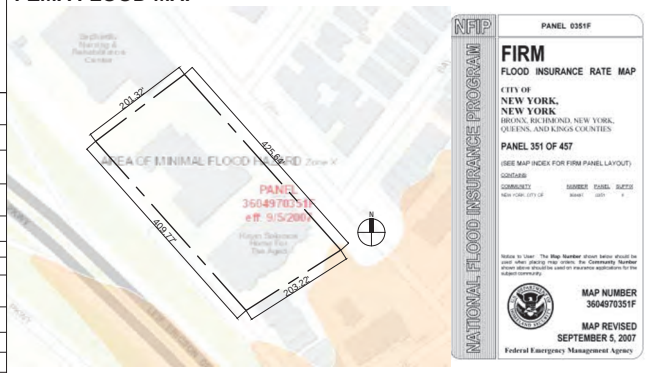
ZR25-811 REQUIRED BICYCLE PARKING SPACES

	REQUIRED/ ALLOWED	PROPOSED	REMARK
RESIDENTIAL	77	77	USE GROUP 2 (1 PER 2 DWELLING UNITS) 154 UNITS / 2 = 77 SPACES REQUIRED
COMMUNITY FACILITY	17	17	USE GROUP 3 & 4 (1 PER 10,000 SF) 166,727.69 / 10,000 = 16.67 (17) SPACES REQUIRED
COMMERCIAL	4	4	USE GROUP 6 (1 PER 10,000 SF) 35,227.62 / 10,000 = 3.5 (4) SPACES REQUIRED
TOTAL REQUIRED	98	98	REQUIRED BICYCLE PARKING AREA: 98 X 15 SF = 1470 SF PROVIDED AREA ON FL2: 548.68+ 161.39 + 293.40+ 451.53 + 245.21 = 1700.21 > 1470 SF... O.K.

FLOOR AREA SCHEDULE

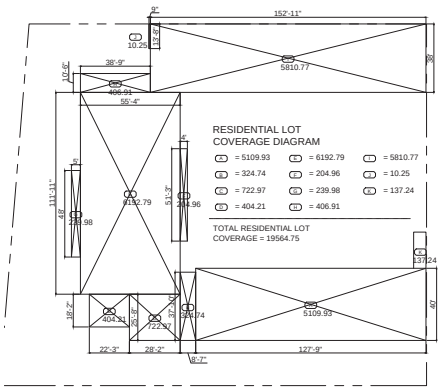
	RESIDENTIAL				COMMUNITY FACILITY				COMMERCIAL			TOTAL	PARKING
	UNITS	GROSS	DEDUCT	NET	GROSS	DEDUC	NET	NURSING HOME	GROSS	DEDUC	NET	ZONING	PROVIDED
CELLAR 1		45816.64											109
1ST FL		2501.16	0	2501.16				**127728.00**	35247.77	20.15	35227.62		21
2ND FL		961.07	0	961.07	36980.02	35480.25	1499.77						134
3RD FL		400.23	0	400.23	37540.86	40.94	37499.92						
4TH FL	8.5	12629.78	192.41	12437.37									
5TH FL	12.5	17219.94	297.73	16922.21									
6TH FL	8	7671.83	267.45	7404.38									
7TH FL	8	7671.83	267.45	7404.38									
8TH FL	8	7671.83	267.45	7404.38									
9TH FL	8	7671.83	267.45	7404.38									
10TH FL	8	7671.83	267.45	7404.38									
11TH FL	8	7671.83	267.45	7404.38									
12TH FL	8	7671.83	267.45	7404.38									
13TH FL	8	7671.83	267.45	7404.38									
14TH FL	8	7671.83	267.45	7404.38									
15TH FL	8	7671.83	267.45	7404.38									
16TH FL	8	7671.83	267.45	7404.38									
17TH FL	8	7671.83	267.45	7404.38									
18TH FL	8	7671.83	267.45	7404.38									
19TH FL	8	7671.83	267.45	7404.38									
20TH FL	8	7671.83	267.45	7404.38									
21ST FL	7	7525.73	253.46	7272.27									
22ND FL	3	7525.73	210.24	7315.49									
23RD FL	3	7525.73	2037.56	5488.17									
ROOF	0	2571.76	1736.67	835.09									
CF ZONING FA							**38999.69**	**127728.00**				**166727.69**	
COMMERCIAL ZONING FA									35247.77		35227.62	35227.62	
RES ZONING FA	**154**			**165198.76**								**165198.76**	
GRAND TOTAL		219755.22			74520.88							**367154.07**	
FAR BREAKDOWN							**0.47**	**1.52**			**0.42**		
FAR USED				**6.86**							**2.41**		
TOTAL FAR													
HF	RESID. LOT COVERAGE			19564.75									
PARKING	**108**						**39**	**63**			**35**	**245**	**255**
TOTAL PROPOSED GROSS AREA		329523.87											

FEMA FLOOD MAP



PARKING AND LOADING

	ZR SECTION	REQUIRED/ ALLOWED	PROPOSED			REMARK
			CELLAR	OSP	2ND FLOOR	
RESIDENTIAL	ZR 25-23	108 MIN.	109	0	134	REQUIRED # OF PARKING SPACE: 70% OF D.U. = 154 x 70%= 107.8 (108) SPACES *PROPOSED PARKING SPACES = 108 SPACES AT CELLAR*
COMMERCIAL (PROPOSED)	ZR 36-21	35 MIN.		0		REQUIRED # OF PARKING SPACE: 1 / 1,000 S.F. 35,227.62 / 1,000 S.F. = 35.22 (35 SPACES) REQUIRED PARKING SPACES
COMMUNITY FACILITY (PROPOSED)	ZR 36-21	39 MIN.		0		REQUIRED # OF PARKING SPACE: 1 / 1,000 S.F. (1,499.77 + 37,449.92) / 1,000 S.F. =38,999.69 = 38.99 (39 SPACES) REQUIRED PARKING SPACES
NURSING HOME (EXISTING)	ZR 25-31	63 MIN.		21		1 PARKING SPACE PER 20 BEDS IN R6 DISTRICT (ZR 25-31) EXISTING ROOMING UNITS PER CO# 300605325: FL2~7: 21 BEDROOMS PER FLOOR 21 X 6 = 126 BEDROOMS (126 BEDS) / 20 = 6.3 (6) PARKING SPACES REQUIRED EXISTING 63 PARKING SPACES PROVIDED AT OSP PER CO# 300605325
TOTAL		245 MIN.	100 + 21 +134 = 255			TOTAL REQUIRED PARKING: 108 + 35 + 39 + 63 = 245 SPACES TOTAL PROPOSED: 100 + 134 SPACES + 21 SPACES (LOT 55) = 255 SPACES
ACCESSIBLE VAN PARKING SPACES	BC 1106	2 VANS	2 VANS			5% OF TOTAL PARKING SPACES REQUIRED TO BE ACCESSIBLE 264 X 5% = 13.2 (13) SPACES ACCESSIBLE VAN PARKING: EVERY SIX ACCESSIBLE PARKING ONE MUST BE VAN ACCEISSLBLE 13 / 6 = 2.17 (2) VAN ACCESSIBLE
PARKING LOT LANDSCAPING	ZR 25-67	NONE	PROPOSED CF FLOOR AREA: 166727.69 PROPOSED TOTAL FLOOR AREA: 367,154.07 166,727.69 / 367,154.07: 0.45 (45%) ~NONE REQUIRED, NONE PROVIDED			PARKING LOT LANDSCAPING REQUIRED FOR DEVELOPMENTS WITH OVER 70% FLOOR AREA OCCUPIED BY COMMUNITY FACILITY



RESIDENTIAL LOT COVERAGE CALCULATION

ZR36-62 REQUIRED LOADING BERTH

	REQUIRED/ ALLOWED	PROPOSED	REMARK
COMMERCIAL	2	2	USE GROUP 6 FIRST 8,000 SF NONE, NEXT 17,000 SF 1 REQUIRED, NEXT 15,000 SF 1 REQUIRED, PROPOSED COMMERCIAL AREA = 35,227.62 SF, = 2 LOADING BERTH REQUIRED. PROPOSED 2 LOADING BERTH IN CELLAR FLOOR

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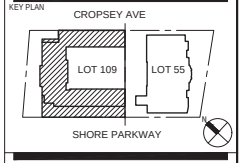
KEY PLAN



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2286 CROPSEY AVE
BROOKLYN, NEW YORK

ZONING CALCULATION

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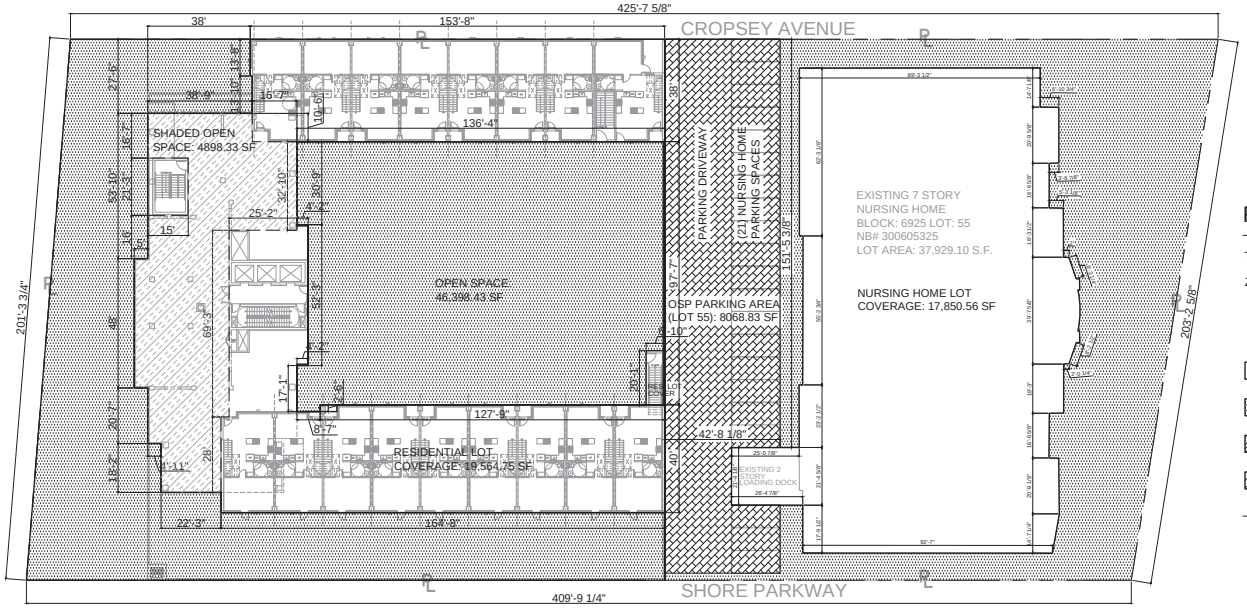

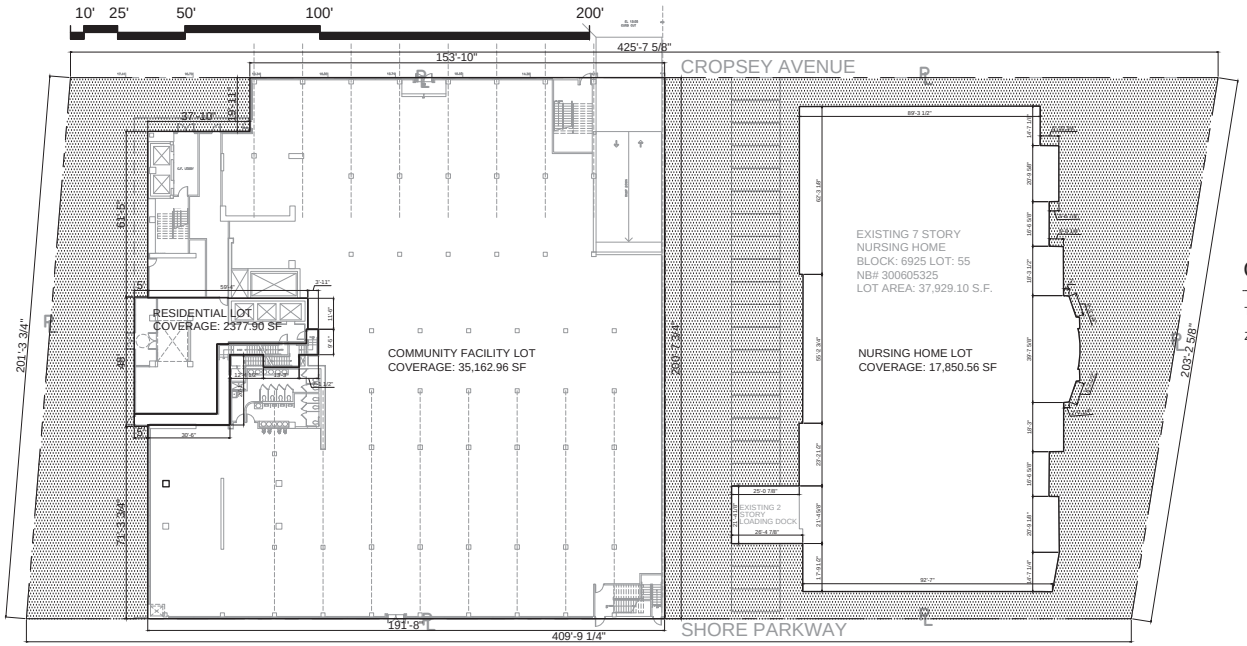

RESIDENTIAL OPEN SPACE

TOTAL ZONING LOT SIZE = 83,813.74

ZR 23-142 PERMITTED HEIGHT FACTOR FOR OSR:
TOTAL RESIDENTIAL FLOOR AREA / RESIDENTIAL LOT COVERAGE = 165,198.76 / 19,564.75 = 8.44 (USE 8.0)
MIN REQUIRED OPEN SPACE RATIO = 31.0% OF TOTAL FA
REQUIRED OPEN SPACE = 165,198.76 x 31.0% = 51,211.62 SF

RESIDENTIAL LOT COVERAGE AREA = 19,564.75 (SEE Z101)

PROPOSED OPEN SPACE = 83,813.74 - 19,564.75 - 17850.56 = 46,398.43

PERMITTED SHADED OPEN SPACE AREA = 51,211.62 x 10% = 5,121.16
PROPOSED SHADED OPEN SPACE AREA = 4,898.33 < 5,121.16

PROPOSED PARKING IN OPEN SPACE = 8,068.83

TOTAL OPEN SPACE AREA = 46,398.43 + 4,898.33
= 51,296.76 > 51,211.62 (31.05%)

PERCENTAGE OF OPEN SPACE USED FOR PARKING:
8,068.83 / 51,211.62 = 0.16 (16%) < 50% .....OK

COMMUNITY FACILITY LOT COVERAGE

TOTAL ZONING LOT SIZE = 83,813.74

ZR 24-11 MAX. COMMUNITY FACILITY LOT COVERAGE (THROUGH LOT) = 65%

PERMITTED LOT COVERAGE = 83,813.74 x 65% = 54,478.58 S.F.

PROPOSED LOT COVERAGE = PROPOSED BUILDING (LOT 109) + EXISTING BUILDING (LOT 55)

PROPOSED COMMUNITY FACILITY COVERAGE
= 53,013.52 SF < 54,478.58 SF O.K.

EXISTING BUILDING (LOT 55) LOT COVERAGE = 17,850.56
PROPOSED BUILDING (LOT 109) LOT COVERAGE = 35,162.96
TOTAL LOT COVERAGE = 17,850.56 + 35,162.96 = 53,013.52
PROPOSED LOT COVERAGE RATIO =
53,013.52 / 83,813.74 = 63% < 65% .....O.K.

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RESIDENTIAL OPEN SPACE & CF LOT COVERAGE DIAGRAMS

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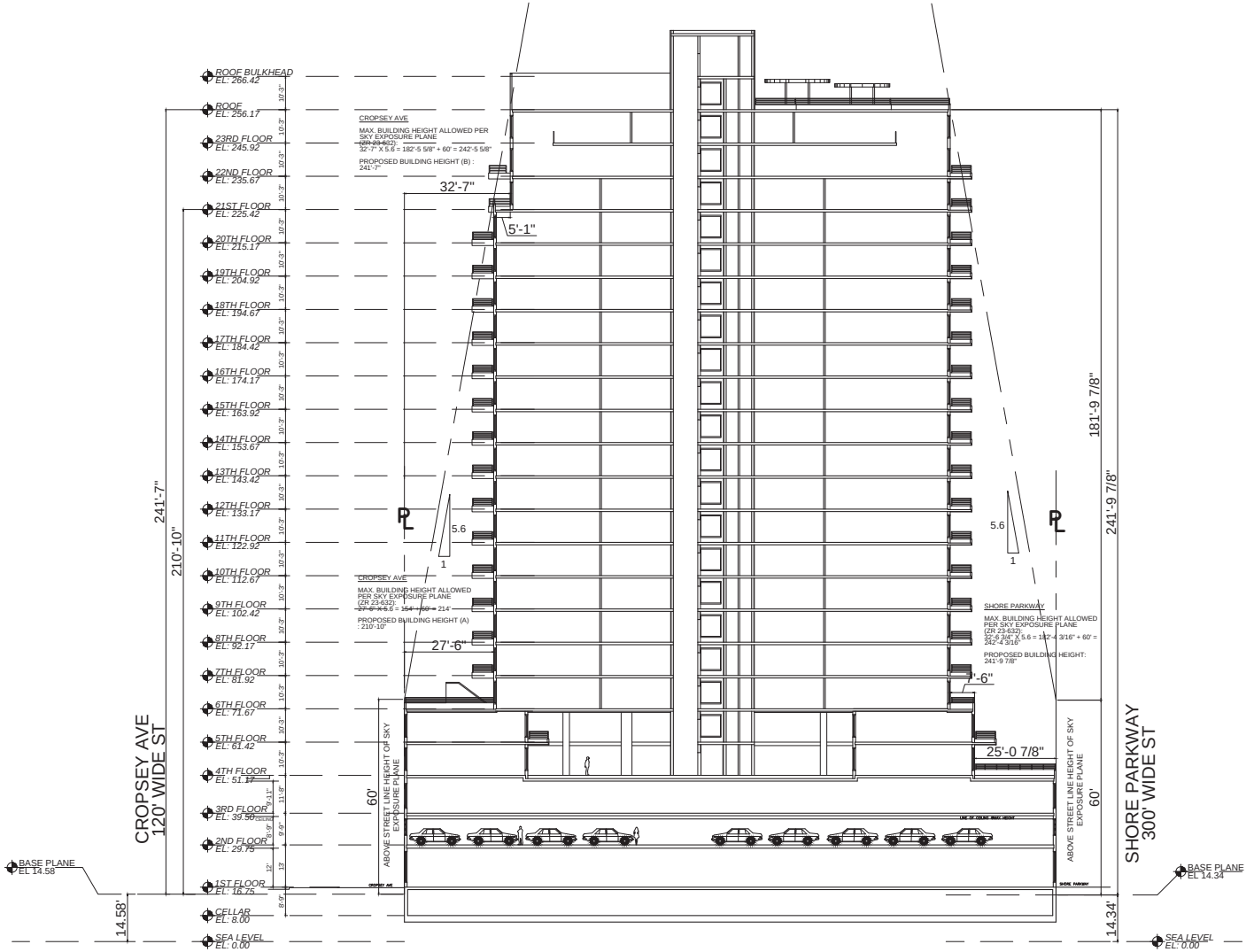
BULK ELEVATION DIAGRAM



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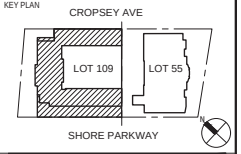

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BULK ELEVATION DIAGRAM

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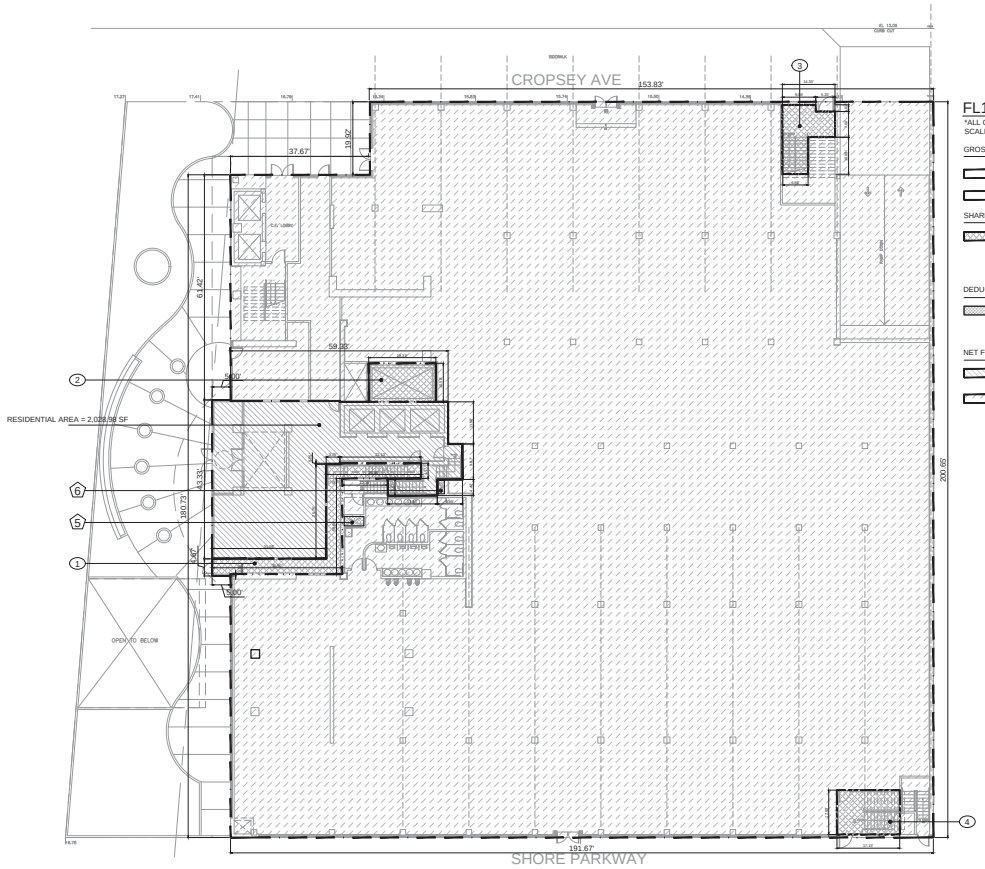


FL1 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: ⅛" = 1'-0"

GROSS BUILDING AREA

RESIDENTIAL BUILDING AREA = 2028.98 + 472.18 = 2501.16

COMMUNITY FACILITY AREA = 35,719.95 - 472.18 = 35,247.77

SHARED FLOOR AREA

SHARED FLOOR AREA:
356.67 + 192.51 + 187.57 + 207.61 = 944.36 / 2 = 472.18
① = 356.67 ② = 192.51 ③ = 187.57 ④ = 207.61

DEDUCTIBLE AREA: 20.15

MECHANICAL AREA (CF): 20.15 TOTAL
⑤ = 13.89 ⑥ = 6.26

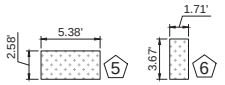
NET FLOOR AREA (ADDING SHARED / SUBTRACTING DEDUCTIBLE AREA)

RESIDENTIAL ZONING FLOOR AREA: 2501.16

COMMERCIAL AREA: 35,247.77 - 20.15 = 35,227.62

FL1 DEDUCTIBLE AREA CALCULATION

SCALE: ⅛" = 1'-0"



DEDUCTIBLE AREA 5: 5.38' X 2.58' = 13.89

DEDUCTIBLE AREA 6: 1.71' X 3.67' = 6.26

MECHANICAL CHASE DIAGRAMS

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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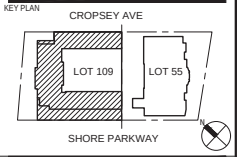

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FL1 ZONING DIAGRAM

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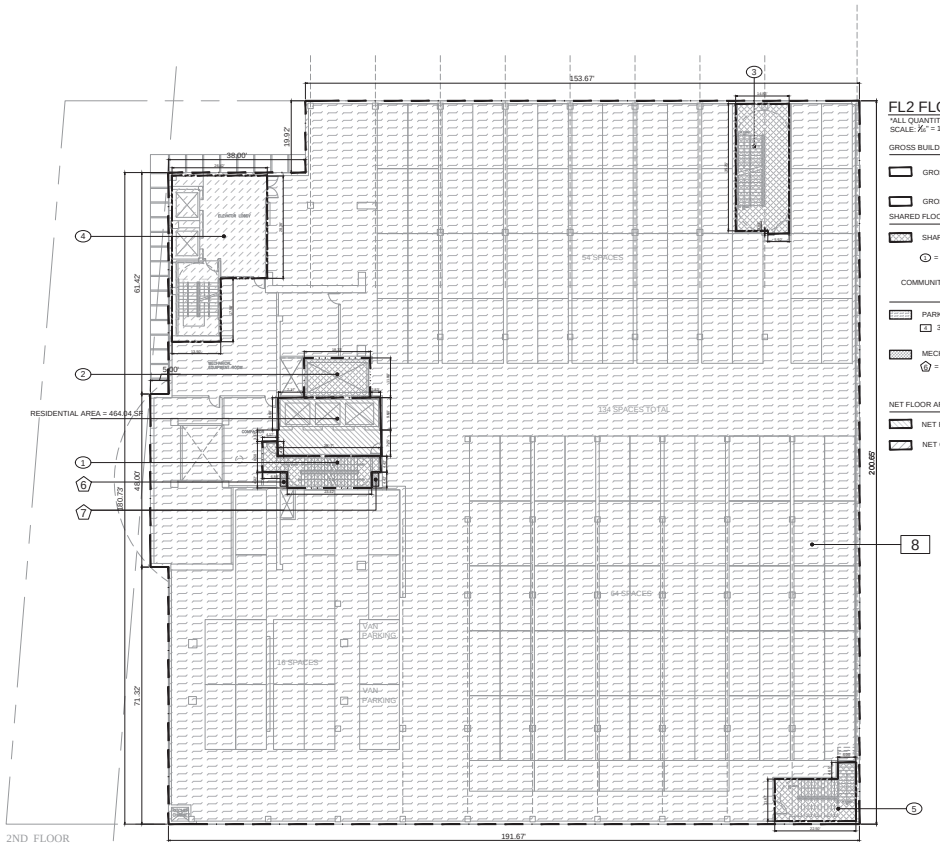

FL2 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/8" = 1'-0"

GROSS BUILDING AREA

GROSS COMMUNITY FACILITY AREA = 37,941.09 - 464.04 - 497.03 = 36,980.02

GROSS RESIDENTIAL BUILDING AREA = 464.04 + 497.03 = 961.07

SHARED FLOOR AREA

SHARED FLOOR AREA: 265.05 + 201.67 + 527.34 = 994.06 / 2 = 497.03

① = 265.05 ② = 201.67 ③ = 527.34

COMMUNITY FACILITY ④ = 990.22

PARKING AREA : 35,480.25 TOTAL

④ 37,941.09 - 464.04 - 994.06 - 12.52 - 990.22 = 35480.25

MECHANICAL SPACE : 12.52 TOTAL

⑥ = 6.26 ⑦ = 6.26

NET FLOOR AREA (ADDING SHARED / SUBTRACTING DEDUCTIBLE AREA)

NET RESIDENTIAL ZONING FLOOR AREA: 961.07

NET COMMUNITY FACILITY AREA = 36,980.02 - 35,480.25 = 1499.77

FL2 DEDUCTIBLE AREA CALCULATION

SCALE: 1/8" = 1'-0"

DEDUCTIBLE AREA 6 / 7: 1.71' X 3.67' = 6.26 X 2 = 12.52

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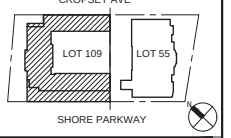

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FL2 ZONING DIAGRAM

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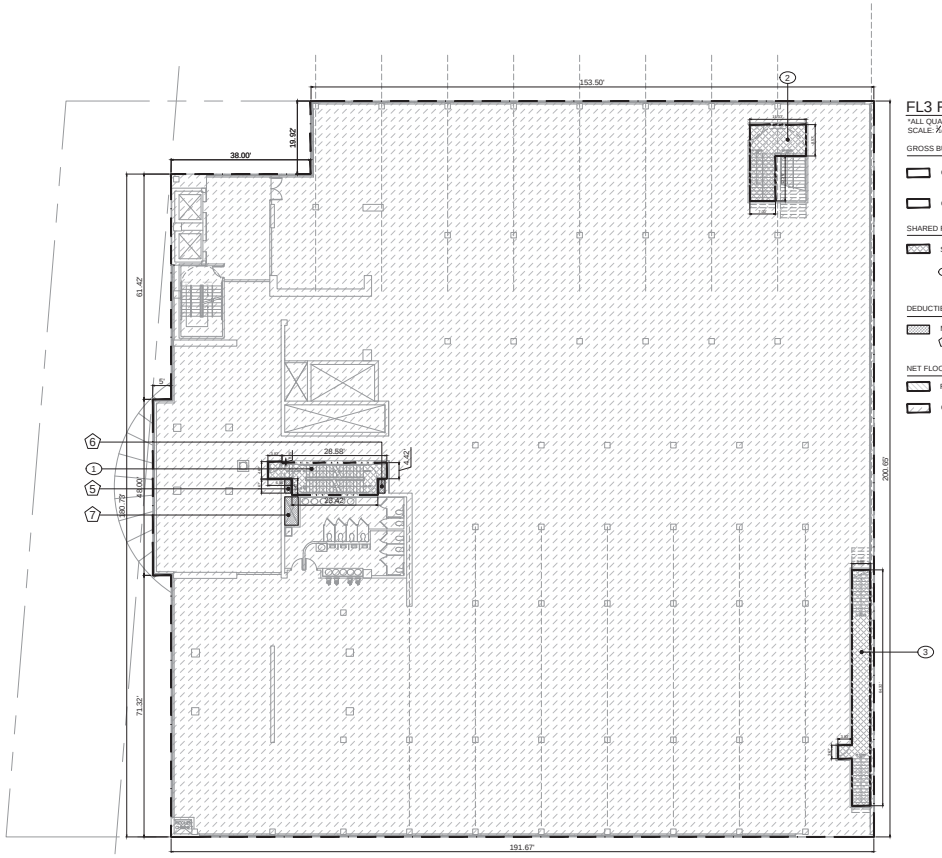


FL3 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/8" = 1'-0"

GROSS BUILDING AREA

GROSS COMMUNITY FACILITY AREA = 37,941.09 - 400.23 = 37,540.86

GROSS RESIDENTIAL BUILDING AREA = 400.23

SHARED FLOOR AREA

SHARED FLOOR AREA: 247.53 + 217.31 + 335.61 = 800.45 / 2 = 400.23

① = 247.53 ② = 217.31 ③ = 335.61

DEDUCTIBLE AREA: 40.94

MECHANICAL SPACE : 40.94 TOTAL

⑤ = 6.26 ⑥ = 6.26 ⑦ = 28.42

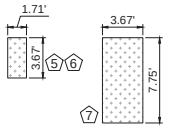
NET FLOOR AREA (ADDING SHARED / SUBTRACTING DEDUCTIBLE AREA)

RESIDENTIAL ZONING FLOOR AREA: 400.23

COMMUNITY FACILITY AREA = 37,540.86 - 40.94 = 37,499.92

FL3 DEDUCTIBLE AREA CALCULATION

SCALE: ⅜" = 1'-0"



DEDUCTIBLE AREA 5 / 6: 1.71' X 3.67' = 6.26

DEDUCTIBLE AREA 7: 3.67' X 7.75' = 28.42

MECHANICAL CHASE DIAGRAMS

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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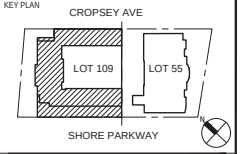

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FL3 ZONING DIAGRAM

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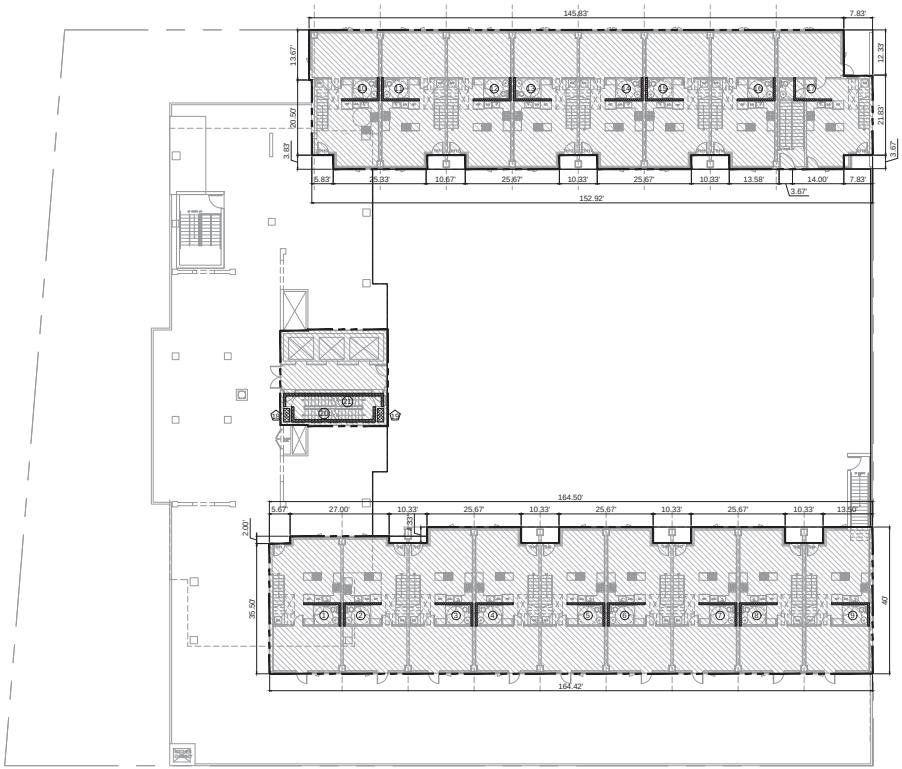


FL4 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/64" = 1'-0"

GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 12,629.78

DEDUCTIBLE AREA: 192.41 TOTAL

PLUMBING CHASE AREA: 137.53 TOTAL

A = 8.09 B = 8.09 C = 8.09 D = 8.09
E = 8.09 F = 8.09 G = 8.09 H = 8.09
I = 8.09 J = 8.09 K = 8.09 L = 8.09
M = 8.09 N = 8.09 O = 8.09 P = 8.09
Q = 8.09

MECHANICAL AREA: 12.52 TOTAL

R = 6.26 S = 6.26

STAIRWELL AREA: 42.36 TOTAL

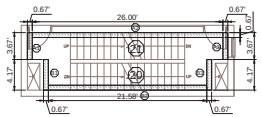
T = 20.04 U = 22.32

NET FLOOR AREA

NET RESIDENTIAL ZONING FLOOR AREA:
12,629.78 - 192.41 = 12,437.37

FL4 DEDUCTIBLE AREA CALCULATION

SCALE: 1/4" = 1'-0"



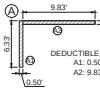
STAIRWELL DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

DEDUCTIBLE AREA 27: 2.45 + 17.42 + 2.45 = 22.32
A1: 0.67' X 3.67' = 2.45
A2: 26.00' X 0.67' = 17.42
A3: 0.67' X 3.67' = 2.45

DEDUCTIBLE AREA 26: 2.79 + 14.46 + 2.79 = 20.04
B1: 0.67' X 4.17' = 2.79
B2: 21.58' X 0.67' = 14.46
B3: 0.67' X 4.17' = 2.79

1.71' X 3.67' = 6.26

MECHANICAL CHASE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



DEDUCTIBLE AREA A: 3.17 + 4.92 = 8.09
A1: 0.50' X 6.33' = 3.17
A2: 9.83' X 0.50' = 4.92

PLUMBING DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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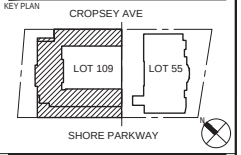

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FL4 ZONING DIAGRAM

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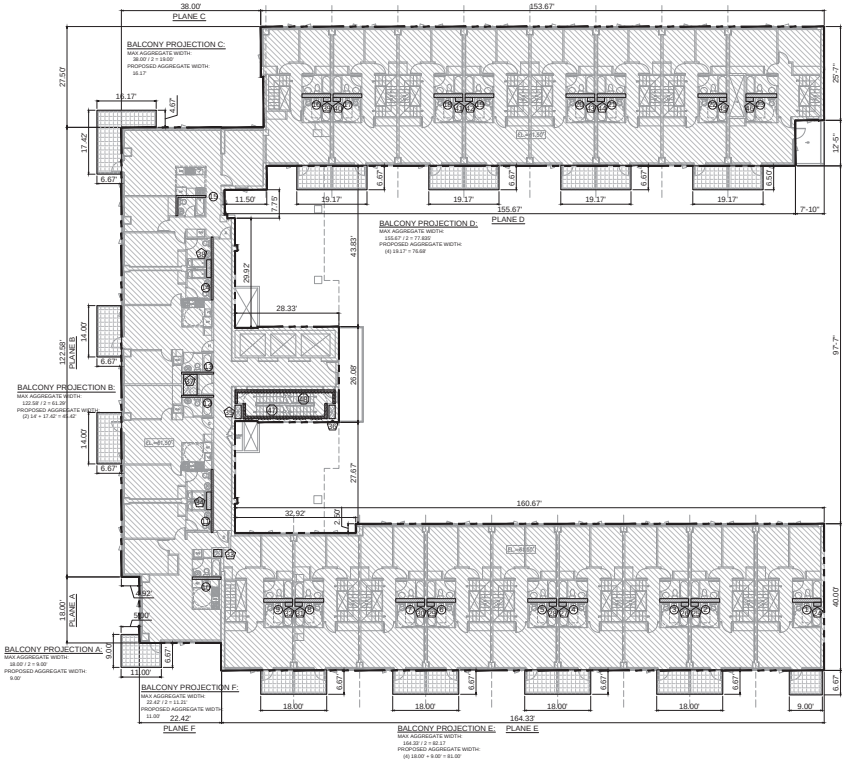


FL5 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"

GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 17,219.94

DEDUCTIBLE AREA: 297.73 TOTAL

PLUMBING CHASE AREA: 171.44 TOTAL

① = 7.83	② = 7.83	③ = 7.83	④ = 7.83
⑤ = 7.83	⑥ = 7.83	⑦ = 7.83	⑧ = 7.83
⑨ = 7.83	⑩ = 5.25	⑪ = 8.58	⑫ = 4.37
⑬ = 4.37	⑭ = 8.58	⑮ = 6.59	⑯ = 7.83
⑰ = 7.83	⑱ = 7.83	⑲ = 7.83	⑳ = 7.83
㉑ = 7.83	㉒ = 7.83	㉓ = 8.42	

MECHANICAL AREA: 83.93 TOTAL

㉔ = 2.16	㉕ = 2.16	㉖ = 2.16	㉗ = 2.16
㉘ = 2.16	㉙ = 2.16	㉚ = 2.16	㉛ = 2.16
㉜ = 2.16	㉝ = 4.50	㉞ = 6.04	㉟ = 6.26
㊱ = 6.26	㊲ = 18.11	㊳ = 6.04	㊴ = 2.16
㊵ = 2.16	㊶ = 2.16	㊷ = 2.16	㊸ = 2.16
㊹ = 2.16	㊺ = 2.16	㊻ = 2.16	

STAIRWELL AREA: 42.36 TOTAL

㊼ = 20.04 ㊽ = 22.32

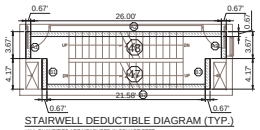
NET FLOOR AREA

NET RESIDENTIAL ZONING FLOOR AREA:
17,219.94 - 297.73 = 16,922.21

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)

FL5 DEDUCTIBLE AREA CALCULATION

SCALE: 1/8" = 1'-0"



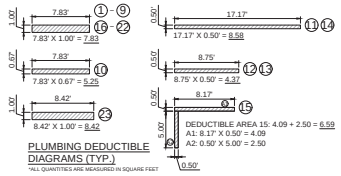
STAIRWELL DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

DEDUCTIBLE AREA 27: 2.45 + 17.42 + 2.45 = 22.32
A1: 0.67' X 3.67' = 2.45
A2: 26.00' X 0.67' = 17.42
A3: 0.67' X 3.67' = 2.45

DEDUCTIBLE AREA 26: 2.79 + 14.46 + 2.79 = 20.04
B1: 0.67' X 4.17' = 2.79
B2: 21.58' X 0.67' = 14.46
B3: 0.67' X 4.17' = 2.79

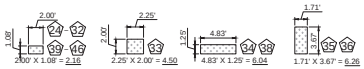
DEDUCTIBLE AREA A: 21.25 - 3.14 = 18.11
A1: 3'-9" X 5'-8" = 21.25
A2: π (1')² = 3.14

MECH DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



PLUMBING DEDUCTIBLE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

DEDUCTIBLE AREA 15: 4.09 + 2.50 = 6.59
A1: 8.17' X 0.50' = 4.09
A2: 0.50' X 5.00' = 2.50



MECHANICAL CHASE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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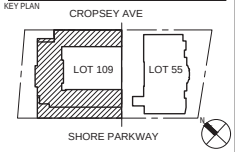
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL5 ZONING DIAGRAM

SEAL & SIGNATURE

DATE:	12/02/2015
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	Z-108.00
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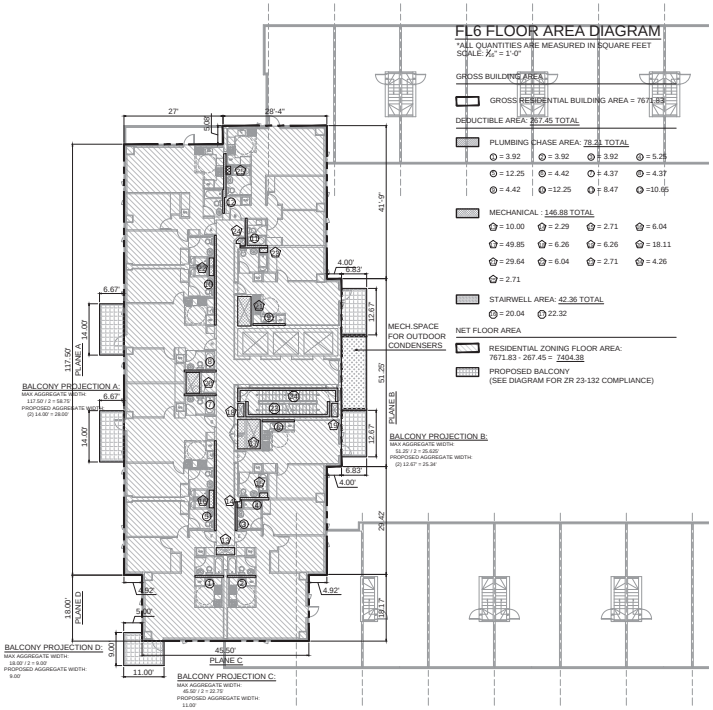


FL6 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"

GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 7671.83

DEDUCTIBLE AREA: 267.45 TOTAL

PLUMBING CHASE AREA: 78.21 TOTAL

① = 3.92	② = 3.92	③ = 3.92	④ = 5.25
⑤ = 12.25	⑥ = 4.42	⑦ = 4.37	⑧ = 4.37
⑨ = 4.42	⑩ =12.25	⑪ = 8.47	⑫ =10.65

MECHANICAL : 146.88 TOTAL

⑬ = 10.00	⑭ = 2.29	⑮ = 2.71	⑯ = 6.04
⑰ = 49.85	⑱ = 6.26	⑲ = 6.26	⑳ = 18.11
㉑ = 29.64	㉒ = 6.04	㉓ = 2.71	㉔ = 4.26
㉕ = 2.71			

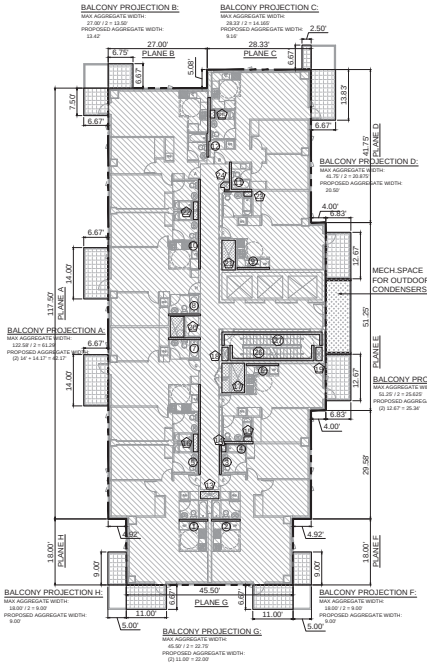
STAIRWELL AREA: 42.36 TOTAL

㉖ = 20.04 ㉗ 22.32

NET FLOOR AREA

RESIDENTIAL ZONING FLOOR AREA:
7671.83 - 267.45 = 7404.38

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)



FL7~20 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"

GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 7671.83

DEDUCTIBLE AREA: 267.45 TOTAL

PLUMBING CHASE AREA: 78.21 TOTAL

① = 3.92	② = 3.92	③ = 3.92	④ = 5.25
⑤ = 12.25	⑥ = 4.42	⑦ = 4.37	⑧ = 4.37
⑨ = 4.42	⑩ =12.25	⑪ = 8.47	⑫ =10.65

MECHANICAL : 146.88 TOTAL

⑬ = 10.00	⑭ = 2.29	⑮ = 2.71	⑯ = 6.04
⑰ = 49.85	⑱ = 6.26	⑲ = 6.26	⑳ = 18.11
㉑ = 29.64	㉒ = 6.04	㉓ = 2.71	㉔ = 4.26
㉕ = 2.71			

STAIRWELL AREA: 42.36 TOTAL

㉖ = 20.04 ㉗ 22.32

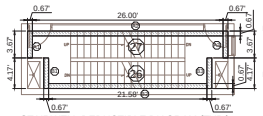
NET FLOOR AREA

RESIDENTIAL ZONING FLOOR AREA:
7671.83 - 267.45 = 7404.38

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)

FL6~20 DEDUCTIBLE AREA CALCULATION

SCALE: 1/8" = 1'-0"



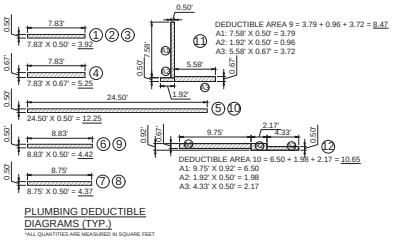
DEDUCTIBLE AREA 27: 2.45 + 17.42 + 2.45 = 22.32
A1: 0.67' X 3.67' = 2.45
A2: 26.00' X 0.67' = 17.42
A3: 0.67' X 3.67' = 2.45

DEDUCTIBLE AREA 26: 2.79 + 14.46 + 2.79 = 20.04
B1: 0.67' X 4.17' = 2.79
B2: 21.58' X 0.67' = 14.46
B3: 0.67' X 4.17' = 2.79

STAIRWELL DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

DEDUCTIBLE AREA A: 21.25 - 3.14 = 18.11
A1: 3'-9" X 5'-8" = 21.25
A2: π (1')² = 3.14

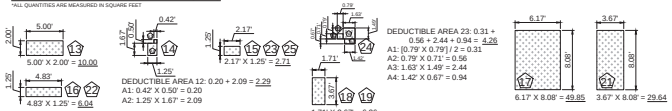
MECH DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



DEDUCTIBLE AREA 9 = 3.79 + 0.96 + 3.72 = 8.47
A1: 7.58' X 0.50' = 3.79
A2: 1.92' X 0.50' = 0.96
A3: 5.58' X 0.67' = 3.72

DEDUCTIBLE AREA 10 = 6.50 + 1.98 + 2.17 = 10.65
A1: 9.75' X 0.92' = 6.50
A2: 1.92' X 0.50' = 1.98
A3: 4.33' X 0.50' = 2.17

PLUMBING DEDUCTIBLE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



5.00' X 2.00' = 10.00

DEDUCTIBLE AREA 12: 0.20 + 2.09 = 2.29
A1: 0.42' X 0.50' = 0.20
A2: 1.25' X 1.67' = 2.09

2.17' X 1.25' = 2.71

4.83' X 1.25' = 6.04

DEDUCTIBLE AREA 23: 0.31 + 0.56 + 2.44 + 0.94 = 4.26
A1: [0.79' X 0.79'] / 2 = 0.31
A2: 0.79' X 0.71' = 0.56
A3: 1.63' X 1.49' = 2.44
A4: 1.42' X 0.67' = 0.94

1.71' X 3.67' = 6.26

6.17' X 8.08' = 49.85

3.67' X 8.08' = 29.64

MECHANICAL CHASE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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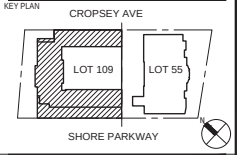


REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

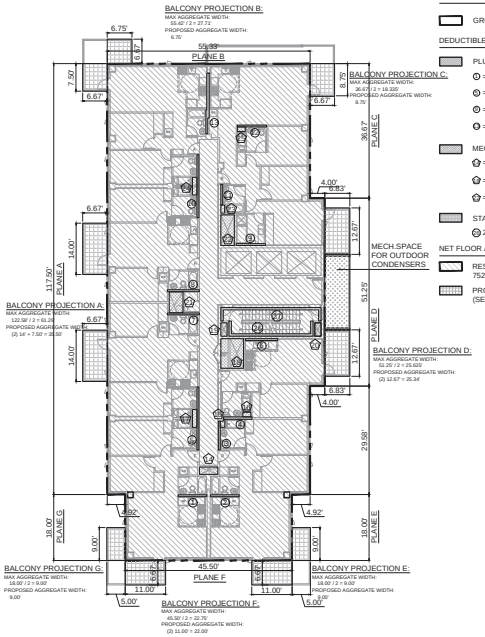
FL6 ~ FL10
ZONING DIAGRAM

SEAL & SIGNATURE

DATE:	12/02/2015
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	Z-109.00
PAGE No:	11 OF 38

FL21 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"



GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 7525.73

DEDUCTIBLE AREA: 253.46 TOTAL

PLUMBING CHASE AREA: 69.03 TOTAL

① = 3.92	② = 3.92	③ = 3.92	④ = 5.25
⑤ = 8.58	⑥ = 4.42	⑦ = 4.37	⑧ = 4.37
⑨ = 4.00	⑩ = 8.58	⑪ = 2.83	⑫ = 4.00
⑬ = 10.87			

MECHANICAL AREA: 142.07 TOTAL

⑭ = 10.00	⑮ = 2.29	⑯ = 2.71	⑰ = 6.04
⑱ = 49.84	⑲ = 6.26	⑳ = 6.26	㉑ = 18.11
㉒ = 29.64	㉓ = 2.17	㉔ = 6.04	㉕ = 2.71

STAIRWELL AREA: 42.36 TOTAL

㉖ = 20.04 ㉗ = 22.32

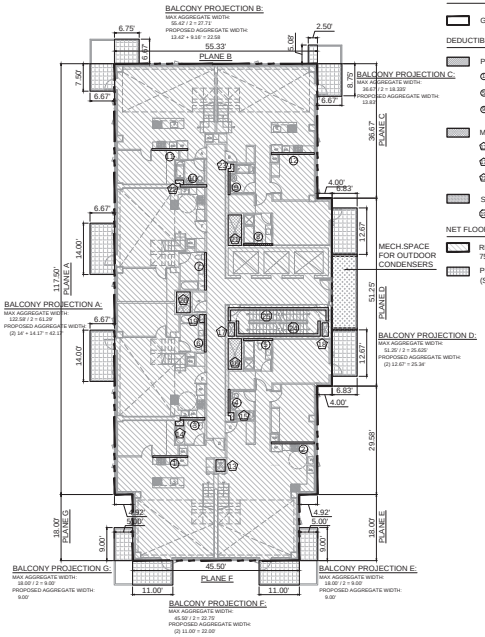
NET FLOOR AREA

RESIDENTIAL ZONING FLOOR AREA:
7525.73 - 245.52 = 7272.27

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)

FL22 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"



GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 7525.73

DEDUCTIBLE AREA: 210.24 TOTAL

PLUMBING CHASE AREA: 55.40 TOTAL

① = 4.79	② = 5.88	③ = 4.50	④ = 3.17
⑤ = 4.00	⑥ = 5.13	⑦ = 5.13	⑧ = 4.00
⑨ = 3.17	⑩ = 4.83	⑪ = 4.92	⑫ = 5.88

MECHANICAL AREA: 112.48 TOTAL

⑭ = 7.92	⑮ = 3.01	⑯ = 2.39	⑰ = 30.56
⑱ = 6.26	⑲ = 6.26	⑳ = 2.71	㉑ = 18.11
㉒ = 30.56	㉓ = 2.30	㉔ = 2.40	

STAIRWELL AREA: 42.36 TOTAL

㉕ = 20.04 ㉖ = 22.32

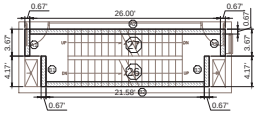
NET FLOOR AREA

RESIDENTIAL ZONING FLOOR AREA:
7525.73 - 210.24 = 7315.49

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)

FL21 DEDUCTIBLE AREA CALCULATION

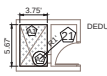
SCALE: 1/4" = 1'-0"



DEDUCTIBLE AREA 27: 2.45 + 17.42 + 2.45 = 22.32
A1: 0.67' X 3.67' = 2.45
A2: 26.00' X 0.67' = 17.42
A3: 0.67' X 3.67' = 2.45

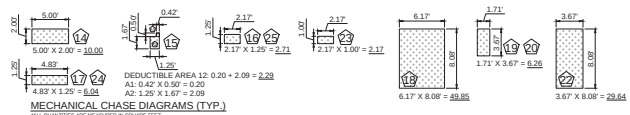
DEDUCTIBLE AREA 26: 2.79 + 14.46 + 2.79 = 20.04
B1: 0.67' X 4.17' = 2.79
B2: 21.58' X 0.67' = 14.46
B3: 0.67' X 4.17' = 2.79

STAIRWELL DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



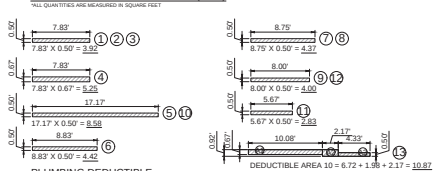
DEDUCTIBLE AREA 21: 21.25 - 3.14 = 18.11
A1: 3'-9" X 5'-8" = 21.25
A2: π (1')² = 3.14

MECH DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



DEDUCTIBLE AREA 12: 0.20 + 2.09 = 2.29
A1: 0.42' X 0.50' = 0.20
A2: 1.25' X 1.67' = 2.09

MECHANICAL CHASE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

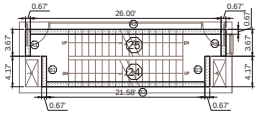


DEDUCTIBLE AREA 10 = 6.72 + 1.98 + 2.17 = 10.87
A1: 10.08' X 0.92' = 6.72
A2: 1.92' X 0.50' = 1.98
A3: 4.33' X 0.50' = 2.17

PLUMBING DEDUCTIBLE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

FL22 DEDUCTIBLE AREA CALCULATION

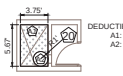
SCALE: 1/4" = 1'-0"



DEDUCTIBLE AREA 27: 2.45 + 17.42 + 2.45 = 22.32
A1: 0.67' X 3.67' = 2.45
A2: 26.00' X 0.67' = 17.42
A3: 0.67' X 3.67' = 2.45

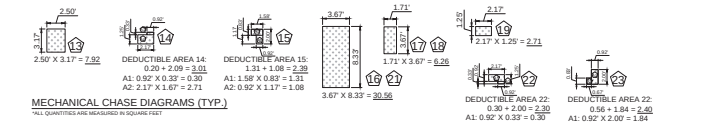
DEDUCTIBLE AREA 26: 2.79 + 14.46 + 2.79 = 20.04
B1: 0.67' X 4.17' = 2.79
B2: 21.58' X 0.67' = 14.46
B3: 0.67' X 4.17' = 2.79

STAIRWELL DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



DEDUCTIBLE AREA 20: 21.25 - 3.14 = 18.11
A1: 3'-9" X 5'-8" = 21.25
A2: π (1')² = 3.14

MECH DEDUCTIBLE DIAGRAM (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



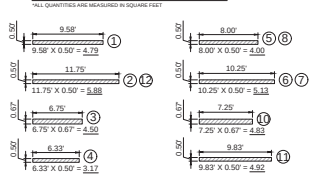
DEDUCTIBLE AREA 14:
0.20 + 2.09 = 3.01
A1: 0.92' X 0.33' = 0.30
A2: 2.17' X 1.67' = 2.71

DEDUCTIBLE AREA 15:
1.31 + 1.08 = 2.39
A1: 1.58' X 0.83' = 1.31
A2: 0.92' X 1.17' = 1.08

DEDUCTIBLE AREA 22:
0.30 + 2.00 = 2.30
A1: 0.92' X 0.33' = 0.30
A2: 2.17' X 0.92' = 2.00

DEDUCTIBLE AREA 22:
0.56 + 1.84 = 2.40
A1: 0.92' X 2.00' = 1.84
A2: 0.67' X 0.83' = 0.56

MECHANICAL CHASE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



PLUMBING DEDUCTIBLE DIAGRAMS (TYP.)
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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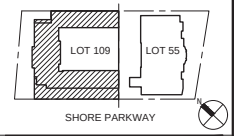
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

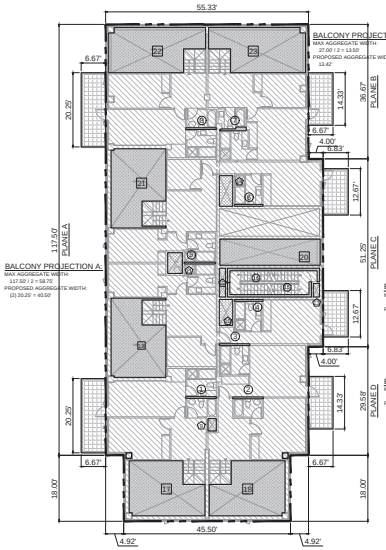
FL21~22 ZONING DIAGRAM

SEAL & SIGNATURE

DATE:	12/02/2015
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	Z-110.00
PAGE No:	12 OF 38

FL23 FLOOR AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"



GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 7525.73

DEDUCTIBLE AREA: 2037.56 TOTAL

PLUMBING CHASE AREA: 33.61 TOTAL
① = 4.16 ② = 4.16 ③ = 4.16 ④ = 3.88
⑤ = 4.25 ⑥ = 3.88 ⑦ = 4.96 ⑧ = 4.16

MECHANICAL AREA: 106.46 TOTAL
⑨ = 7.58 ⑩ = 25.98 ⑪ = 22.68 ⑫ = 13.39
⑬ = 6.26 ⑭ = 30.57

STAIRWELL AREA: 40.91 TOTAL
⑮ = 19.88 ⑯ = 21.03

FLOOR OPENING AREA: 1856.58 TOTAL
⑰ = 270.07 ⑱ = 270.07 ⑲ = 276.96 ⑳ = 193.50
㉑ = 276.96 ㉒ = 284.51 ㉓ = 284.51

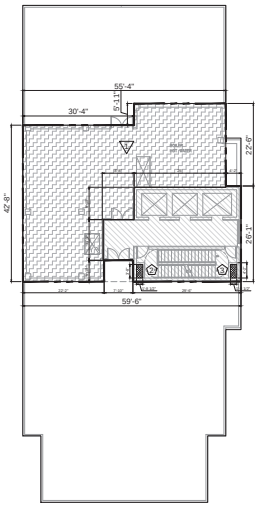
NET FLOOR AREA

NET RESIDENTIAL ZONING FLOOR AREA:
7525.73 - 2037.56 = 5488.17

PROPOSED BALCONY
(SEE DIAGRAM FOR ZR 23-132 COMPLIANCE)

ROOF AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET
SCALE: 1/16" = 1'-0"



GROSS BUILDING AREA

GROSS RESIDENTIAL BUILDING AREA = 2571.76

DEDUCTIBLE AREA: 1736.67 TOTAL

MECHANICAL ROOM AREA: 1724.11 TOTAL
▽ = 1724.11

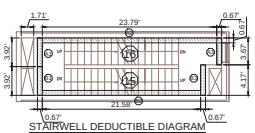
MECHANICAL SPACE AREA: 12.56 TOTAL
⑫ = 6.28 ⑭ = 6.28

NET FLOOR AREA

NET RESIDENTIAL ZONING FLOOR AREA:
2571.76 - 1736.67 = 835.09

FL23 DEDUCTIBLE AREA CALCULATION

SCALE: 1/8" = 1'-0"

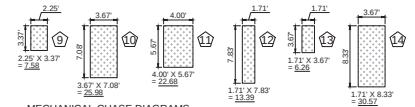


DEDUCTIBLE AREA 16: 2.63 + 15.94 + 2.46 = 21.03
A1: 0.67' X 3.92' = 2.63
A2: 23.79' X 0.67' = 15.94
A3: 0.67' X 3.67' = 2.46

DEDUCTIBLE AREA 15: 2.63 + 14.46 + 2.79 = 19.88
A1: 0.67' X 3.92' = 2.63
A2: 21.58' X 0.67' = 14.46
A3: 0.67' X 4.17' = 2.79

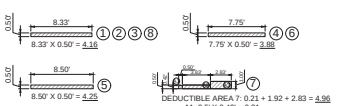
STAIRWELL DEDUCTIBLE DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



MECHANICAL CHASE DIAGRAMS

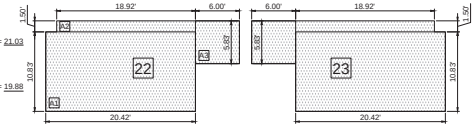
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



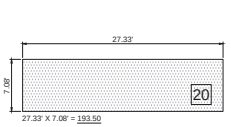
PLUMBING DEDUCTIBLE DIAGRAMS

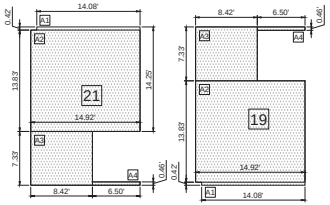
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

DEDUCTIBLE AREA 7: 0.21 + 1.92 + 2.83 = 4.96
A1: 0.5' X 0.42' = 0.21
A2: 3.83' X 0.50' = 1.92
A3: 2.83' X 1.00' = 2.83



DEDUCTIBLE AREA 22/23: 221.15 + 28.38 + 34.98 = 284.51
A1: 20.42' X 10.83' = 221.15
A2: 18.92' X 1.50' = 28.38
A3: 6.00' X 5.83' = 34.98

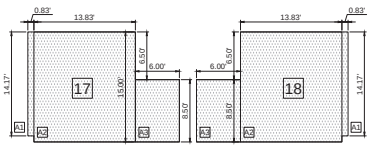




DEDUCTIBLE AREA 19/21: 5.91 + 206.34 + 61.72 + 2.99 = 276.96
A1: 14.08' X 0.42' = 5.91
A2: 14.92' X 13.83' = 206.34
A3: 8.42' X 7.33' = 61.72
A4: 6.50' X 0.46' = 2.99

FLOOR OPENING DIAGRAMS

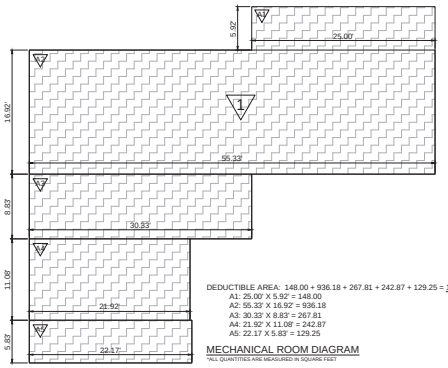
*ALL QUANTITIES ARE MEASURED IN SQUARE FEET



DEDUCTIBLE AREA 17/18: 11.76 + 207.31 + 51.00 = 270.07
A1: 0.83' X 14.17' = 11.76
A2: 13.83' X 15.00' = 207.31
A3: 6.00' X 8.50' = 51.00

ROOF DEDUCTIBLE AREA CALCULATION

SCALE: 1/8" = 1'-0"



DEDUCTIBLE AREA: 148.00 + 936.18 + 267.81 + 242.87 + 129.25 = 1724.11
A1: 25.00' X 5.92' = 148.00
A2: 55.33' X 16.92' = 936.18
A3: 30.33' X 8.83' = 267.81
A4: 21.92' X 11.08' = 242.87
A5: 22.17' X 5.83' = 129.25

MECHANICAL ROOM DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

MECHANICAL CHASE DIAGRAMS

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

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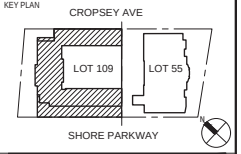
KEY PLAN



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PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL23 ~ ROOF ZONING DIAGRAM

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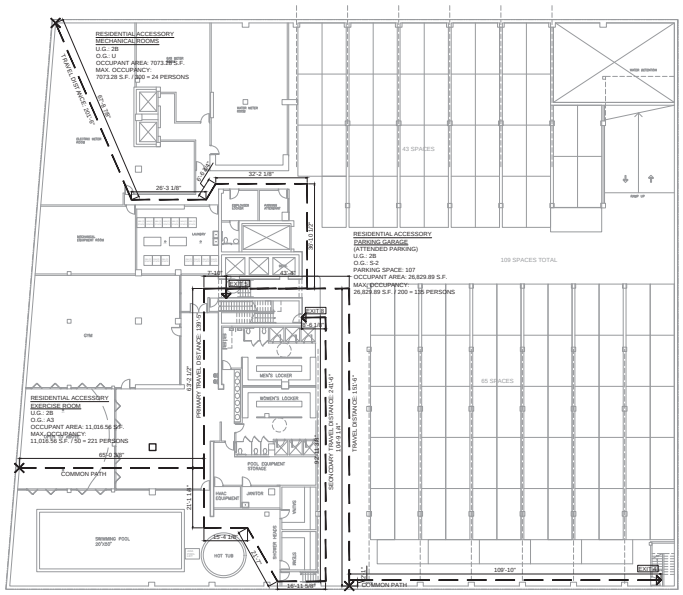
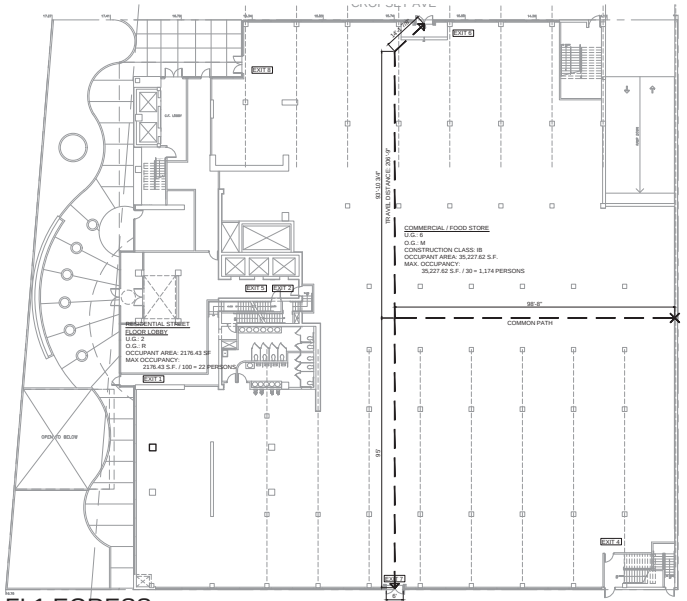
EGRESS CAPACITY PER OCCUPANCY (TABLE 1005.1) FULLY SPRINKLERED

EXIT ACCESS TRAVEL DISTANCE (TABLE 1015.1) FULLY SPRINKLERED

FLOOR NUMBER	OCCUPANCY GROUP	MAX OCCUPANT LOAD	REQUIRED EXIT DOOR WIDTH PER INDEX (0.2)	PROPOSED EXIT DOOR WIDTH	REQUIRED EXIT STAIR WIDTH PER INDEX (0.3)	PROPOSED EXIT STAIR WIDTH	PERMITTED MAX. TRAVEL DISTANCE	PROPOSED MAX. TRAVEL DISTANCE	PERMITTED MAX. COMMON PATH TRAVEL DISTANCE	PROPOSED MAX. COMMON PATH TRAVEL DISTANCE	PERMITTED DEAD END CORRIDOR LENGTH	PROPOSED DEAD END CORRIDOR LENGTH
CELLAR	PARKING GARAGE (S-2)	26,829.89 SF / 200 = 135 PERSONS	380 / 3 EXITS = 126.67 PERSONS 126.67 x 0.2 = 25.33" PER DOOR	EXIT-4 DOOR = 36" EXIT-5 DOOR = 36" EXIT-8 DOOR = 36"	380 / 2 EXITS = 126.67 PERSONS 126.67 x 0.3 = 38" PER STAIR	EXIT-4 STAIR = 44" EXIT-5 STAIR = 44" EXIT-8 STAIR = 44"	250'-0"	151'-6"	100'-0"	2'-1"	50'-0"	(N/A)
	UTILITY ROOMS (U)	7073.28 SF / 300 = 24 PERSONS										
	GYMNASIUM (A3)	11,016.56 S.F. / 50 = 221 PERSONS					PRIMARY: 150'	139'-5"	75'-0"	65'-0"	50'-0"	(N/A)
	TOTAL OCCUPANTS: 135+ 24 + 221 = 380						SECONDARY: 250'	241'-6"				
FL1	COMMERCIAL/ STORE (M)	35,227.62 SF / 30 = 1174 PERSONS	1174 x 0.2 = 235"	EXIT-4 DOOR = 36" EXIT-6 DOOR = 72" EXIT-7 DOOR = 72" EXIT-8 DOOR = 72"	FLOOR ON GRADE NOT APPLICABLE	FLOOR ON GRADE NOT APPLICABLE	300'-0"	206'-9"	100'-0"	98'-8"	50'-0"	(N/A)
FL2	ACCESSORY PARKING GARAGE / MECHANICAL (S-2)	37,045.59 SF / 200 = 185 PERSONS	185 / 3 EXITS = 61.67 PERSONS 61.67 x 0.2 = 12.33" PER DOOR	EXIT-1 DOOR = 36" EXIT-3 DOOR = 36" EXIT-4 DOOR = 36"	185 / 3 EXITS = 61.67 PERSONS 61.67 x 0.3 = 18.5" PER STAIR	EXIT-1 STAIR = 44" EXIT-3 STAIR = 44" EXIT-4 STAIR = 44"	250'-0"	176'-7"	100'-0"	93'-3"	50'-0"	(N/A)
FL3	AMBULATORY DIAGNOSTIC (B)	37,590.86 SF / 100 = 376 PERSONS	376 / 3 EXITS = 125.33 PERSONS 125.33 x 0.2 = 25.07" PER DOOR	EXIT-1 DOOR = 36" EXIT-3 DOOR = 36" EXIT-4 DOOR = 36"	376 / 3 EXITS = 125.33 PERSONS 125.33 x 0.3 = 37.6" PER STAIR	EXIT-1 STAIR = 44" EXIT-3 STAIR = 44" EXIT-4 STAIR = 44"	300'-0"	170'-0"	100'-0"	98'-8"	50'-0"	(N/A)
FL4	RESIDENTIAL (R-2) TOWNHOUSES	120 PERSONS (SEE A-105)		EXIT-1 DOOR = 36" EXIT-3 DOOR = 48"		EXIT-1 STAIR = 44" EXIT-3 STAIR = 84"	200'-0"	149'-7"	125'-0"	0'-0"	(N/A)	(N/A)
	ROOF DECK (A-5) ACCESSIBLE TO RESIDENTS ONLY	65 PERSONS (SEE A-004)					PRIMARY: 200'	149'-7"	30'-0"	0'-0"	(N/A)	(N/A)
							SECONDARY: 300'	132'-8"				
		185 PERSONS TOTAL	185 x 0.2 = 37" REQUIRED COMBINED WIDTH	84" PROPOSED COMBINED WIDTH	185 x 0.3 = 56" REQUIRED COMBINED WIDTH	128" PROPOSED COMBINED WIDTH						
FL5	RESIDENTIAL (R-2)	13 PERSONS	13 / 2 EXITS = 6.5 PERSONS 6.5 x 0.2 = 1.3" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	13 / 2 EXITS = 6.5 PERSONS 6.5 x 0.3 = 1.95" PER STAIR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	200'-0"	91'-9"	125'-0"	89'-3"	80'-0"	48'-5"
FL6	RESIDENTIAL (R-2)	22 PERSONS	22 / 2 EXITS = 11 PERSONS 11 x 0.2 = 2.2" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	22 / 2 EXITS = 11 PERSONS 11 x 0.3 = 3.3" PER STAIR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	200'-0"	91'-2"	125'-0"	87'-8"	80'-0"	47'-0"
FL7~20	RESIDENTIAL (R-2)	22 PERSONS PER FLOOR	22 / 2 EXITS = 11 PERSONS 11 x 0.2 = 2.2" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	22 / 2 EXITS = 11 PERSONS 11 x 0.3 = 3.3" PER STAIR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	200'-0"	91'-2"	125'-0"	87'-8"	80'-0"	47'-0"
FL21	RESIDENTIAL (R-2)	21 PERSONS	21 / 2 EXITS = 10.5 PERSONS 10.5 x 0.2 = 2.1" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	21 / 2 EXITS = 10.5 PERSONS 10.5 x 0.3 = 3.15" PER STAIR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	200'-0"	91'-2"	125'-0"	87'-8"	80'-0"	47'-0"
FL22~23	RESIDENTIAL (R-2) DUPLEX UNITS	26 PERSONS	26 / 2 EXITS = 13 PERSONS 13 x 0.2 = 2.6" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	26 / 2 EXITS = 13 PERSONS 13 x 0.3 = 3.9" PER DOOR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	200'-0"	125'-6"	125'-0"	117'-9"	80'-0"	40'-6"
ROOF	UTILITY ROOMS (U)	1424.23 / 300 = 5 PERSONS	5 / 2 EXITS = 2.5 PERSONS 2.5 x 0.2 = 0.5" PER DOOR	EXIT-1 DOOR = 36" EXIT-2 DOOR = 36"	5 / 2 EXITS = 2.5 PERSONS 2.5 x 0.3 = 0.75" PER DOOR	EXIT-1 STAIR = 44" EXIT-2 STAIR = 44"	250'-0"	45'-5"	100'-0"	42'-11"	50'-0"	(N/A)



CELLAR EGRESS



FL1 EGRESS

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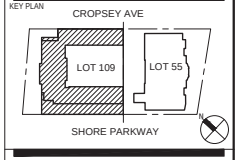

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PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

EGRESS DIAGRAMS
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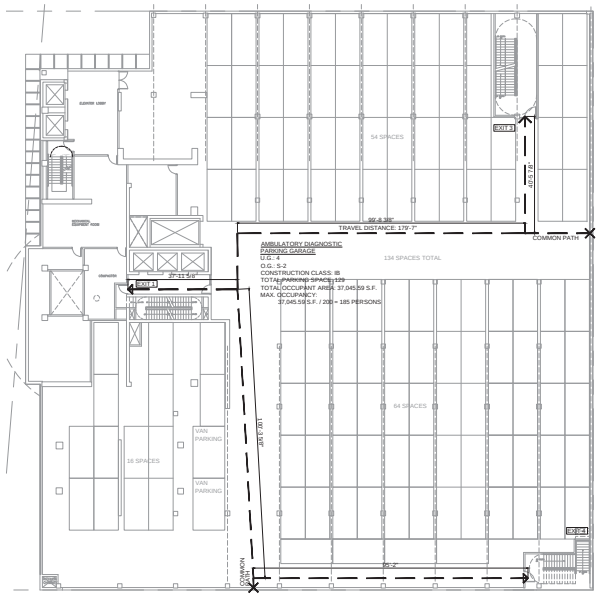

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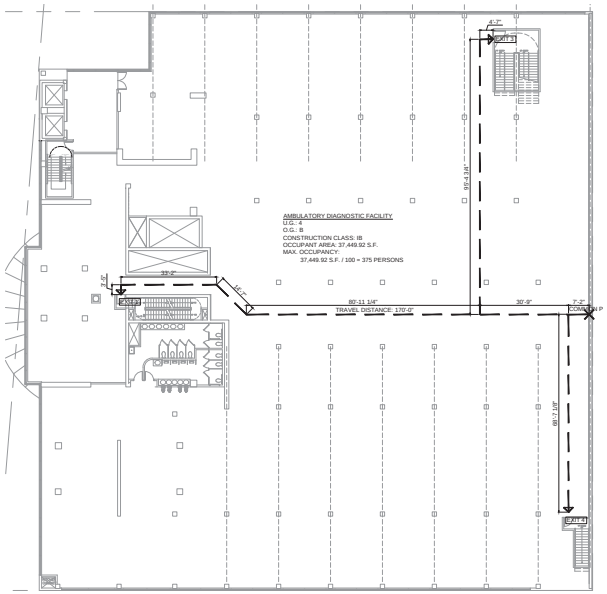

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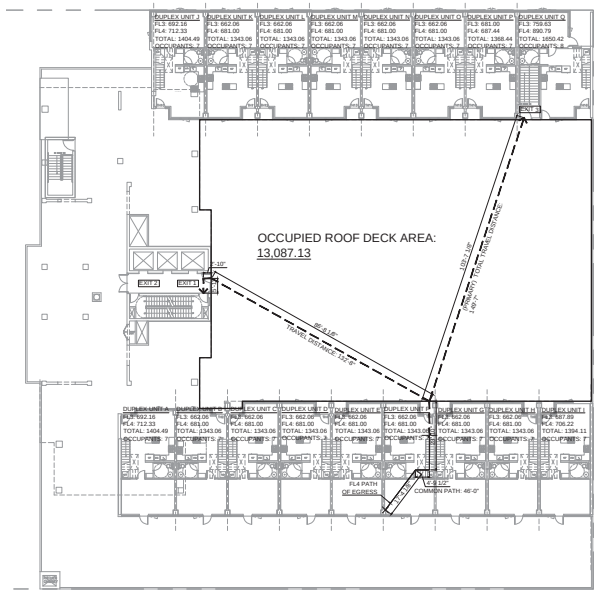

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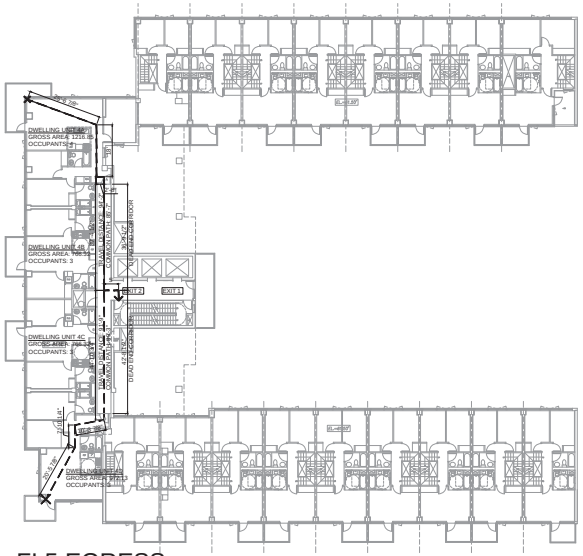

FL5 EGRESS

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KEY PLAN

REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
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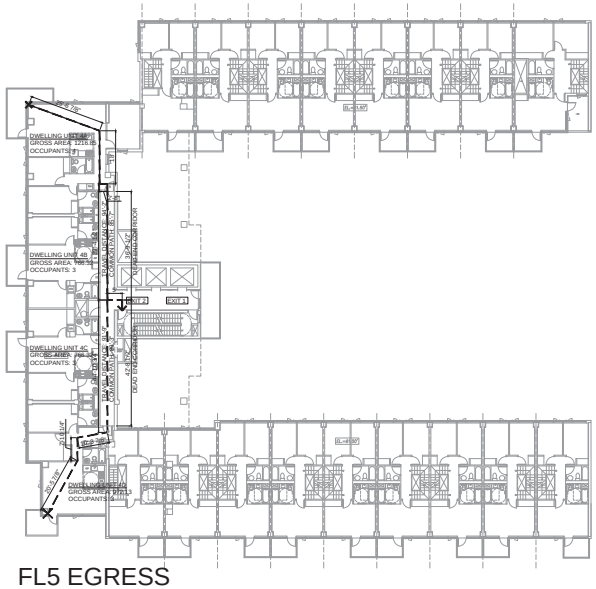

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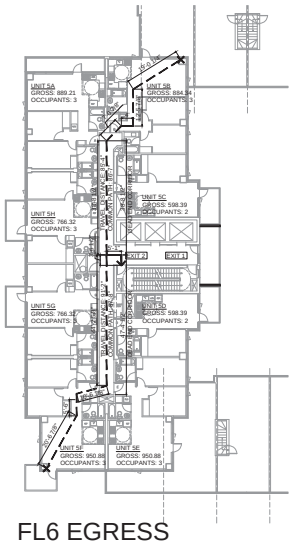

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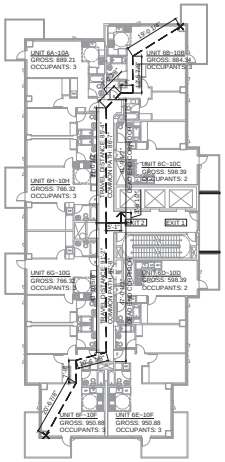
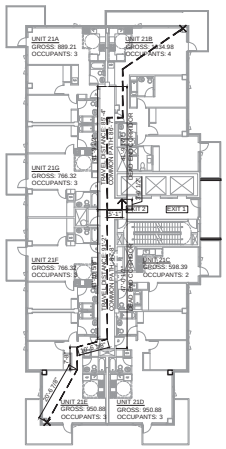


FL7~20 EGRESS



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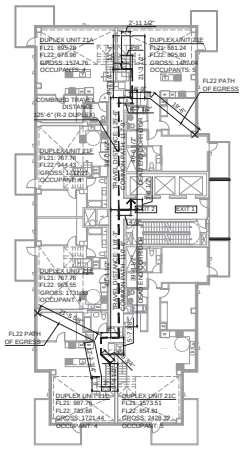
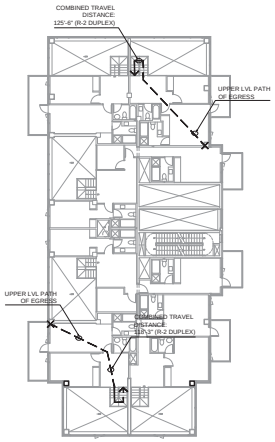
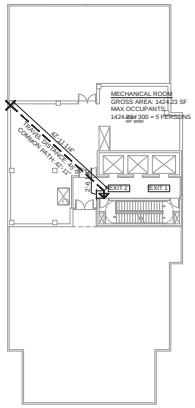


FL22 EGRESS



FL23 EGRESS



ROOF EGRESS

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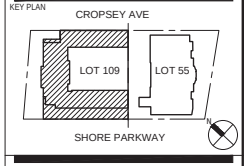

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FL5~24 EGRESS DIAGRAMS

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DWG No:	A-003.00
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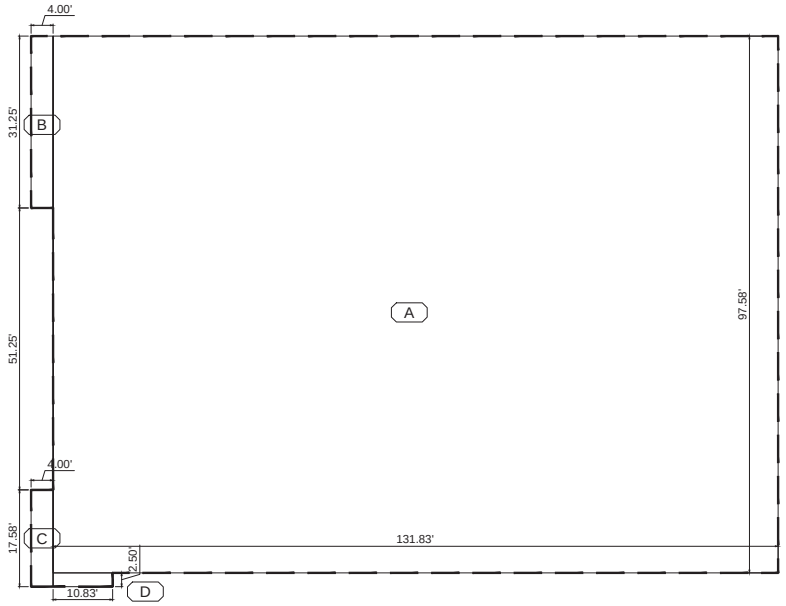

ROOF DECK AREA DIAGRAM

*ALL QUANTITIES ARE MEASURED IN SQUARE FEET

GROSS DECK AREA

GROSS DECK AREA = 13,087.13

A = 12,864.77

B = 124.99

C = 70.19

D = 27.18

NET OCCUPANT AREA

NET OCCUPIED ROOF DECK AREA:
12,864.77 + 124.99 + 70.19 + 27.18 = 13,087.13

OCCUPANT LOAD : 13,087.13 / 200 = 65 PERSONS
DOOR WIDTH: 65 X 0.2 = 13" TOTAL
STAIR WIDTH: 65 X 0.3 = 19.5" TOTAL

SEE A-001 FOR EGRESS CALCULATIONS

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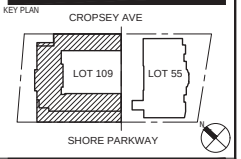
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

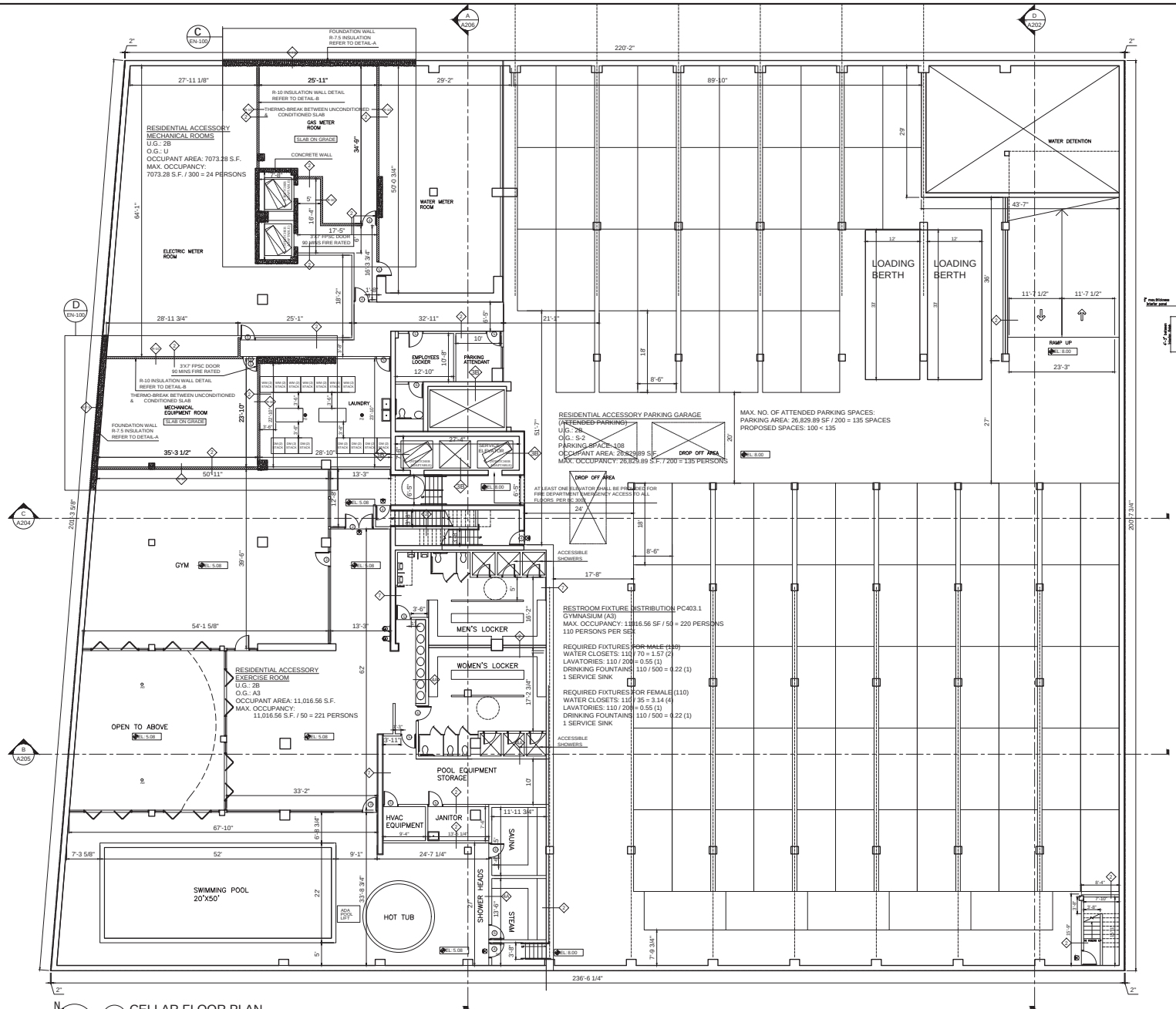
BROOKLYN, NEW YORK

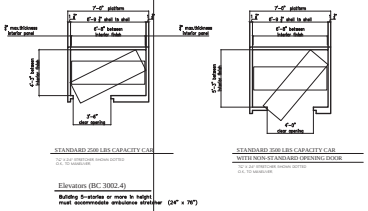
ROOF DECK OCCUPANT LOAD

SEAL & SIGNATURE

DATE: 12/02/2015
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

A-004.00





1 CELLAR FLOOR PLAN
SCALE: NTS
ELEVATION: +5.00 (GYM) / +8.00 (PARKING)

0' 5' 10' 20' 50'

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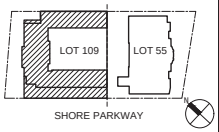
4. SEE SITE CONNECTION PROPOSAL FOR SEWER CONNECTION

5. COORDINATE ELEVATOR SHAFT, PIT, EQUIPMENT AND MACHINE ROOM WITH MANUFACTURER.

KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

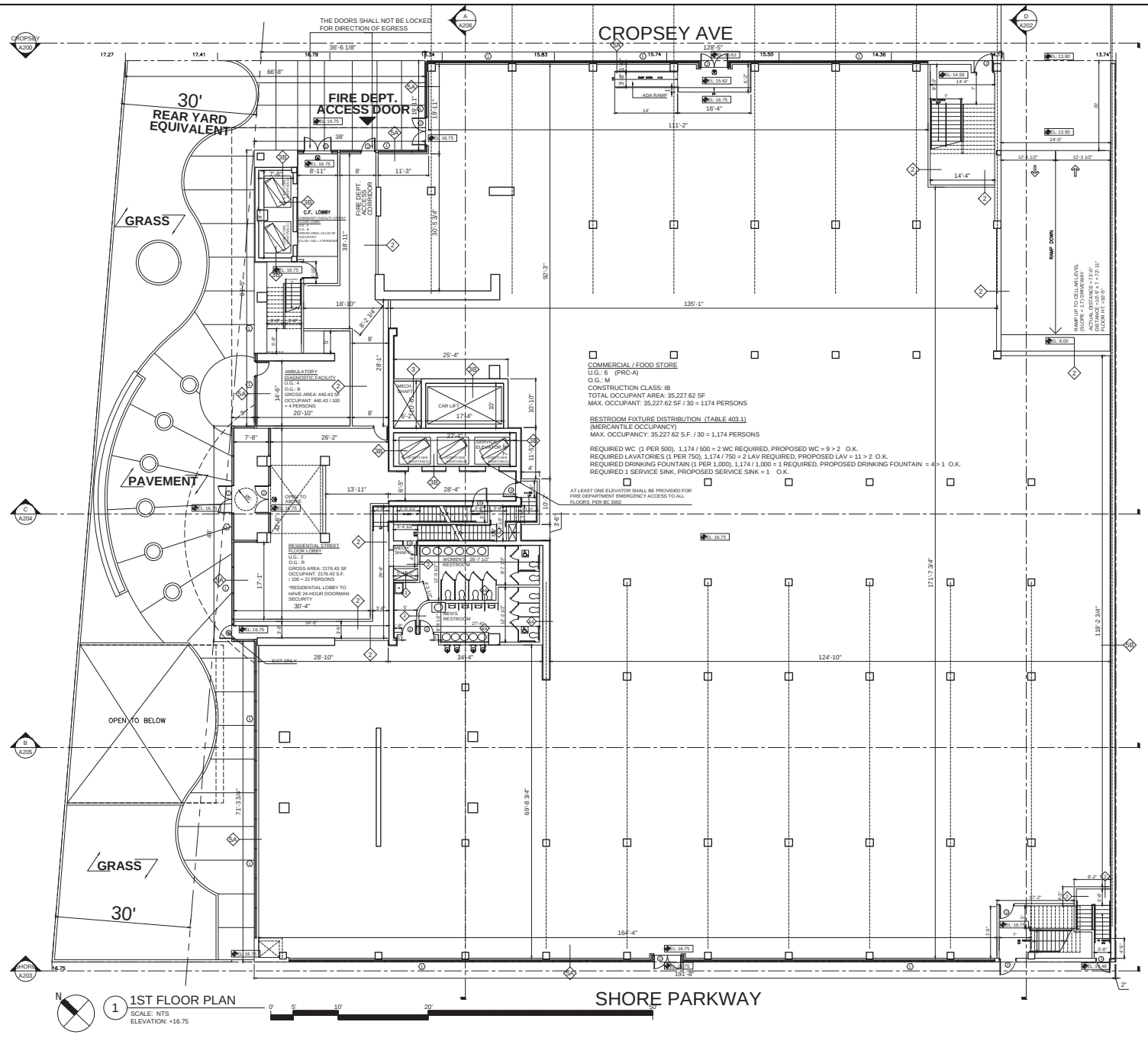
2286 CROPSEY AVE
BROOKLYN, NEW YORK

CELLAR PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	

A-101.00



1 1ST FLOOR PLAN
SCALE: NTS
ELEVATION: +16.75

0' 5' 10' 20' 30'

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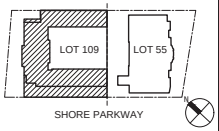
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

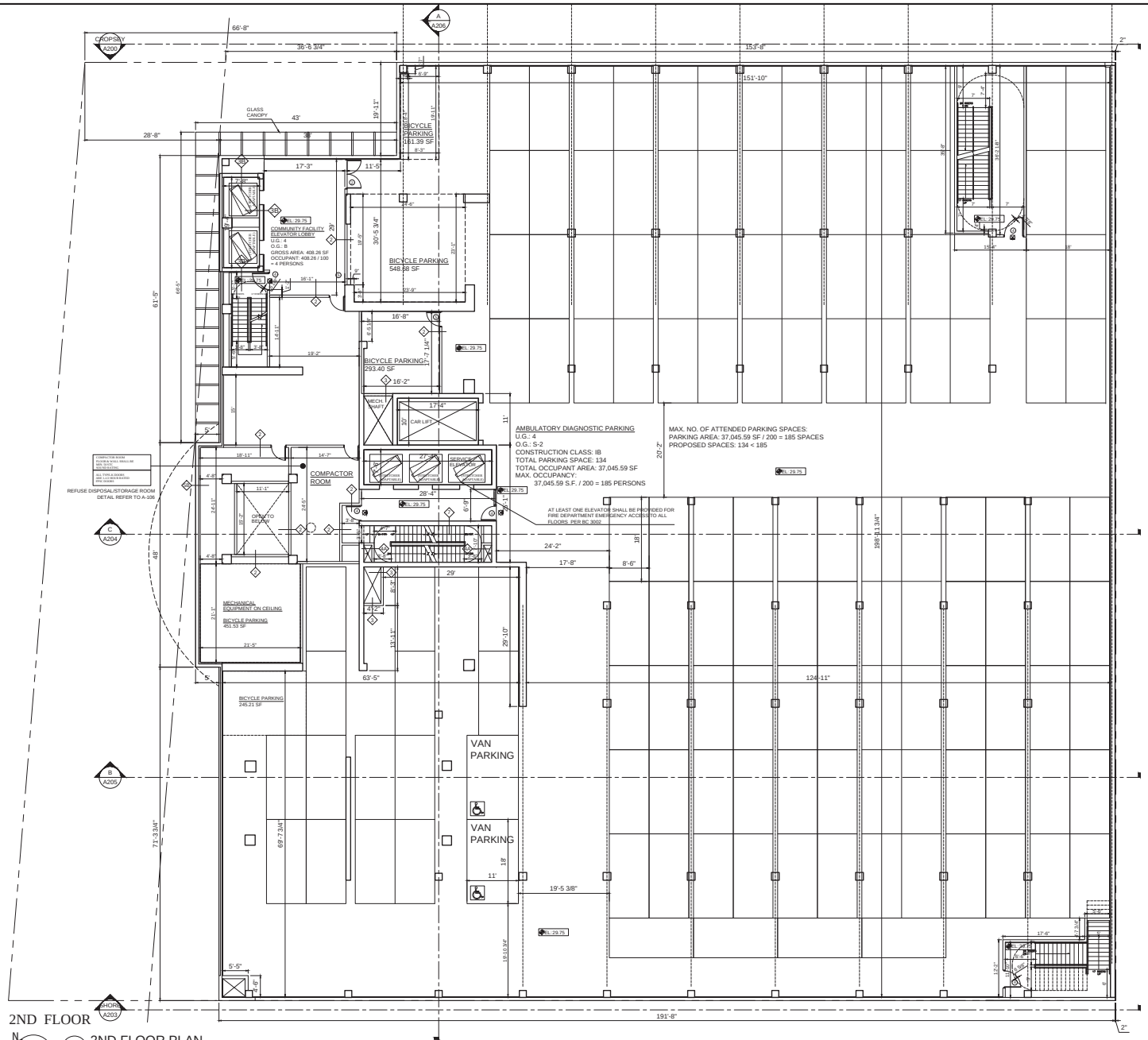
FL1 PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	

A-102.00

PAGE No: 18 OF 38



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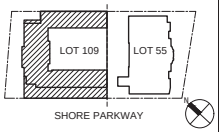
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

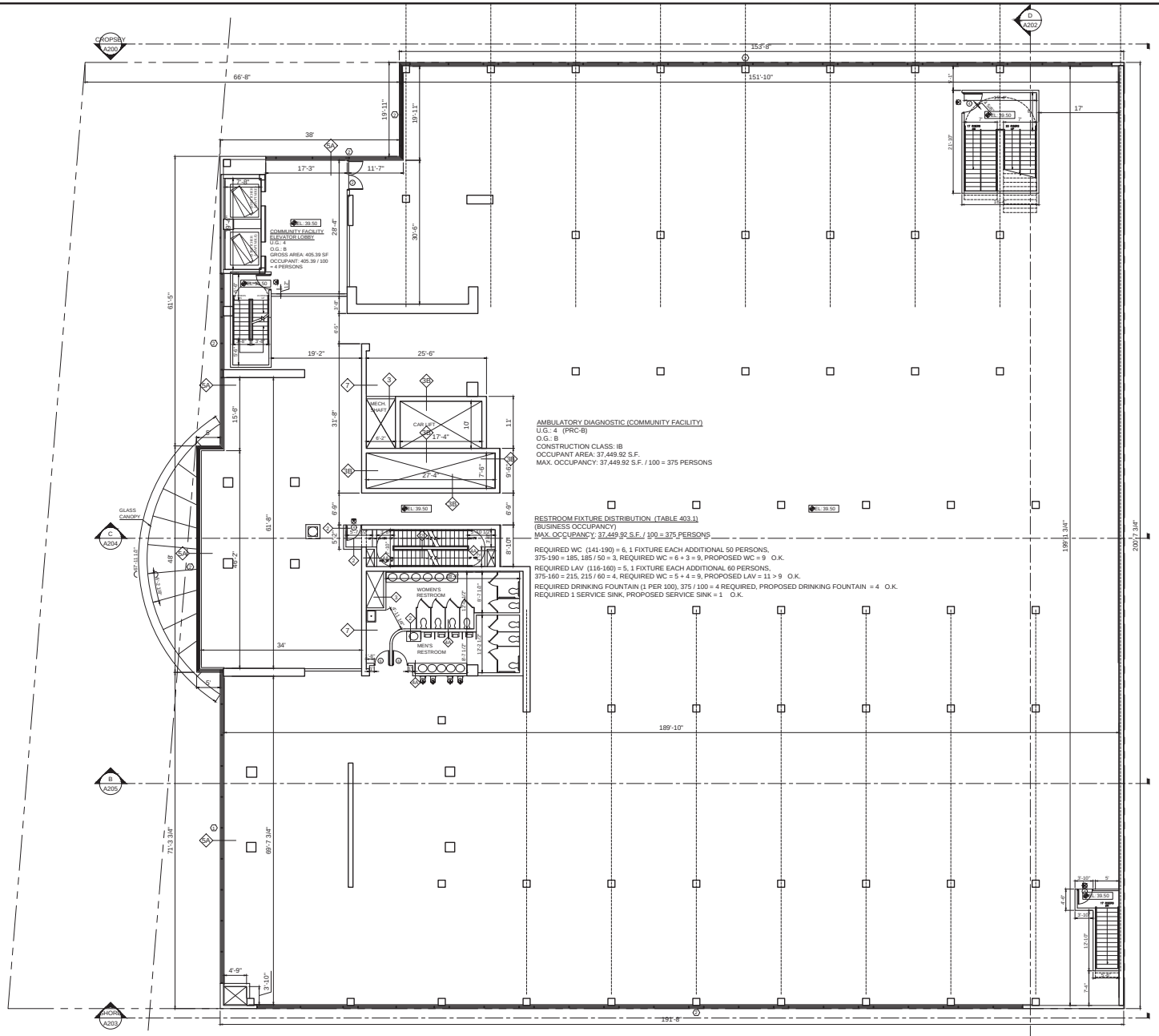
2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL2 PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	

A-103.00



1 3RD FLOOR PLAN
SCALE: NTS
ELEVATION: +39.50

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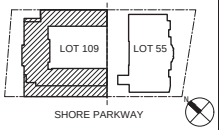
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL3 PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	

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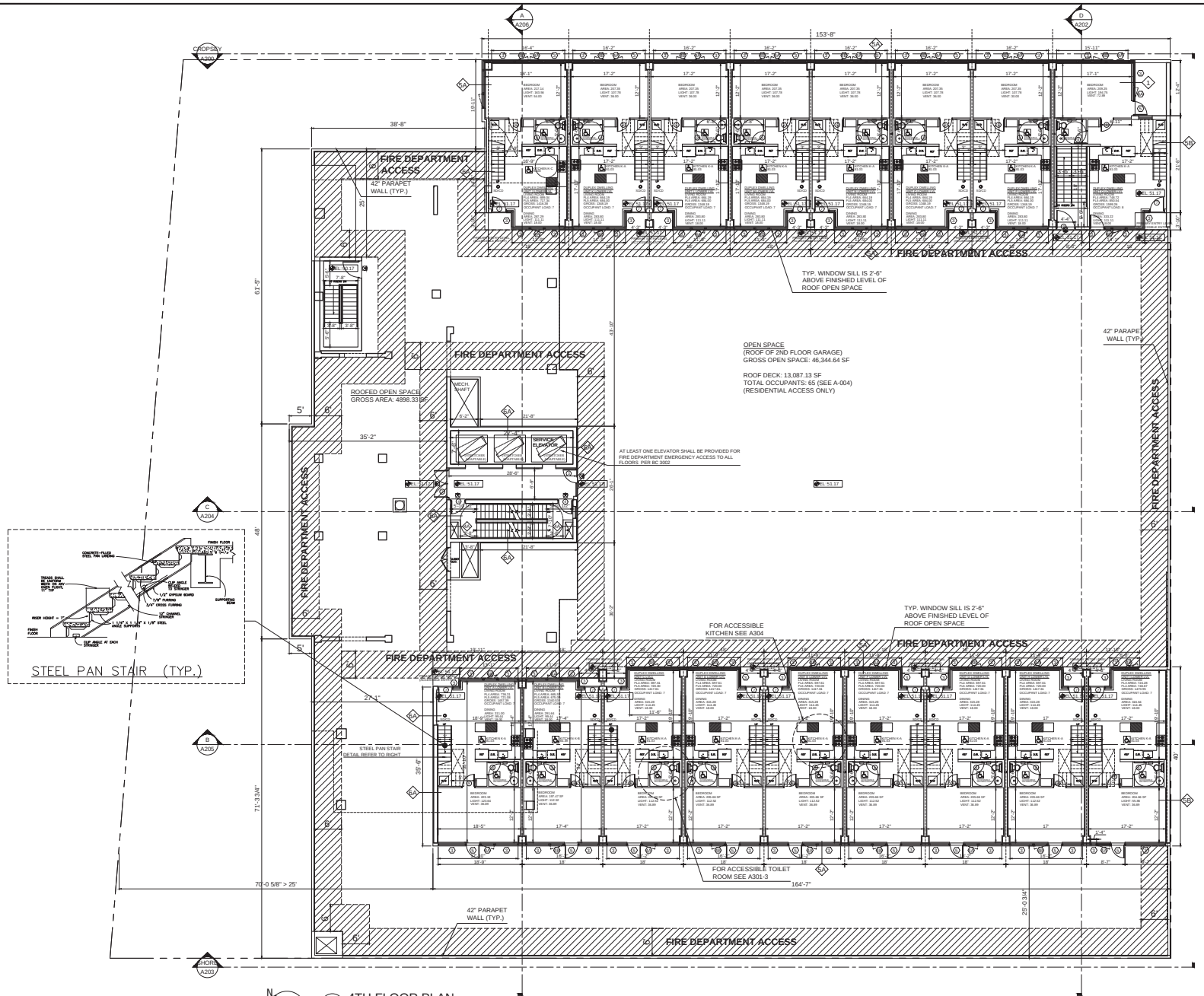
PAGE No: 20 OF 38



1 4TH FLOOR PLAN
SCALE: NTS
ELEVATION: +50.17

0' 5' 10' 20' 50'

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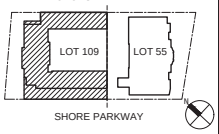
KEY PLAN



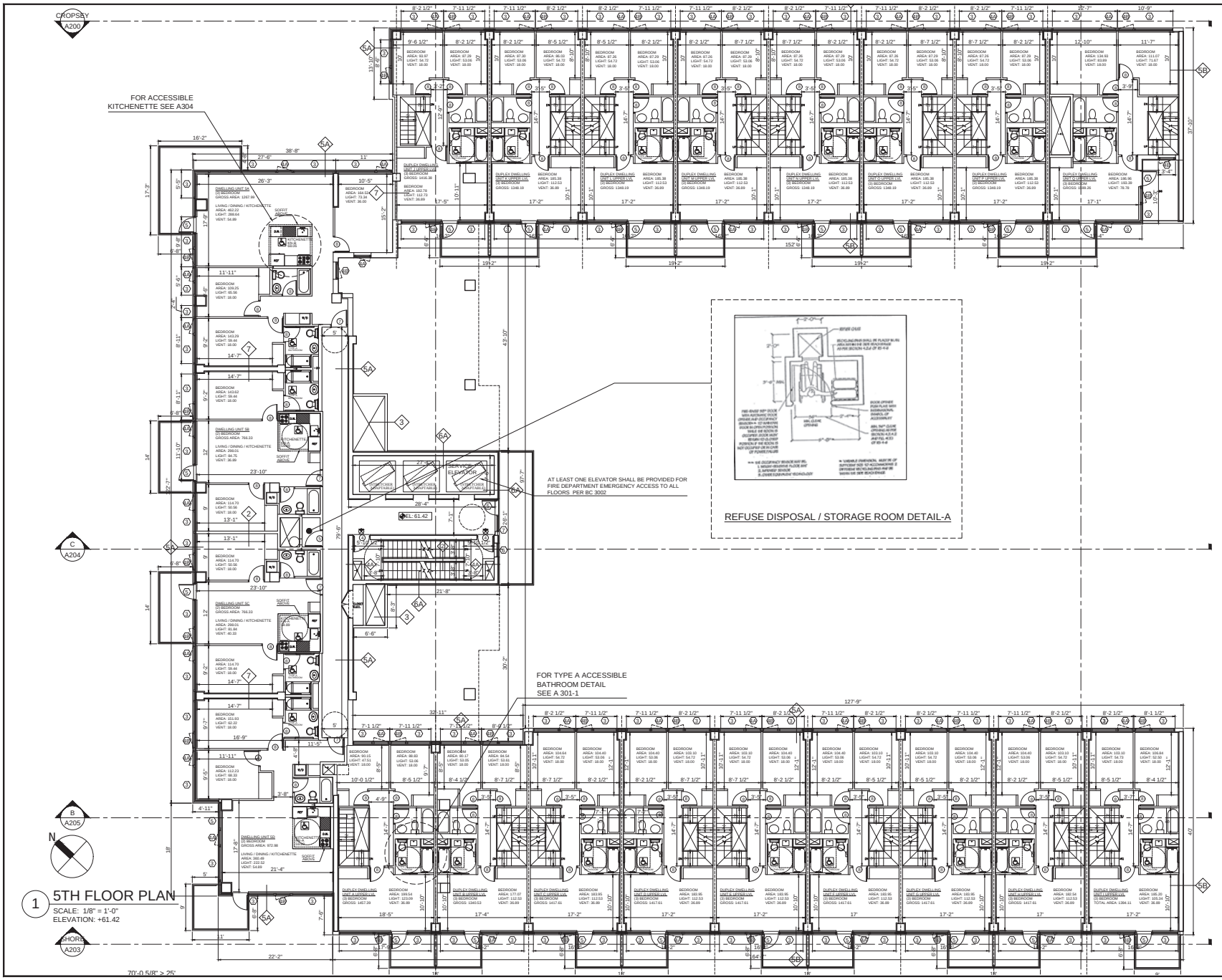
REV.#	DATE	DESCRIPTION

PROJECT
2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL4 PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	A-105.00
PAGE No:	21 OF 38



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KEY PLAN

REV.#	DATE	DESCRIPTION

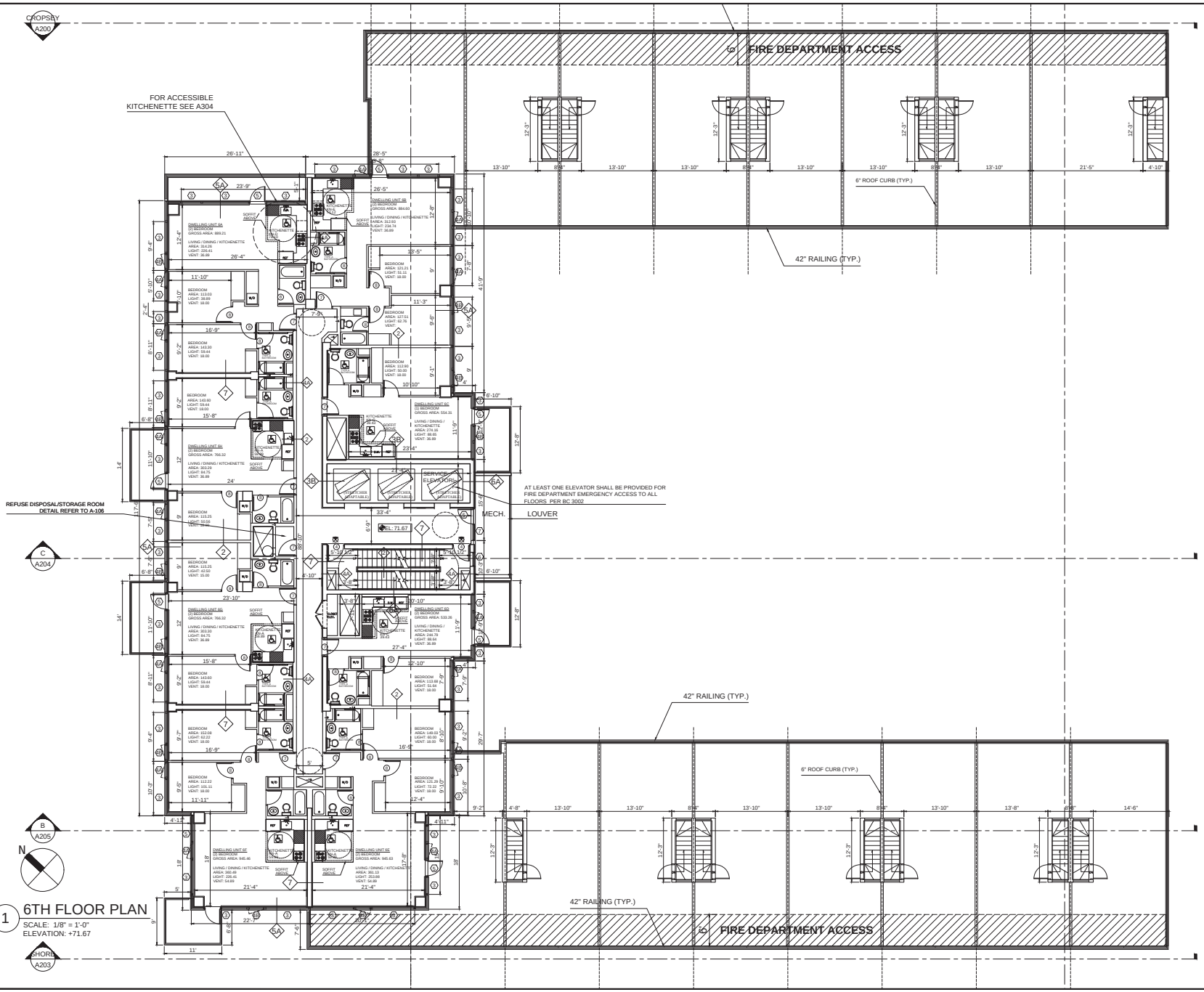
PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL5 PLAN

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	A-106.00
PAGE No:	22 OF 38



1 6TH FLOOR PLAN
SCALE: 1/8" = 1'-0"
ELEVATION: +71.67

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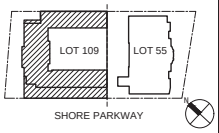
KEY PLAN



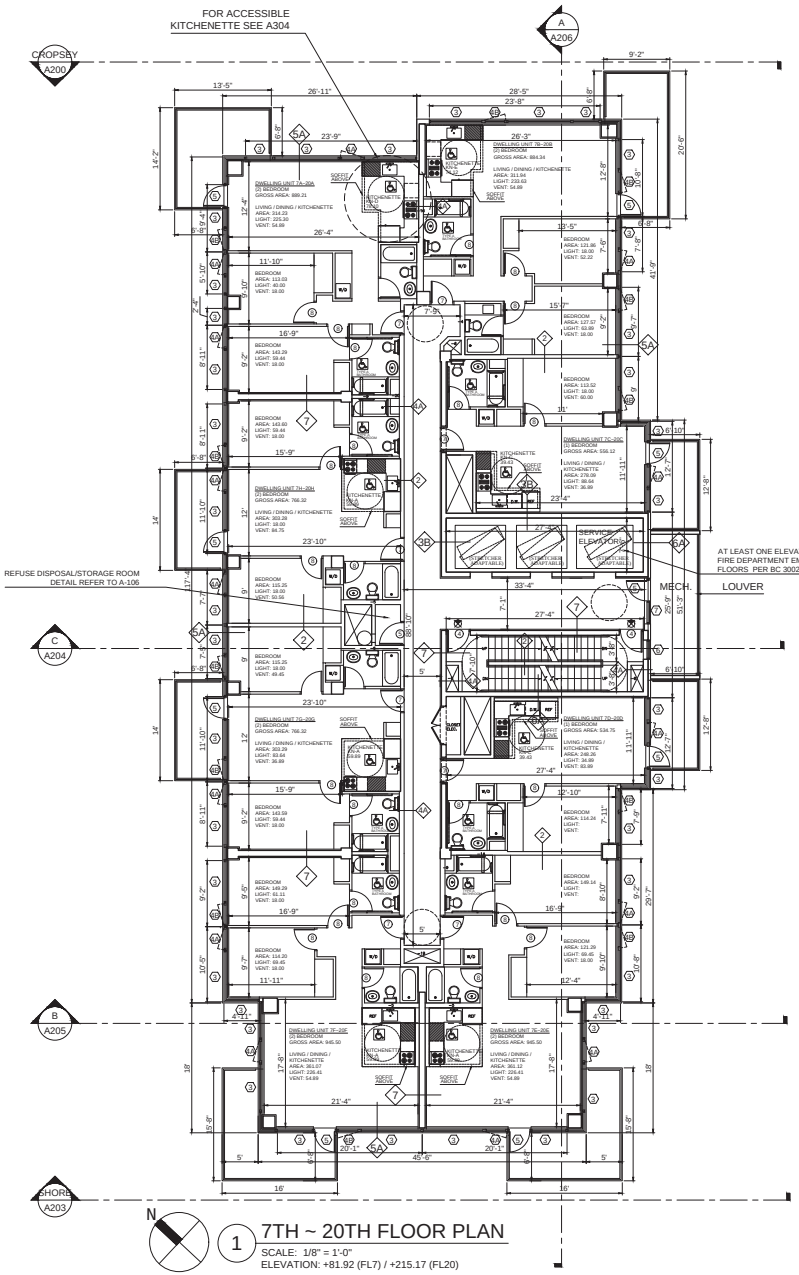
REV.#	DATE	DESCRIPTION

PROJECT
2286 CROPSEY AVE
BROOKLYN, NEW YORK

FL6 PLAN

SEAL & SIGNATURE

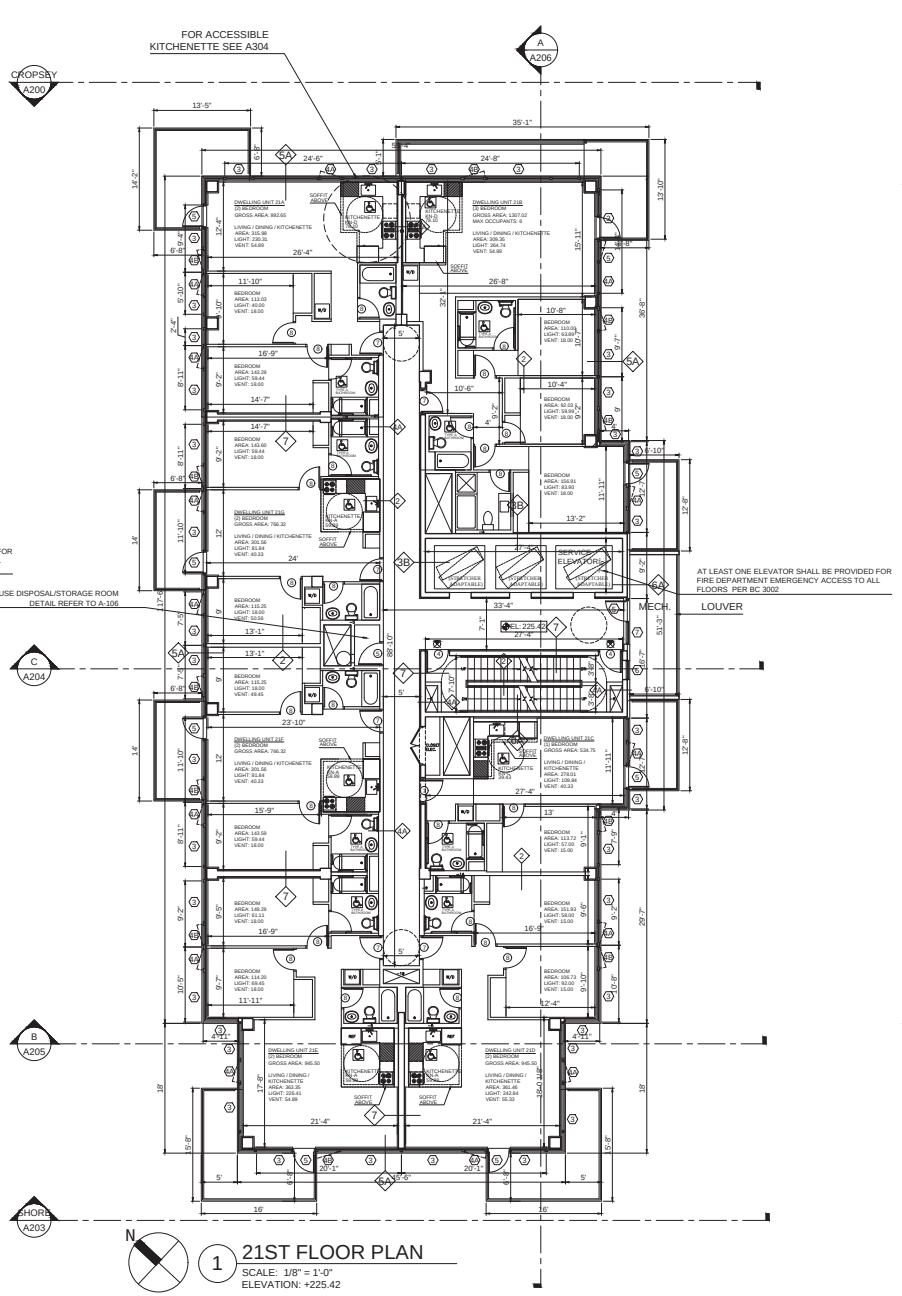
DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	A-107.00
PAGE No:	23 OF 38



1 7TH ~ 20TH FLOOR PLAN

SCALE: 1/8" = 1'-0"

ELEVATION: +81.92 (FL7) / +215.17 (FL20)



1 21ST FLOOR PLAN

SCALE: 1/8" = 1'-0"

ELEVATION: +225.42

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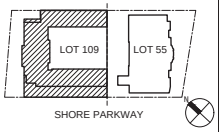
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

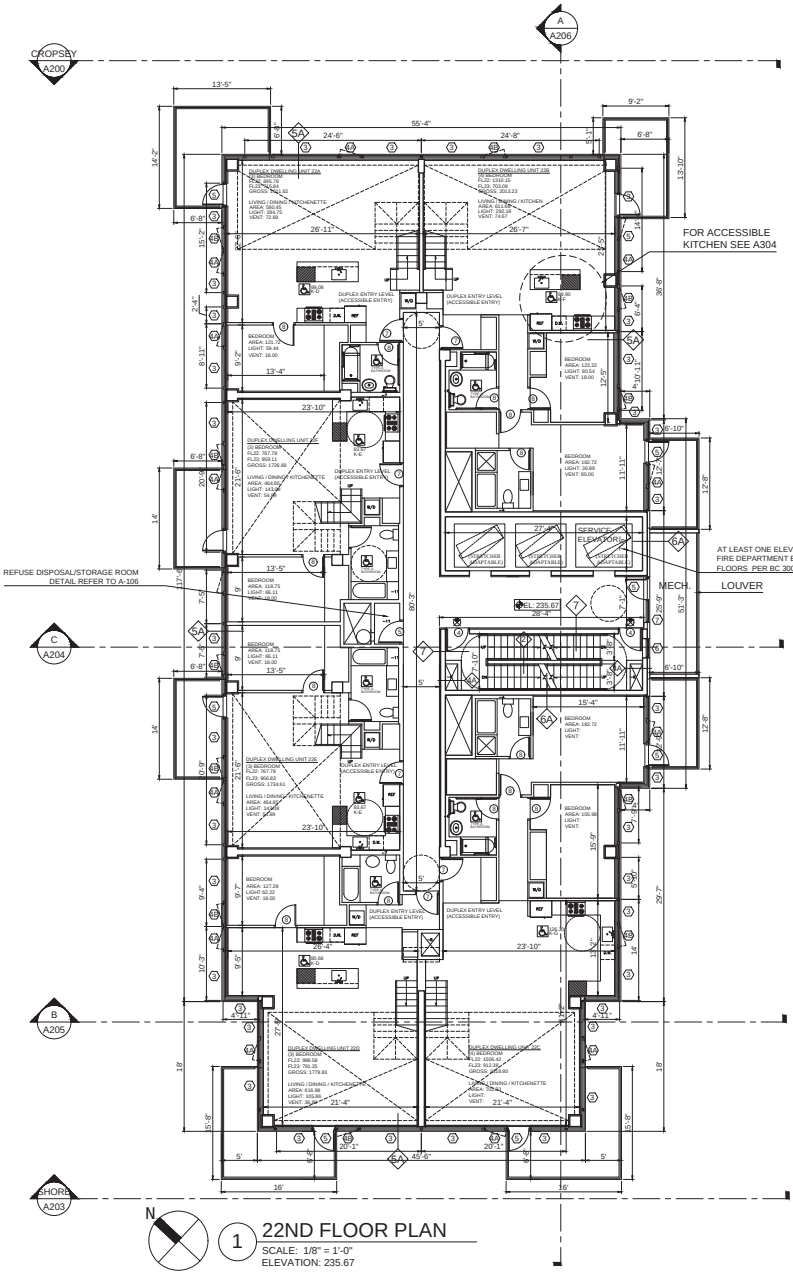
FL7~20, FL21 PLANS

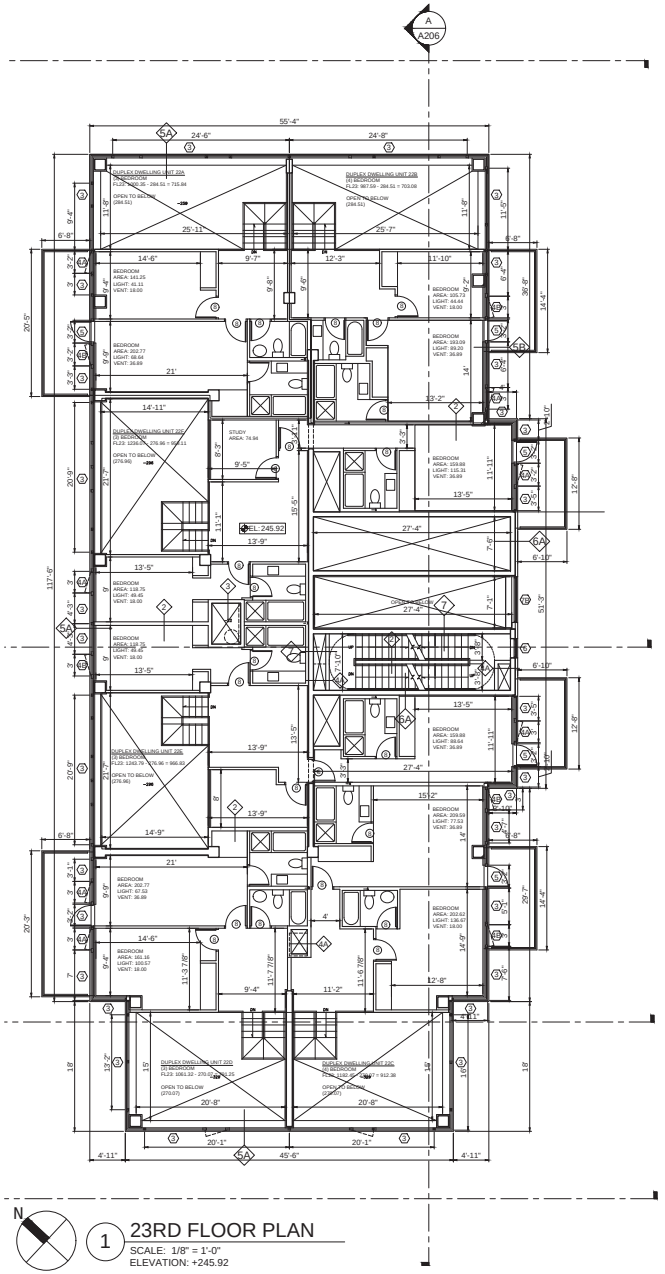
SEAL & SIGNATURE

DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

A-108.00

PAGE No: 24 OF 38





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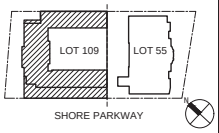
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

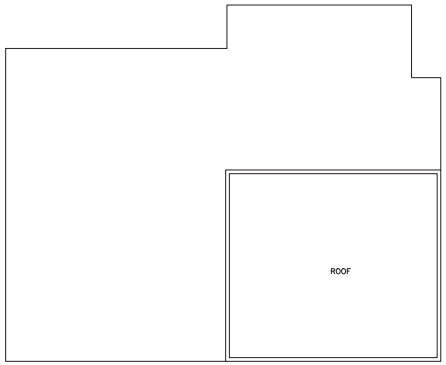
FL22, FL23 PLANS

SEAL & SIGNATURE

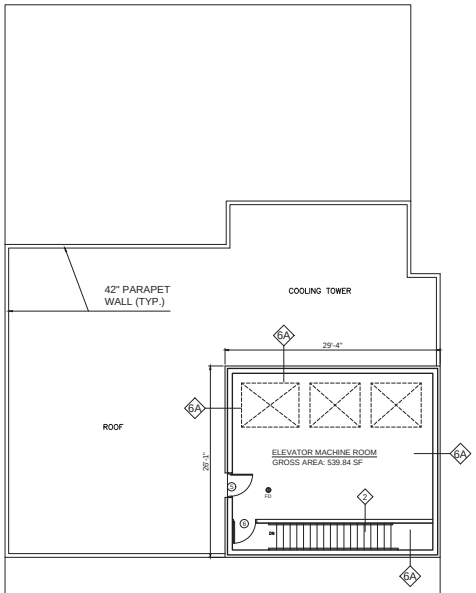
DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	

A-109.00

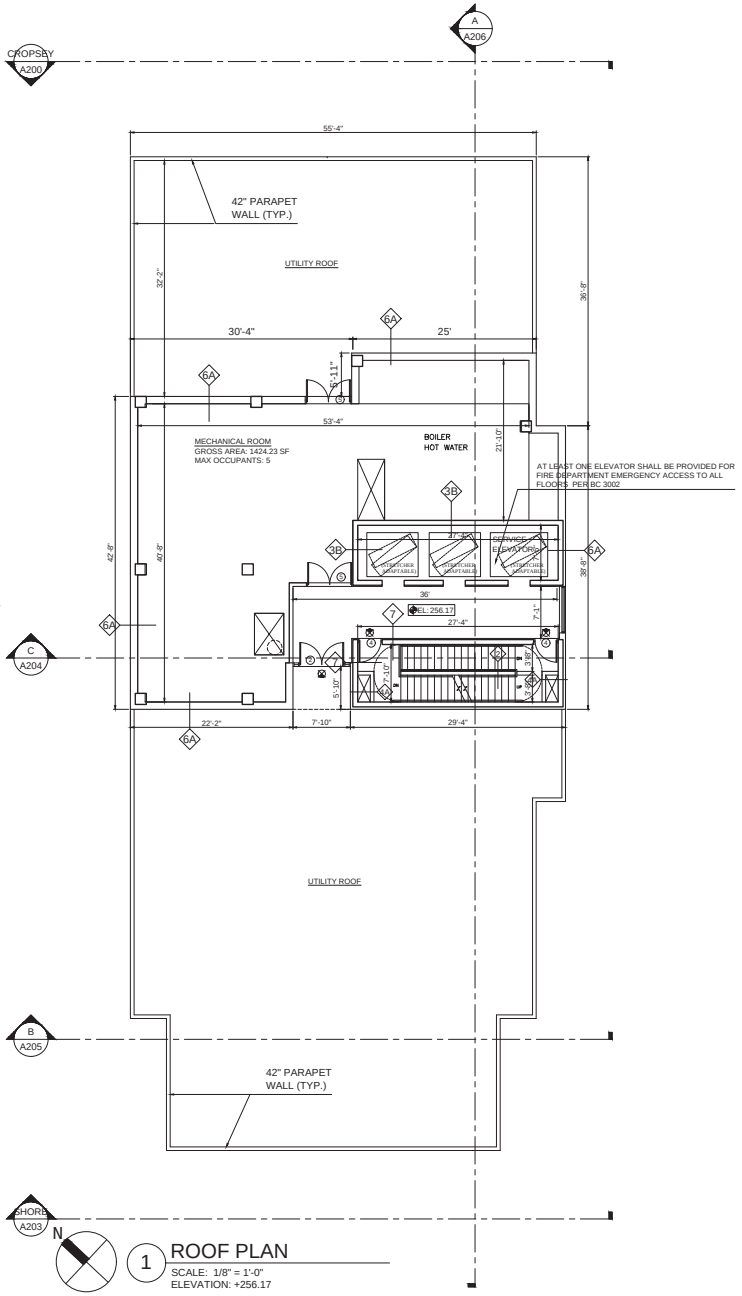
PAGE No: 25 OF 38



1 ELEVATOR BULKHEAD
SCALE: 1/8" = 1'-0"



1 ELEVATOR MACHINE ROOM
SCALE: 1/8" = 1'-0"



1 ROOF PLAN
SCALE: 1/8" = 1'-0"
ELEVATION: +256.17

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KEY PLAN

REV.#	DATE	DESCRIPTION

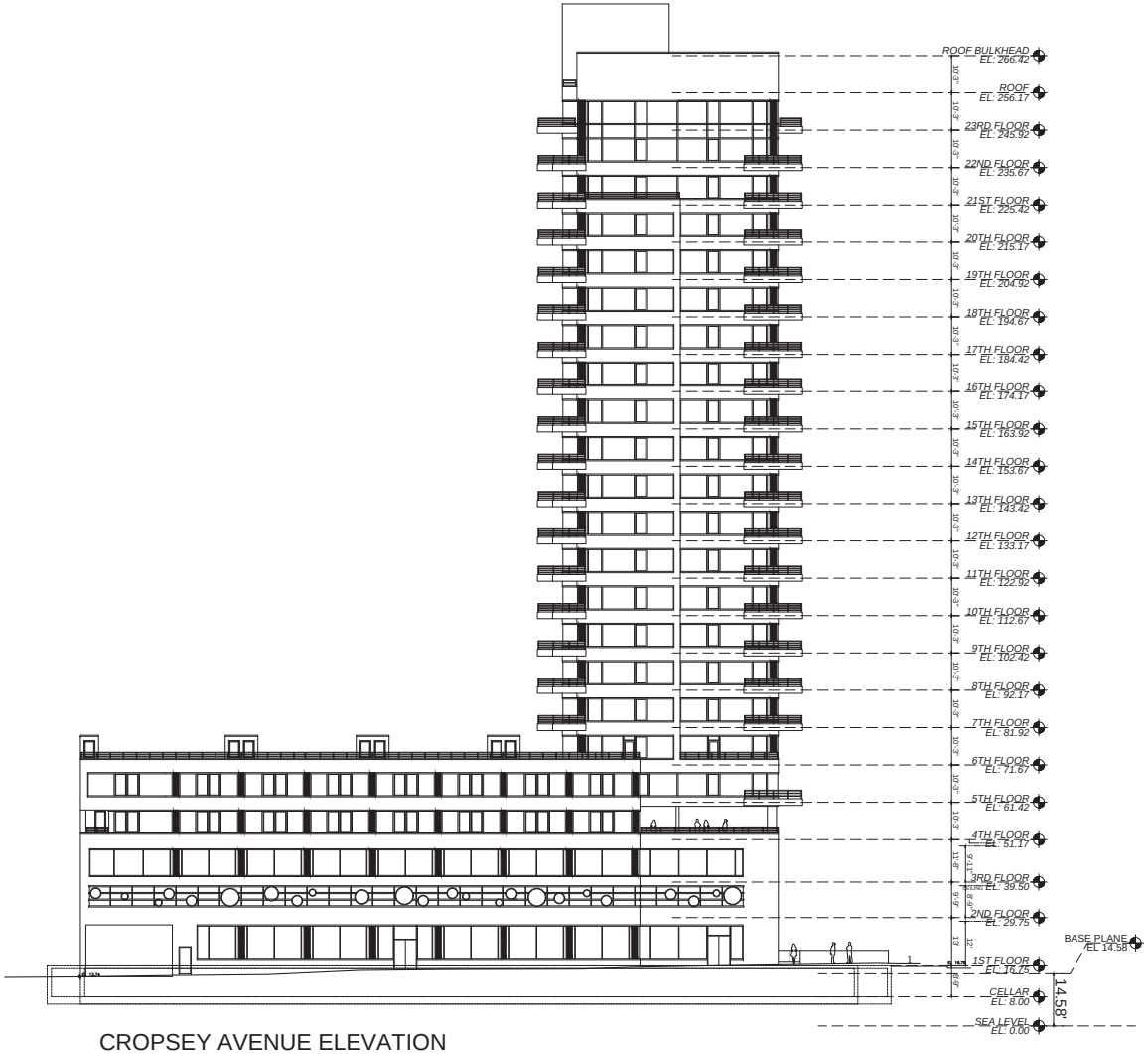
PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

ROOF AND BULKHEAD PLANS

SEAL & SIGNATURE

DATE: 08/16/2016	
PROJECT No:	
DRAWING BY: JL	
CHK BY: MK	
DWG No:	A-110.00
PAGE No:	26 OF 38



CROPSEY AVENUE ELEVATION

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

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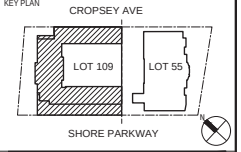
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

CROPSEY AVE ELEVATION

SEAL & SIGNATURE

DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

A-201.00

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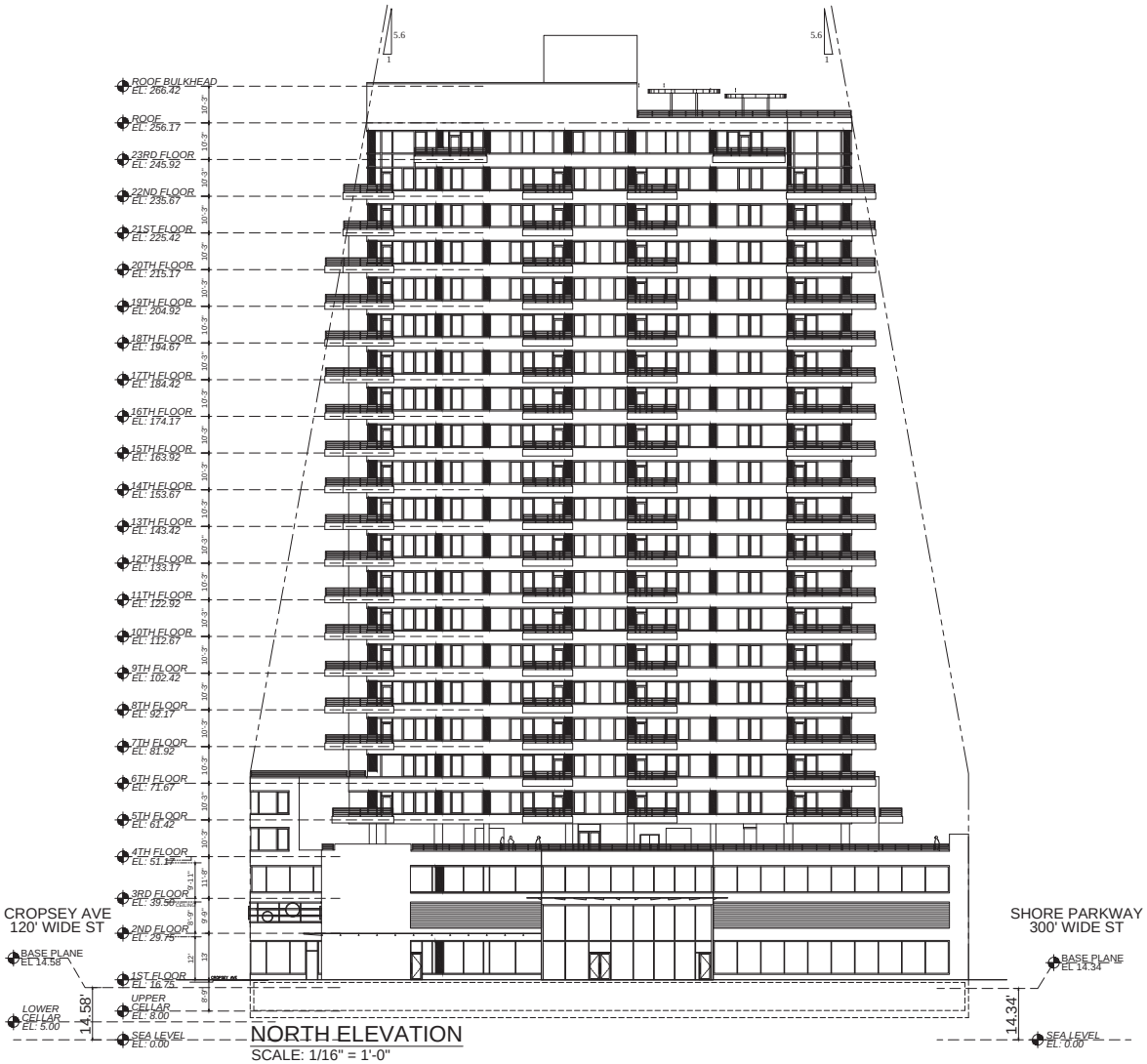

NORTH ELEVATION
SCALE: 1/16" = 1'-0"

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NOTES:

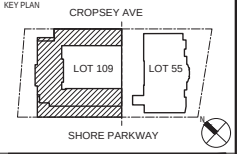
1. SEE STRUCTURE DRAWINGS FOR STRUCTURAL DETAILS AND SCHEDULES

3. SEE MEP DRAWINGS FOR MECHANCAL AND SPRINKLER SYSTEMS, ELECTRICAL SYSTEMS, PLUMBING SYSTEMS.

4. SEE SITE CONNECTION PROPOSAL FOR SEWER CONNECTION

5. COORDINATE ELEVATOR SHAFT, PIT, EQUIPMENT AND MACHINE ROOM WITH MANUFACTURER.

KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

NORTH ELEVATION

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DATE:	08/16/2016
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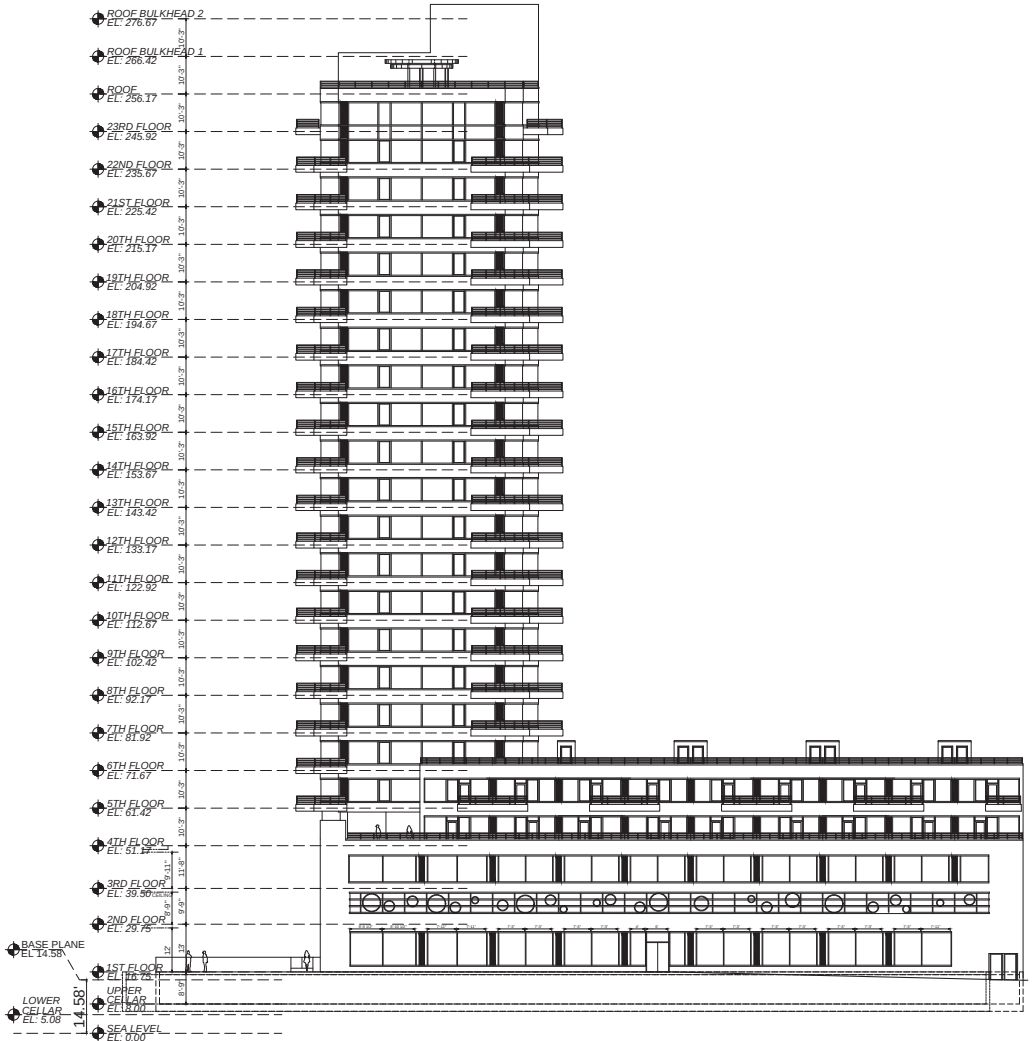

SHORE PARKWAY ELEVATION

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

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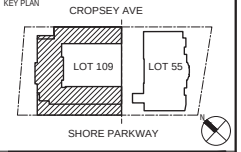
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

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BROOKLYN, NEW YORK

SHORE PARKWAY ELEVATION

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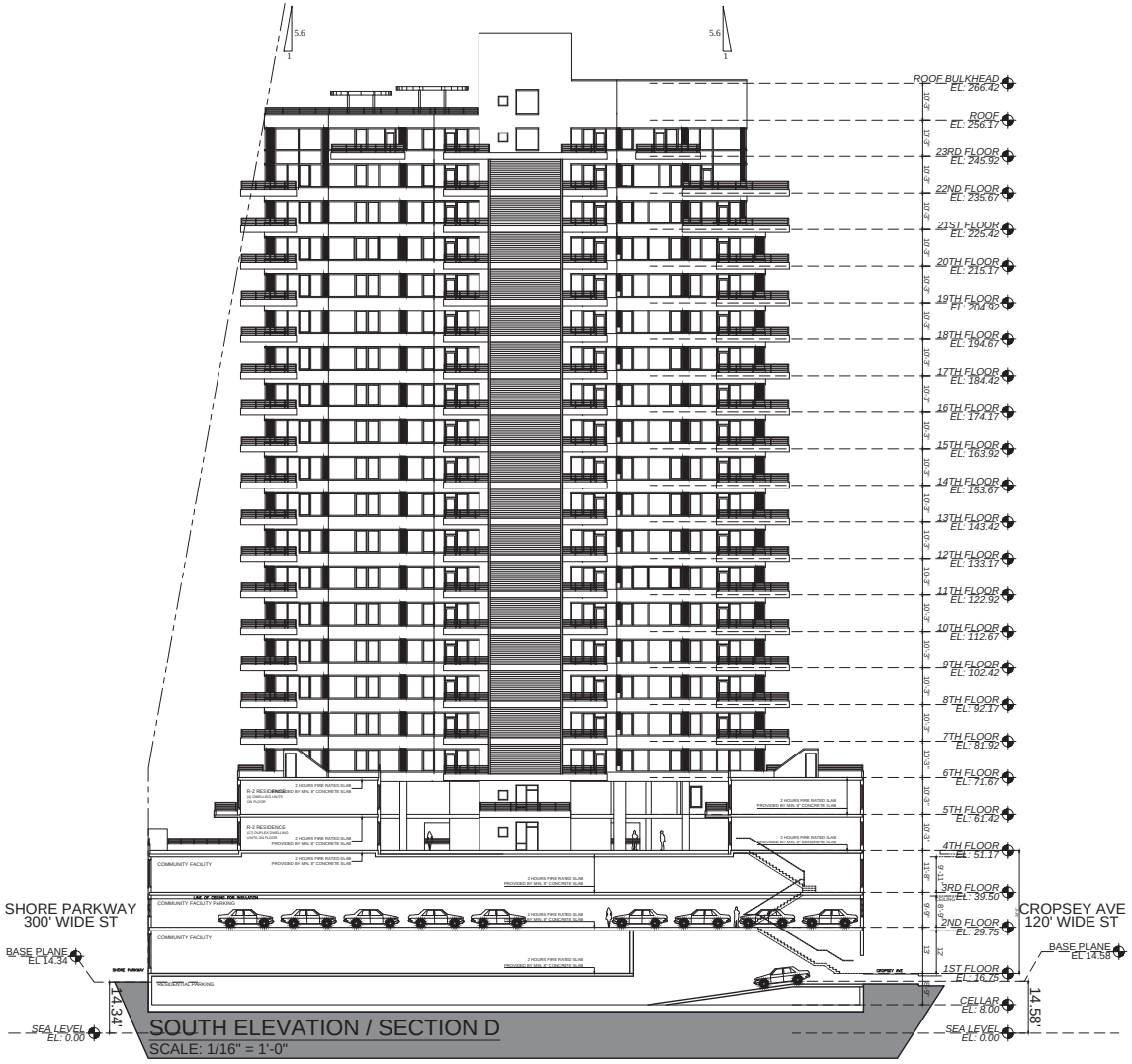

SOUTH ELEVATION / SECTION D

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

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5. COORDINATE ELEVATOR SHAFT, PIT, EQUIPMENT AND MACHINE ROOM WITH MANUFACTURER.

KEY PLAN

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2286 CROPSEY AVE

BROOKLYN, NEW YORK

BUILDING SECTION D

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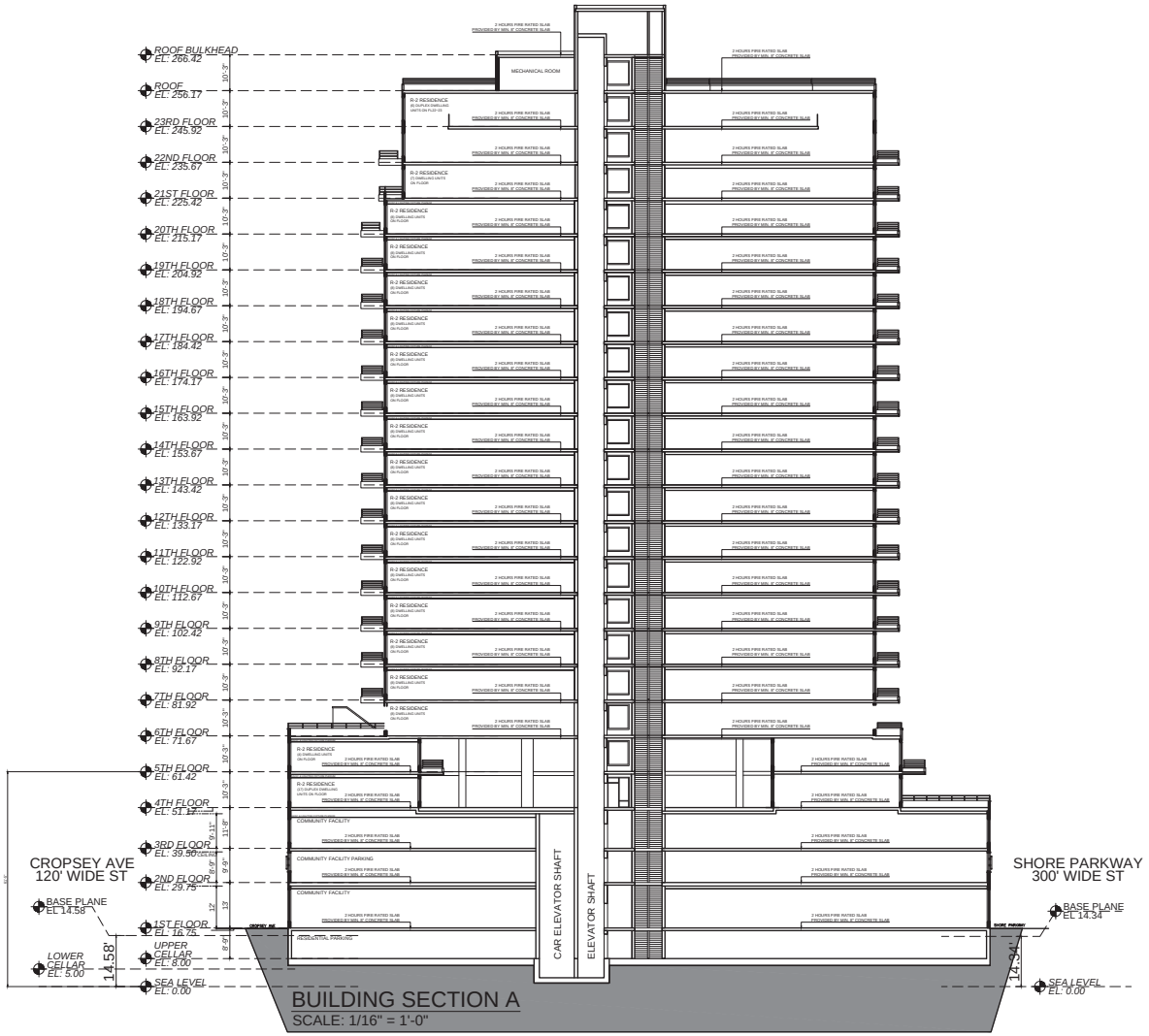

BUILDING SECTION A

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

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KEY PLAN

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PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

SECTION A

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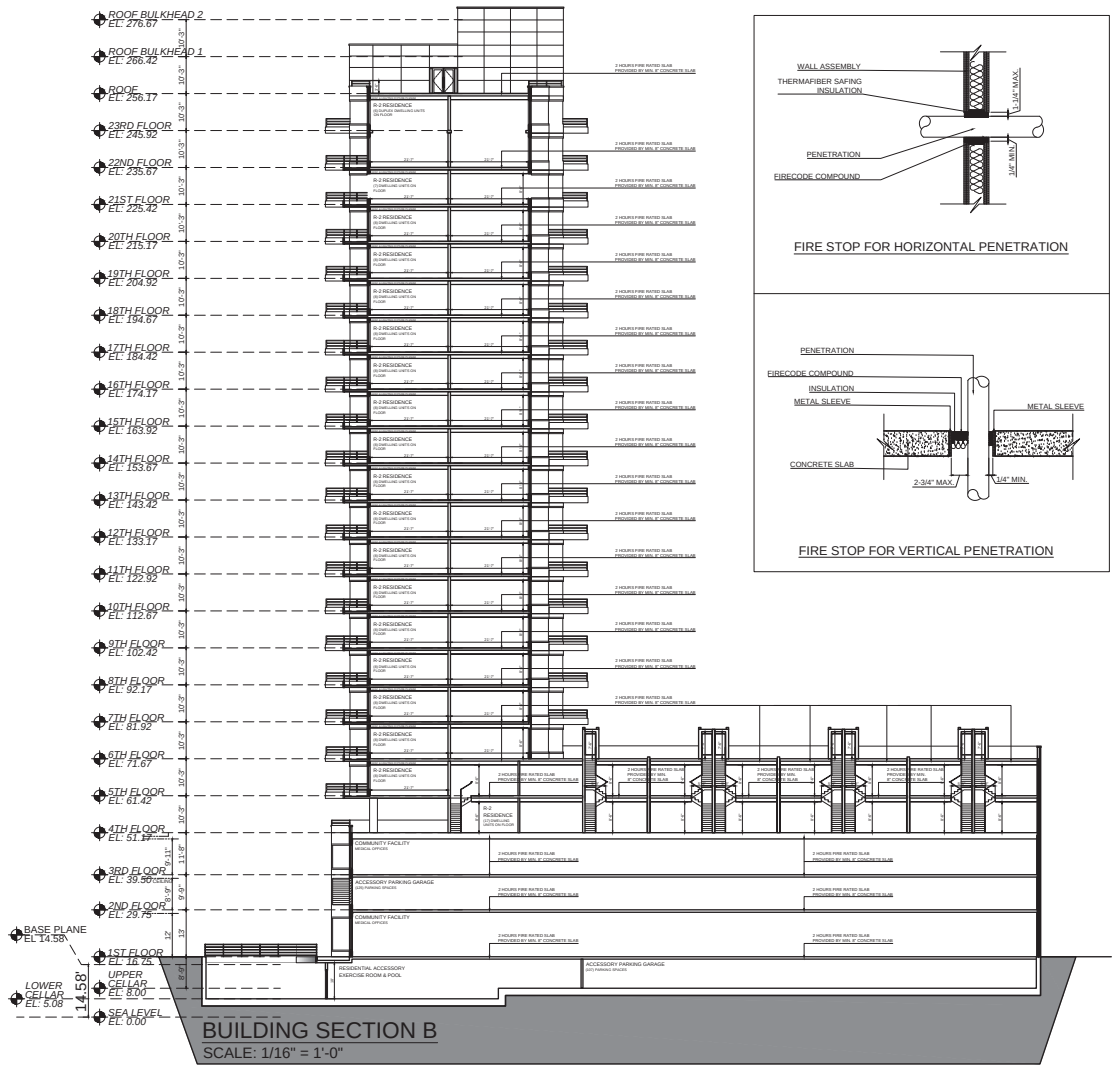

BUILDING SECTION B

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

FIRE STOP FOR HORIZONTAL PENETRATION

FIRE STOP FOR VERTICAL PENETRATION

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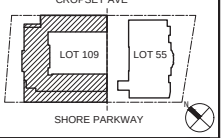
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

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BROOKLYN, NEW YORK

SECTION B

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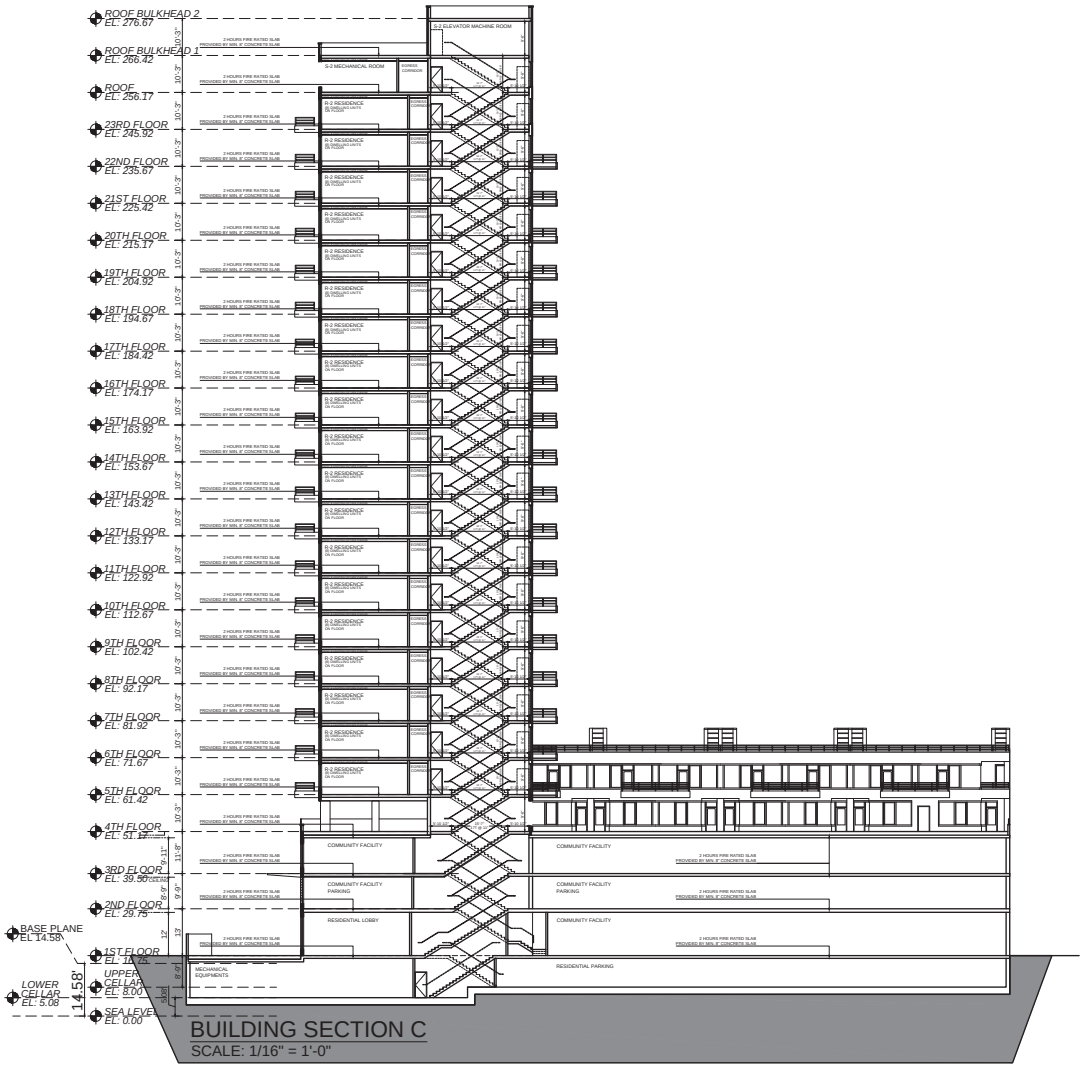

BUILDING SECTION C

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

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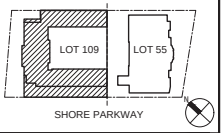
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

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BROOKLYN, NEW YORK

SECTION C

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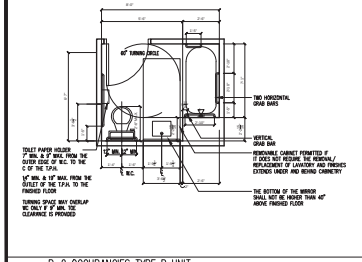
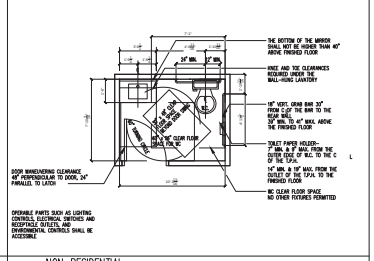
HANDICAPPED ADAPTABILITY NOTES

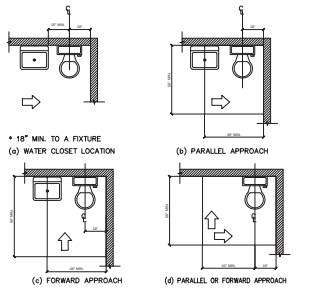
1. ALL DETAILS AND GENERAL NOTES PERTAINING TO HANDICAPPED ADAPTABILITY SHALL SUPERSEDE OTHER DETAILS AND NOTES HEREIN.
2. ALL COMPONENTS OF SPACES REQUIRED TO COMPLY WITH HANDICAPPED ADAPTABILITY NOT COVERED BY THE SCOPE OF THESE DOCUMENTS SHALL ALSO COMPLY WITH REQUIREMENTS OF RS4–6, THIS INCLUDES (BUT IS NOT LIMITED TO) INTERIOR FINISHES, CONTROLS FOR BATHROOM, KITCHEN AND HVAC APPLIANCES AND FOR LIFTS AND ELEVATORS; AND HARDWARE FOR DOORS, WINDOWS AND STORAGE AREAS.
3. DOORWAYS INTENDED FOR USER PASSAGE SHALL HAVE A MINIMUM CLEAR OPENING OF 32 IN. WITH THE DOOR OPEN 90 DEGREES. MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP.
4. THE DOOR AND DOOR BUCK AT THE BATHROOM(S) SHALL BE DESIGNED AND CONSTRUCTED SO THAT REMOUNTING THE HINGES IS THE ONLY CHANGE REQUIRED TO SWING THE DOOR OUT.
5. THRESHOLDS AT DOORWAYS SHALL NOT EXCEED ¾ IN. IN HEIGH FOR EXTERIOR RESIDENTIAL SLIDING DOORS OR ½ IN. FOR OTHER TYPES OF DOORS. RAISED THRESHOLDS AND FLOOR LEVEL CHANGES AT ACCESSIBLE DOORWAYS SHALL BE BEVELED WITH A SLOPE NOT GREATER THAN 1:2.
6. IN DWELLING UNITS THE HEIGHT OF THE WATER CLOSETS SHALL BE AT LEAST 15 IN. AND NO MORE THAN 19 IN. MEASURED TO THE TOP OF THE TOILET SEAT.
7. STRUCTURAL REINFORCEMENT OR OTHER PROVISIONS SHALL BE MADE THAT WILL ALLOW INSTALLATION OF GRAB BARS IN THE LOCATIONS SHOWN IN THE DETAILS.
8. IF A CABINET IS PROVIDED UNDER THE LAVATORY, IT SHALL BE EASILY REMOVABLE FOR A WIDTH OF 30 IN. FINISHED FLOORING SHALL EXTED UNDER THIS AREA TO THE WALL.
9. THE SINK AND SURROUNDING COUNTER IN ADAPTABLE DWELLING UNITS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
   (a) THE SINK AND SURROUNDING COUNTER SHALL BE ADJUSTABLE OR REPLACEABLE AS A UNIT AT VARIABLE HEIGHTS BETWEEN 28 IN. AND 36 IN. MEASURED FROM THE FINISHED FLOOR TO THE TOP OF THE COUNTER SURFACE OR SINK RIM. OR SHALL BE MOUNTED AT A FIXED HEIGHT NO GREATER THAN 34 IN. MEASURED FROM THE FINISHED FLOOR TO THE TOP OF THE COUNTER SURFACE OR SINK RIM.
   (b) WHERE SINKS ARE INSTALLED TO BE ADJUSTABLE IN HEIGHT, ROUGHEN PLUMBING SHALL BE LOCATED TO ACCEPT CONNECTIONS OF SUPPLY AND DRAINPPES FOR SINKS MOUNTED AT THE HEIGHT OF 28 IN.
   (c) BASE CABINETS, IF PROVIDED, SHALL BE REMOVABLE UNDER THE FULL 30 IN. MINIMUM FRONTAGE OF THE SINK AND SURROUNDING COUNTER, THE FINISHED FLOORING SHALL EXTEND UNDER THE COUNTER TO THE WALL.
   (d) COUNTER THICKNESS AND SUPPORTING STRUCTURE SHALL BE 2 IN. MAXIMUM OVER THE REQUIRED CLEAR SPACE.
   (e) THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SINKS, HOT WATER PIPES AND DRAINPPES UNDER SINKS SHALL BE INSULATED OR OTHERWISE COVER.
10. OVERHEAD KITCHEN CABINETS (EXCEPT OVER STOVES, COOK TOPS AND PASS THROUGH) SHALL BE INSTALLED SO AS TO BE EASILY LOWERED TO A HEIGHT OF 48 IN. FROM FINISHED FLOOR TO TOP OF LOWEST SHELF.
11. IF A MEDICINE CABINET IS PROVIDED ABOVE THE LAVATORY, THEN THE BOTTOM OF THE MEDICINE CABINET SHALL BE LOCATED WITH A USABLE SHELF NO HIGHER THAN 44 IN. ABOVE THE FLOOR.
12. AN IN-TUB SEAT OR A SEAT AT THE HEAD END OF THE TUB SHALL BE PROVIDED IN BATHTUBS. SEATS SHALL BE MOUNTED SECURELY AND SHALL NOT SLIP DURING USE.
13. A SEAT SHALL BE PROVIDED IN SHOWER STALLS (SEE DETAIL). THE SEAT SHALL BE MOUNTED 17 IN. TO 19 IN. FROM THE BATHROOM FLOOR AND SHALL EXTEND THE FULL DEPTH OF THE STALL. THE SEAT SHALL BE ON THE WALL OPPOSITE THE CONTROLS.
14. A SHOWER SPRAY UNIT SHALL BE PROVIDED WITH A HOSE AT LEAST 60 IN. LONG THAT CAN BE USED AS A FIXED SHOWER HEAD OR AS A HANDHOLD SHOWER. IF AN ADJUSTABLE–HEIGH SHOWER HEAD MOUNTED ON A VERTICAL BAR USED, THE BAR SHALL BE INSTALLED SO AS NOT TO OBSTRUCT THE USE OF GRAB BARS.
15. THE 30 IN. KITCHEN WORK SURFACE SHOWN ON THE PLANS SHALL PROVIDE A WORK SURFACE THAT COMPLIES WITH THE FOLLOWING REQUIREMENTS:
   (a) THE COUNTER SHALL BE ADJUSTABLE OR REPLACEABLE AS A UNIT AS VARIABLE HEIGHTS BETWEEN 28 IN. AND 36 IN. MEASURED FROM THE FLOOR TO THE TOP COUNTER SURFACE, OR SHALL BE MOUNTED AT A FIXED HEIGHT, NO GREATER THAN 34 IN. MEASURED FROM THE FLOOR TO THE TOP OF THE COUNTER SURFACE.
   (b) BASE CABINETS, IF PROVIDED, SHALL BE REMOVABLE UNDER THE FULL 30 IN. MINIMUM FRONTAGE COUNTER. THE FINISHED FLOOR SHALL EXTEND COUNTER TO THE WALL.
   (c) COUNTER THICKNESS AND SUPPORTING STRUCTURE SHALL BE 2 IN. MAXIMUM OVER THE COUNTER TO THE WALL.
   (d) THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SUCH COUNTERS.
16. WASHING MACHINES AND CLOTHES DRYERS IN COMMON–USE LAUNDRY ROOMS SHALL BE FRONT–LOADING.
17. CLOTHES RODS SHALL BE A MAXIMUM OF 54 IN. FROM THE FLOOR OR SHALL BE EASILY ADJUSTABLE TO THIS HEIGHT.
18. CHANGES IN GROUND LEVEL UP TO ¾ IN. MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4 IN. AND ½ IN. SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
19. DOORS TO HAZARDOUS AREAS SHALL BE MADE IDENTIFIABLE TO THE TOUCH BY A TEXTURED SURFACE ON THE DOOR HANDLE, KNOB, PULL OR OTHER OPERATING HARDWARE. THIS TEXTURED SURFACE MAY BE MADE CONTACT SURFACE. (HAZARDOUS AREAS INCLUDE LOADING PLATFORMS, BOILER ROOMS, STAGES, ETC.).
20. DETECTABLE WARNING TEXTURES ON WALKING SURFACES AS SHOWN ON PLANS SHALL CONSIST OF EXPOSED AGGREGATE CONCRETE, CUSHIONED SURFACES MADE OF RUBBER OR PLASTIC, RAISED STRIPS, OR GROOVES, TEXTURES SHALL CONTRAST WITH THAT OF THE SURROUNDING SURFACE RAISED STRIPS OR GROOVES SHALL COMPLY WITH RS 4–6. GROOVES MAY BE USED INDOORS ONLY.
21. AUDIBLE EMERGENCY ALARMS SHALL PRODUCE A SOUND THAT EXCEEDS THE PREVAILING EQUIVALENT SOUND LEVEL IN THE ROOM OR SPCE BY AT LEAST 15 DECIBELS OR EXCEEDS ANY MAXIMUM SOUND LEVEL WITH A DURATION OF 30 SECONDS BY 5 DECIBELS, WHICHEVER IS LOUDER SOUND LEVELS FOR ALARM SIGNALS SHALL NOT EXCEED 120 DECIBELS.
22. VISUAL ALARMS SHALL BE FLASHING LIGHTS ARRANGED TO FLASH IN CONJUCTION WITH THE AUDIBLE EMERGENCY ALARMS. THE FLASHING FREQUENCY OF VISUAL ALARMS SHALL BE APPROXIMATELY 1 HZ. SPECIALIZED SYSTEMS USING ADVANCED TECHNOLOGY MAY BE HANDICAPPED USERS OF THE BUILDING OR FACILITY.
23. SENSORY ALARMS PROVIDED FOR PERSONS WITH HEARING IMPAIRMENTS SHALL BE CONNECTED TO THE BUILDING EMERGENCY SYSTEM OR THERE SHALL BE A STANDARD 110 VOLT ELECTRICAL RECEPTACLE INTO WHICH AN ALARM UNIT CAN BE CONNECTED TO BE ACTIVATED BY THE BUILDING ALARM SYSTEM INSTRUCTIONS FOR USE OF THE AUXILIARY ALARM OR CONNECTIONS SHALL BE PROVIDED.
24. THE STRUCTURAL STRENGTH OF GRAB BARS, TUB AND SHOWER SEATS, FASTENERS, AND MOUNTING DEVICES SHALL MEET THE FOLLOWING SPECIFICATIONS:
   (a) BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF 250 LBF (112N) SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT.
   (b) SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF 250 LBF (112N) SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MATERIAL OF THE GRAB BAR OR SEAT, IF THE CONNECTION BETWEEN THE GRAB BAR OR SEAT AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESSES SHALL BE TOTALED FOR THE COMBINED SHEAR STRESS, WHICH SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS.
   (c) SHEAR FORCE INDUCED IN A FASTENER OR MOUNTING DEVICE FROM THE APPLICATION OF 250 LBF (112N) SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OR MOUNTING DEVICE OR THE SUPPORTING STRUCTURE, WHICHEVER IS THE SMALLER ALLOWABLE LOAD.
   (d) TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT FROM THE APPLICATION OF 250 LBF (112N) SHALL BE LESS AND THE SUPPORTING STRUCTURE.
   (e) GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTING.



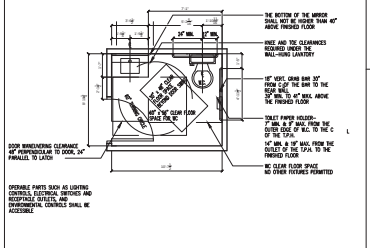
1 R-2 OCCUPANCIES TYPE B UNIT TYPE A BATHROOM (FIG. R2A3)
NOT TO SCALE



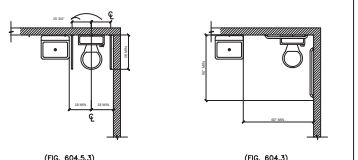
2 NON–RESIDENTIAL UNISEX/SINGLE USER TOILET ROOM (FIG. S1, BC 1109.2)
NOT TO SCALE



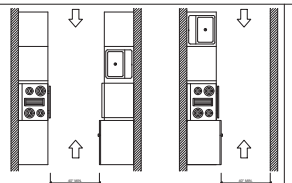
3 WATER CLOSETS IN TYPE B UNITS (FIG. 1004.11.3.1.2)
NOT TO SCALE



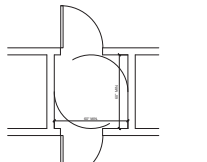
4 NON–RESIDENTIAL UNISEX/SINGLE USER TOILET ROOM (FIG. S5, BC 1109.2)
NOT TO SCALE

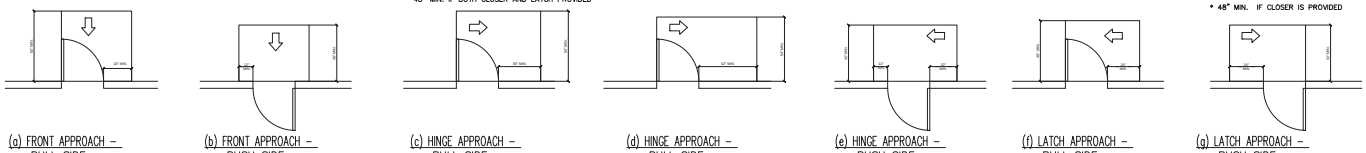


5 SWING–UP GRAB BAR FOR WATER CLOSET SIZE OF CLEARANCE FOR WATER CLOSET
NOT TO SCALE

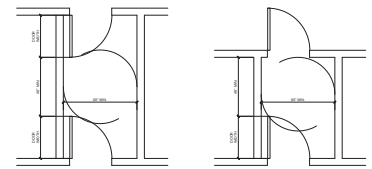


6 PASS–THROUGH KITCHEN CLEARANCE (FIG. 804.2.1)
NOT TO SCALE

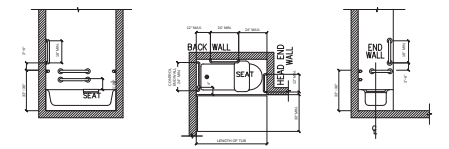




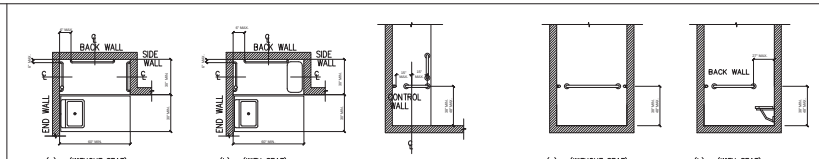
7 MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS (FIG. 404.2.3.1)
NOT TO SCALE



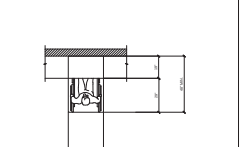
8 TWO DOORS IN A SERIES (FIG. 404.2.5)
NOT TO SCALE



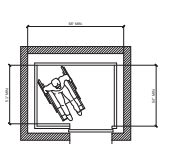
9 GRAB BARS FOR BATHTUBS WITHOUT PERMANENT SEAT
NOT TO SCALE



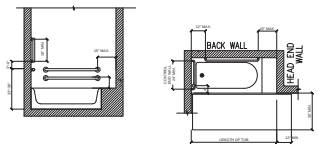
10 SHOWER COMPARTMENT SIZE AND CLEARANCE
NOT TO SCALE



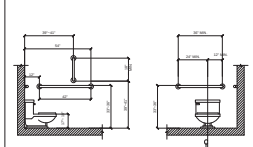
11 MIN. CLEARENCE FOR SEATING & TABLE
NOT TO SCALE



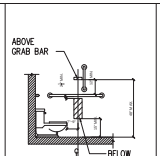
12 MIN. DIMENSION OF ELEVATOR CAR
NOT TO SCALE



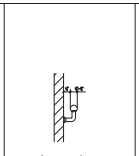
13 GRAB BARS FOR BATHTUBS WITH PERMANENT SEAT
NOT TO SCALE



14 ADAPTABLE WATER CLOSET
NOT TO SCALE

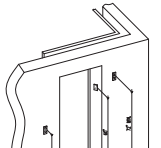


15 DISPENSER LOCATION
NOT TO SCALE



16 GRAB BAR DETAIL
NOT TO SCALE

17 ADAPTABLE KITCHEN WITH REMOVABLE CABINETS
NOT TO SCALE



18 HOISTWAY & ELEVATOR ENTRANCE
NOT TO SCALE (FIG. 407.2.2.2)

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NOTES:

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3. SEE MEP DRAWINGS FOR MECHANCAL AND SPRINKLER SYSTEMS, ELECTRICAL SYSTEMS, PLUMBING SYSTEMS.
4. SEE SITE CONNECTION PROPOSAL FOR SEWER CONNECTION
5. COORDINATE ELEVATOR SHAFT, PIT, EQUIPMENT AND MACHINE ROOM WITH MANUFACTURER.

KEY PLAN

REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

ACCESSIBILITY DETAILS

SEAL & SIGNATURE

DATE:	08/16/2016
PROJECT No:	
DRAWING BY:	JL
CHK BY:	MK
DWG No:	A-301.00
PAGE No:	34 OF 38

DOOR SCHEDULE

DOOR NO.	ROOM NAME	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICKNESS	TYPE	MATERIAL	FINISH	GLAZING	FIRE RATING	FRAME MATERIAL	FRAME FINISH	SADDLE MAT	REMARK
1	MAIN ENTRANCE (AMBULATORY DIAGNOSTIC)	(4) 3'-0"	9'-0"	-	A	AL/GL	-	-	-	ALUM	-	ALUM	STORE FRONT SYSTEM W/SIDELIGHT, WEATHER STRIP, 1/4" THK GLASS, THERMAL BREAK. U-FACTOR = 0.38, SHGC = 0.34
2	LOBBY ENTRANCE (AMBULATORY DIAGNOSTIC)	(2) 3'-0"	9'-0"	-	C	AL/GL	-	-	-	ALUM	-	ALUM	STORE FRONT SYSTEM W/SIDELIGHT, WEATHER STRIP, 1/4" THK GLASS, THERMAL BREAK. U-FACTOR = 0.38, SHGC = 0.34
3	MAIN ENTRANCE (RESIDENTIAL LOBBY)	(2) 3'-0"	9'-0"	-	B	AL/GL	-	-	-	ALUM	-	ALUM	STORE FRONT SYSTEM W/SIDELIGHT, WEATHER STRIP, 1/4" THK GLASS, THERMAL BREAK.
4	EGRESS DOOR	3'-0"	7'-0"	-	F	STEEL	PAINT	-	B / 90 MIN.		PAINT	ALUM	1-1/2HR FPSC, PUSH BAR
5	UTILITY DOOR	3'-0"	7'-0"	1 3/4"	H	STEEL	PAINT	-	B / 90 MIN.		PAINT	ALUM	1 1/2HR. FPSC W/ FIRE RATED LOUVER BELOW
6	TYPICAL H/C TOILET	2'-10"	6'-8"	1 3/4"	H	STEEL	PAINT	-	-		PAINT	-	
7	APARTMENT ENTRY/ TOWNHOUSE ENTRY	3'-0"	8'-4"	1 3/4"	E	STEEL	PAINT	-	B / 90 MIN.		PAINT	ALUM	1-1/2HR FPSC / LOCK & KEY & DOOR BELL, BOLT INSIDE WEATHER STRIP & THERMAL BREAK FOR TOWNHOUSE
8	BED ROOM	2'-10"	6'-8"	1 3/4"	F	WOOD	PAINT	-	-	WOOD	PAINT	-	
9	CLOSET	3'-6"	7'-0"	1 3/4"	I	WOOD	PAINT	-	-	WOOD	PAINT	WOOD	BI-FOLDING DOOR

WINDOW SCHEDULE

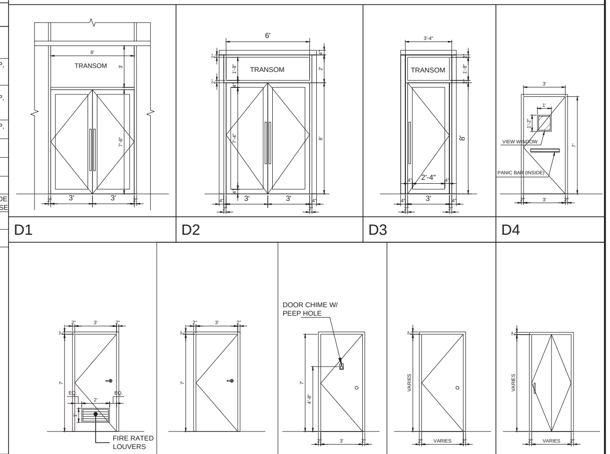
WINDOW NO.	WINDOW NO.	WIDTH	HEIGHT	GLAZING	FRAME MATERIAL	FRAME FINISH	REMARK	U-FACTOR	SHGC	AIR LEAKAGE
W1	NFRC B6911.04-116-45	PER PLAN	8'-0"	DOUBLE GLAZED INSULATED (TYP.)	ALUMINMUM	PAINT	STORE FRONT	0.38	0.40	0.047
W2	WIG-A-16	PER PLAN	5'-0"				STORE FRONT	0.38	0.40	0.1
W3	AND-N-1-01145-00001	2'-6"	5'-0"				RESIDENTIAL	0.28	0.32	0.1
W4	AND-N-1-01145-00001	5'-4"	5'-0"				RESIDENTIAL	0.28	0.32	0.1
W5	AND-N-1-01145-00001	2'-10"	6'-10"				RESIDENTIAL	0.28	0.32	0.1
W6	AND-N-1-01145-00001	2'-10"	6'-10"				RESIDENTIAL	0.28	0.32	0.1
W7	WIG-A-16	10'-7"	5'-0"				RESIDENTIAL	0.28	0.32	0.1
W8	AND-N-1-01145-00001	2'-8"	2'-8"				RESIDENTIAL	0.28	0.32	0.1

FINISH SCHEDULE

FLOOR	ROOM	FLOOR MATERIAL	FLOOR BASE	WALL MATERIAL	WALL FINISH	CEILING MATERIAL	CEILING FINISH	HEIGHT	REMARK
CELLAR	STAIRS	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	ALL EXIT STAIRS TO BE CONC. POURED STEEL PAN STAIRS
	WATER/GAS ELEC. METER RM	CONC.	-	C.BLK	PTD	GYP.	PTD	VARIES	
	PARKING AREA	CONC.	-	C.BLK	PTD	GYP.	PTD	10'-2"	
FIRST FL.	RESIDENTIAL LOBBY & VESTIBULE	GRANITE	GRANITE	GYP.	MARB	GYP.	PTD	21'-4"	PROVIDE WOOD CHAIR RAIL
	COMMUNITY FACILITY LOBBY & VESTIBULE	GRANITE	GRANITE	GYP.	MARB	GYP.	PTD	21'-4"	PROVIDE WOOD CHAIR RAIL
	COMMUNITY FACILITY	VCT	VINYL	C.BLK/GYP.	PTD	GYP.	PTD	VARIES	
	TOILET	GRANITE	GRANITE	GYP.	MARB	GYP.	PTD	VARIES	
	STAIR	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	
	CORRIDOR	GRANITE	-	GYP.	MARB	GYP.	PTD	21'-4"	PROVIDE WOOD CHAIR RAIL
THIRD FL SECOND FL.	COMMUNITY FACILITY	VCT	VINYL	C.BLK/GYP.	PTD	GYP.	PTD	VARIES	
	STAIR	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	
	PARKING AREA	CONC.	-	C.BLK	PTD	GYP.	PTD	10'-2"	
	COMPACTOR RM	CONC.	-	C.BLK	PTD	GYP.	PTD	10'-2"	3HR. FIRE RATED WALL & CEILING
	STAIR	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	
	MECHANICAL ROOM	CONC.	-	GYP.	PTD	GYP.	PTD	8'-2"	
THIRD FL. MEZZANINE	STAIR	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	
	MECHANICAL ROOM	CONC.	-	GYP.	PTD	GYP.	PTD	8'-2"	
	BICYCLE AREA	CONC.	-	C.BLK	PTD	GYP.	PTD	VARIES	
FOURTH FL THROUGH TWENTY FOURTH FL.	CORRIDOR	GRANITE	GRANITE	GYP.	MARB.	GYP.	PTD	8'-0"	PROVIDE WOOD CHAIR RAIL
	STAIRS	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	ALL EXIT STAIRS TO BE CONC. POURED STEEL PAN STAIRS
	TRASH ROOM	C.T.	C.T.	GYP./C.T.	PTD	GYP.	PTD	8'-0"	3HR. FIRE RATED WALL & CEILING
	LIVING/DINING	WOOD	WOOD	GYP.	PTD	GYP.	PTD	8'-0"	
	KITCHEN	GRANITE	GRANITE	GYP.	MARB	GYP.	PTD	8'-0"	
	BEDROOM	WOOD	WOOD	GYP.	PTD	GYP.	PTD	8'-0"	
	BATH RM	GRANITE	GRANITE	GYP.	MARB	GYP.	PTD	8'-0"	
ROOF	STAIR	CONC./VCT	VINYL	GYP.	PTD	GYP.	PTD	VARIES	ALL EXIT STAIRS TO BE CONC. POURED STEEL PAN STAIRS
	ELEVATOR MACHINE RM	CONC.	-	GYP.	PTD	GYP.	PTD	14'-2"	
	BOILER ROOM	CONC.	-	GYP.	PTD	GYP.	PTD	8'-2"	

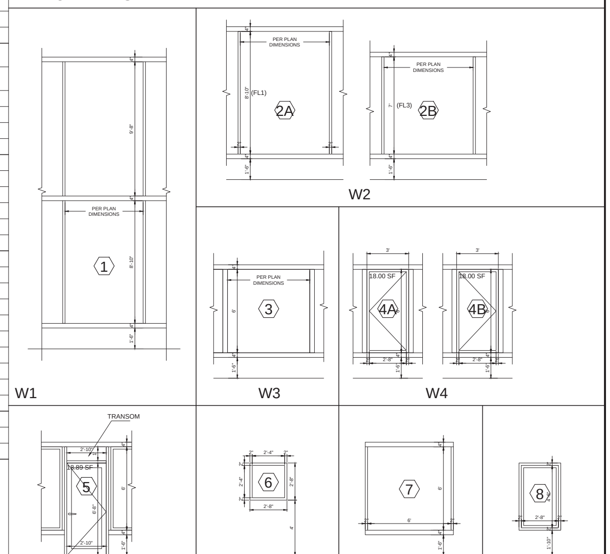
ABBREVIATIONS
AC.C.T. ACOUSTIC CEILING TILE
C.BLK. CONCRETE BLOCK
CONC. CONCRETE
C.T. CERAMIC TILE
GYP. GYPSUM BOARD
MARB MARBLE
PTD PAINTED
WD WOOD
VCT VINYL COMPOSITION TILE

DOOR TYPES



D1 D2 D3 D4 D5 D6 D7 D8 D9

WINDOW TYPES



W1 W2 W3 W4 W5 W6 W7 W8

AIR LEAKAGE NOTE

C402.4 AIR LEAKAGE (MANDATORY).
THE THERMAL ENVELOPE OF BUILDINGS SHALL COMPLY WITH SECTIONS C402.4.1 THROUGH C402.4.8.

C402.4.1 AIR BARRIERS
A CONTINUOUS AIR BARRIER SHALL BE PROVIDED THROUGHOUT THE BUILDING THERMAL ENVELOPE. THE AIR BARRIERS SHALL BE PERMITTED TO BE LOCATED ON THE INSIDE OR OUTSIDE OF THE BUILDING ENVELOPE, LOCATED WITHIN THE ASSEMBLIES COMPOSING THE ENVELOPE, OR ANY COMBINATION THEREOF. THE AIR BARRIER SHALL COMPLY WITH SECTIONS C402.4.1.1 AND C402.4.1.2.
EXCEPTION: AIR BARRIERS ARE NOT REQUIRED IN BUILDINGS LOCATED IN CLIMATE ZONE 1,2 AND 3.

C402.4.1.1. AIR BARRIER CONSTRUCTION.
THE CONTINUOUS AIR BARRIER SHALL BE CONSTRUCTED TO COMPLY THE FOLLOWING:
1. THE AIR BARRIER SHALL BE CONTINUOUS FOR ALL ASSEMBLIES THAT ARE THE THERMAL ENVELOPE OF THE BUILDING AND ACROSS THE JOINTS AND ASSEMBLIES.
2. AIR BARRIER JOINTS AND SEAMS SHALL BE SEALED, INCLUDING SEALING TRANSITIONS IN PLACES AND CHANGES IN MATERIALS. AIR BARRIER PENETRATIONS SHALL BE SEALED IN ACCORDANCE WITH SECTION C402.4.2.. THE JOINTS AND SEALS SHALL BE SECURELY INSTALLED IN OR ON THE JOINT FOR ITS ENTIRE LENGTH SO AS NOT TO DISLODGE. LOOSEN OR OTHERWISE IMPAIR ITS ABILITY TO RESIST POSITIVE AND NEGATIVE PRESSURE FROM WIND, STACK EFFECT AND MECHANICAL VENTILATION.
3. RECESSED LIGHTING FIXTURES SHALL COMPLY WITH SECTION C402.4.8. WHERE SIMILAR OBJECTS ARE INSTALLED WHICH PENETRATE THE AIR BARRIER, PROVISIONS SHALL BE MADE TO MAINTAIN THE INTEGRITY OF THE AIR BARRIER.
EXCEPTION: BUILDINGS THAT COMPLY WITH SECTION C402.4.1.2.3 ARE NOT REQUIRED TO COMPLY WITH ITEM 1 AND 3.

C402.4.1.2.1 MATERIALS
MATERIALS WITH AN AIR PERMEABILITY NO GREATER THAN 0.004 CFM/SF(0.02L/S . S.M.) UNDER A PRESSURE DIFFERENTIAL OF 0.3 INCHES WATER GAUGE(W.G.)(75PA) WHEN TESTED IN ACCORDANCE WITH ASTM E 2178 SHALL COMPLY WITH THIS SECTION. MATERIALS IN ITEM 1 THROUGH 15 SHALL BE DEEMED TO COMPLY WITH THIS SECTION PROVIDED JOINTS ARE SEALED AND MATERIALS ARE INSTALLED AS AIR BARRIERS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
1. PLYWOOD WITH A THICKNESS OF NOT LESS THAN 3/8 INCH (10 mm)
2. ORIENTED STRAND BOARD HAVING A THICKNESS OF NOT LESS THAN 3/8 INCH (10 mm)
3. EXTRUDED POLYSTYRENE INSULATION BOARD HAVING A THICKNESS OF NOT LESS THAN 1/2 INCH (12 mm)
4. FOIL-BACK POLYISOCYANURATE INSULATION BOARD HAVING THICKNESS OF NOT LESS THAN 1/2 INCH (12 mm)
5. CLOSED CELL SPRAY FOAM A MINIMUM DENSITY OF 1.5 PCF (2.4KG/C.M.) HAVING A THICKNESS OF NOT LESS THAN 1-1/2 INCH (36 mm)
6. OPEN CELL SPRAT FOAM WITH A DENSITY BETWEEN 0.4 AND 1.5 CFP(0.6 AND 2.4 KG/C.M.) AND HAVING A THICKNESS OF NOT LESS THAN 4.5 INCHES (36 mm)
7. EXTERIOR OR INTERIOR GYPSUM BOARD HAVING A THICKNESS OF NOT LESS THAN 1/2 INCH (12 mm)
8. CEMENT BOARD HAVING A THICKNESS OF NOT LESS THAN 1/2 INCH (12 mm)
9. BUILT UP ROOFING MEMBRANE.
10. MODIFIED BITUMINOUS ROOF MEMBRANE.
11. FULLY ADHERED SINGLE-PLY ROOF MEMBRANE.
12. A PORTLAND CEMENT/SAND PARGE, OR GYPSUM PLASTER HAVING A THICKNESS OF NOT LESS THAN 5/8 INCH (16 mm)
13. CAST-IN-PLACE AND PRECAST CONCRETE.
14. FULLY GROUTED CONCRETE BLOCK MASONRY.
15. SHEET STEEL OR ALUMINUM.

C402.4.1.2.2 ASSEMBLIES.
ASSEMBLIES OF MATERIALS AND COMPONENTS WITH AN AVERAGE AIR LEAKAGE NOT EXCEED 0.04 CFM/SF (0.2 L/S.SM) UNDER A PRESSURE DIFFERENTIAL OF 0.3 INCHES OF WATER GAUGE (W.G.)(75 PA) WHEN TESTED IN ACCORDANCE WITH ASTM E 2357, ASTM E 1677 OR ASTM E 283 SHALL COMPLY WITH THIS SECTION. ASSEMBLIES LISTED IN ITEM 1 AND 2 SHALL BE DEEMED TO COMPLY PROVIDED JOINTS ARE SEALED AND REQUIREMENTS OF SECTION C402.4.1.1 ARE MET.
1. CONCRETE MASONRY WALLS COATED WITH ONE APPLICATION EITHER OF BLOCK FILLER AND TWO APPLICATIONS OF A PAINTED OR SEALER COATING.
2. A PORTLAND CEMENTS/SAND PARGE, STUCCO OR PLASTER MINIMUM 1/2 INCH (12 mm) IN THICKNESS.

C402.4.1.2.3 BUILDING TEST
THE COMPLETED BUILDING SHALL BE TESTED AND THE AIR LEAKAGE RATE OF THE BUILDING EVELOPE SHALL NOT EXCEED 0.40 CFM/SF AT A PRESSURE DIFFERENTIAL OF 0.3 INCHES WATER GAUGE (2.0L/S.SM AT 75 PA) IN ACCORDANCE WITH ASTM E 779 OR AN EQUIVALENT METHOD APPROVED BY THE CODE OFFICIAL.

C402.4.2 AIR BARRIER PENETRATIONS.
PENETRATION OF THE AIR BARRIER AND PATHS OF AIR LEAKAGE SHALL BE CAULKED, GASKETED OR OTHERWISE SEALED IN MANNER COMPATIBLE WITH THE CONSTRUCTION MATERIALS AND LOCATION. JOINTS AND SEALED SHALL BE SEALED IN THE SAME MANNER OR TAPED OR COVERED WITH A MOISTURE VAPOR-PERMEABLE WRAPPING MATERIAL. SEALING MATERIALS SHALL BE APPROPRIATE TO THE CONSTRUCTION MATERIALS BEING SEALED. THE JOINTS AND SEALS SHALL BE SECURELY INSTALLED IN OR ON THE JOINT FOR ITS ENTIRE LENGTH SO AS NOT TO DISLODGE, LOOSEN OR OTHERWISE IMPAIR ITS ABILITY TO RESIST POSITIVE AND NEGATIVE PRESSURE FROM WIND, STACK EFFECT AND MECHANICAL VENTILATION.

C402.4.3 AIR LEAKAGE OF FENESTRATION.
THE AIR LEAKAGE OF FENESTRATION ASSEMBLIES SHALL MEET THE PROVISIONS OF TABLE C402.4.3. TESTING SHALL BE IN ACCORDANCE WITH THE APPLICABLE REFERENCE TEST STANDARD IN TABLE C402.4.3 BY AND ACCREDITED, INDEPENDENT TESTING LABORATORY AND LABELED BY THE MANUFACTURER.

EXCEPTIONS:
1. FIELD-FABRICATED FENESTRATION ASSEMBLIES THAT ARE SEALED IN ACCORDANCE WITH SECTION C402.4.1.
2. FENESTRATION IN BUILDINGS THAT COMPLY WITH SECTION C402.4.1.2.3 ARE NOT REQUIRED TO MEET THE AIR LEAKAGE REQUIREMENTS IN TABLE C402.4.3.

TABLE C402.4.3.
MAXIMUM AIR INFILTRATION RATE FOR FENESTRATION ASSEMBLIES

FENESTRATION ASSEMBLY	MAXIMUM RATE (CFM/ SF)	TEST PROCEDURE
WINDOWS	0.20 [a]	AAMA/ WDMA/ CSA101/ I,S,2/ A440 OR NFRC 400
SLIDING DOORS	0.20 [a]	
SWING DOORS	0.20 [a]	
SKYLIGHTS-WITH CONDENSATION WEEPAGE OPENINGS	0.30	
SKYLIGHTS - ALL OTHER	0.20 [a]	
CURTAIN WALLS	0.06	NFRC 400 OR ASTM E 283 AT 1.57 PSF (75 PA)
STOREFRONT GLAZING	0.06	
COMMERCIAL GLAZED SWINGING ENTRANCE DOORS	1.00	
REVOLVING DOORS	1.00	
GARAGE DOORS	0.40	ANSI / DASMA 105, NFRC 400, OR ASTM E 283 AT 1.57 PSF (75 PA)
ROLLING DOORS	1.00	

FOR SI: 1 CUBIC FOOT PER MINUTE = 0.47L/S, 1 SQUARE FOOT = 0.093 S/M
A THE MAXIMUM RATE FOR WINDOWS, SLIDING AND SWINGING DOORS, AND SKYLIGHTS IS PERMITTED TO BE 0.3 CFM PER SQUARE FOOT OF FENESTRATION OR DOOR AREA WHEN TESTED IN ACCORDANCE WITH AAMA/ WDMA/ CSA 101/ I.S.2/ A440 AT 6.24 PSF (300 PA).

C402.4.4 DOORS AND ACCESS OPENINGS TO SHAFTS, CHUTES, STAIRWAYS, AND ELEVATOR LOBBIES.
DOORS AND ACCESS OPENINGS FROM CONDITIONED SPACE TO SHAFTS, CHUTES, STAIRWAYS AND ELEVATOR LOBBIES SHALL EITHER MEET THE REQUIREMENTS OF SECTION C402.4.3. OR SHALL BE GASKETED, WEATHERSTRIPPED OR SEALED.

EXCEPTIONS:
DOOR OPENINGS REQUIRED TO COMPLY WITH SECTION 715 OR 715.3 OF THE NEW YORK CITY BUILDING CODE; OR
DOORS AND DOOR OPENINGS REQUIRED BY THE NEW YORK CITY BUILDING CODE TO COMPLY WITH UL 1784 SHALL NOT BE REQUIRED TO COMPLY WITH SECTION C402.4.4.

C402.4.5 AIR INTAKES, EXHAUST OPENINGS, STAIRWAYS AND SHAFTS.
STAIRWAY ENCLOSURES AND ELEVATOR SHAFT VENTS AND OTHER OUTDOOR AIR INTAKES AND EXHAUST OPENINGS INTEGRAL TO THE BUILDING ENVELOPE SHALL BE PROVIDED WITH DAMPERS IN ACCORDANCE WITH SECTION C403.2.4.4.

C402.4.7 VESTIBULES.
ALL BUILDING ENTRANCES SHALL BE PROTECTED WITH AN ENCLOSED VESTIBULE, WITH ALL DOORS OPENING INTO AND OUT OF THE VESTIBULE EQUIPPED WITH SELF-CLOSING DEVICES. VESTIBULES SHALL BE DESIGNED SO THAT IN PASSING THROUGH THE VESTIBULE IT IS NOT NECESSARY FOR THE INTERIOR AND EXTERIOR DOORS TO OPEN AT THE SAME TIME.

EXCEPTIONS:
1. DOORS NOT INTENDED TO BE USED BY THE PUBLIC, SUCH AS DOORS TO MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS, OR INTENDED SOLELY FOR EMPLOYEE USE.
2. DOORS OPENING DIRECTLY FROM A SLEEPING UNIT OR DWELLING UNIT.
3. DOORS THAT OPEN DIRECTLY FROM A SPACE LESS THAN 3,000 SQUARE FEET (298 SQUARE METERS) IN AREA.
4. REVOLVING DOORS (PROVIDED, HOWEVER, THAT THE INSTALLATION OF ONE OR MORE REVOLVING DOORS IN THE BUILDING ENTRANCE SHALL NOT ELIMINATE THE REQUIREMENT THAT A VESTIBULE BE PROVIDED ON ANY DOORS ADJACENT TO REVOLVING DOORS).
5. DOORS USED PRIMARILY TO FACILITATE VEHICULAR MOVEMENT OR MATERIAL HANDLING AND ADJACENT PERSONNEL DOORS.

C402.4.8 RECESSED LIGHTING
RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES. ALL RECESSED LUMINAIRES SHALL BE IC-RATED AND LABELED AS HAVING AN AIR LEAKAGE RATE OF NOT MORE 2.0 CFM (0.944 L/S) WHEN TESTED IN ACCORDANCE WITH ASTM E 283 AT A 1.57 PSF (75 PA) PRESSURE DIFFERENTIAL. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND INTERIOR WALL OR CEILING COVERING.

OPERATING & MAINTENANCE MANUAL NOTES

C408.2.5.2 MANUALS
AN OPERATING AND MAINTENANCE MANUAL IS TO BE PROVIDED TO THE BUILDING OWNER BY THE MECHANICAL CONTRACTOR AND INCLUDE ALL OF THE FOLLOWING:

1. SUBMITTAL DATA STATING EQUIPMENT SIZE AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
2. MANUFACTURER'S OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, EXCEPT EQUIPMENT NOT FURNISHED AS PART OF THE PROJECT. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
3. NAMES AND ADDRESS OF AT LEAST ONE SERVICE AGENCY.
4. HVAC CONTROLS SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD-DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS AT CONTROL DEVICES OR, FOR DIGITAL CONTROL SYSTEMS, IN SYSTEM PROGRAMMING INSTRUCTIONS.
5. A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.

TO THE BEST OF MY KNOWLEDGE, THE PROPOSED BUILDING IN COMPLIANCE WITH 2014 NEW YORK CITY ENERGY CONSERVATION CODE USING CHAPTER C4 (COMMERCIAL ENERGY EFFICIENCY)

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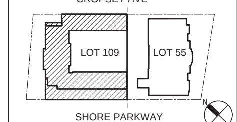
KEY PLAN



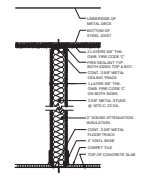
REV.#	DATE	DESCRIPTION

PROJECT
2286 CROPSEY AVE
BROOKLYN, NEW YORK

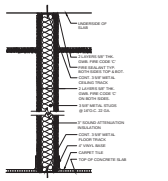
DOOR & WINDOW SCHEDULES

SEAL & SIGNATURE

DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:
A-302.00

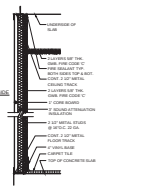


1 HR. RATED PARTITION
GA FILE TYPE: WP 1035 (t)*
FIRE TEST: WHI-495-0504, 4-25-83
UL-R-11270-1, -2, 1-21-85
DESIGN U442
SOUND TEST: SA-840313, 3-9-84
SOUND RATING: 50 STC



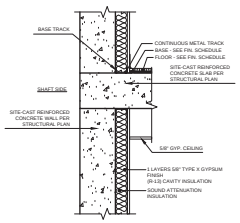
2 HR. RATED PARTITION
GA FILE TYPE: WP 1548
FIRE TEST: WHI, 495-0236,1-30-80

SOUND TEST: WHI, 218-1, 6-11-80
SOUND RATING: 50 STC

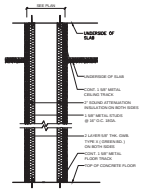


2 HR. RATED SHAFT WALL
GA FILE TYPE: WP 7055 (b, w) *
FIRE TEST: WHI-495-105, 2-21-78
WHI-495-111, 3-7-78

SOUND TEST: WHI FI, 3-13-78
SOUND RATING: 50 STC

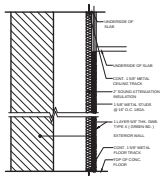


ELEVATOR SHAFT WALL

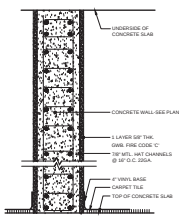


2 HR. RATED CHASE WALL
GA FILE TYPE: WP 5070 (t)*
FIRE TEST: UL R11270, 4-19-85,
DESIGN U444

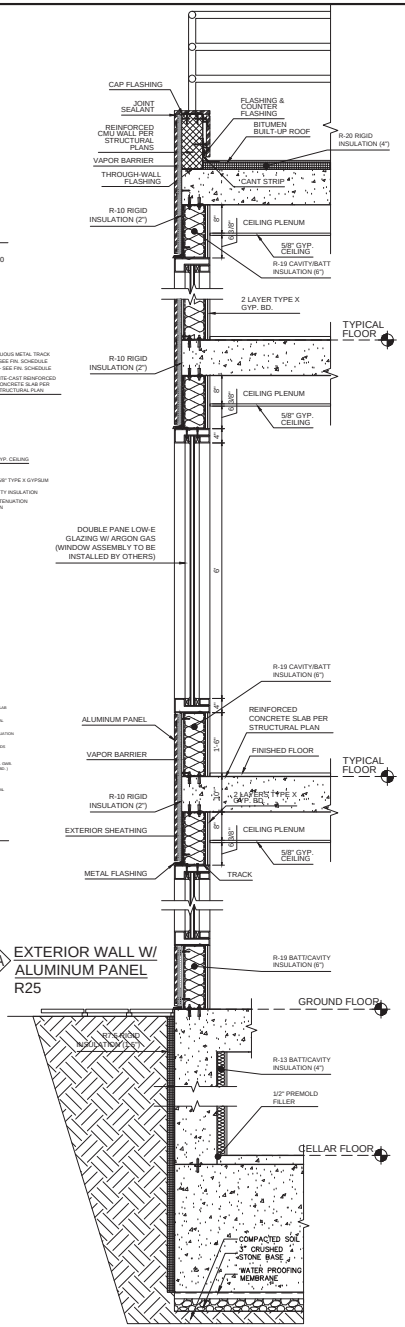
SOUND TEST: SA-851102, 11-6-85
SOUND RATING: 60 STC



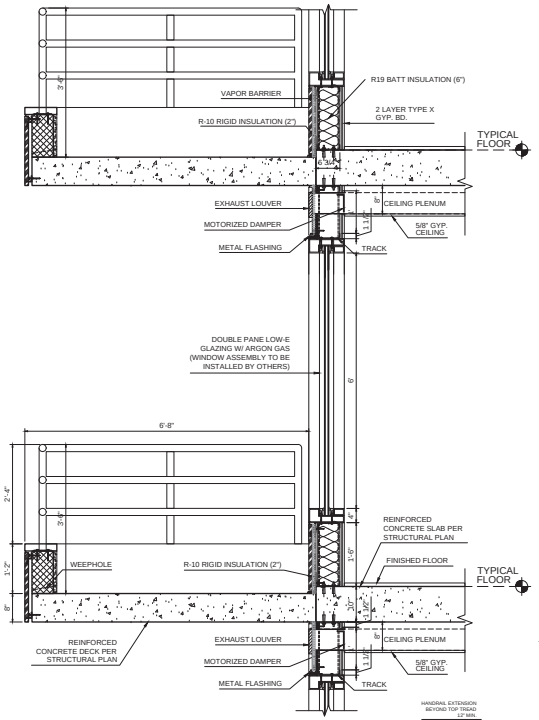
2 HR. RATED CHASE WALL
GA FILE TYPE: WP 5110
FIRE TEST: UC, 4-25-61
FIELD SOUND TEST: ACI 109006c
6-29-64
STC RATING: 55 STC



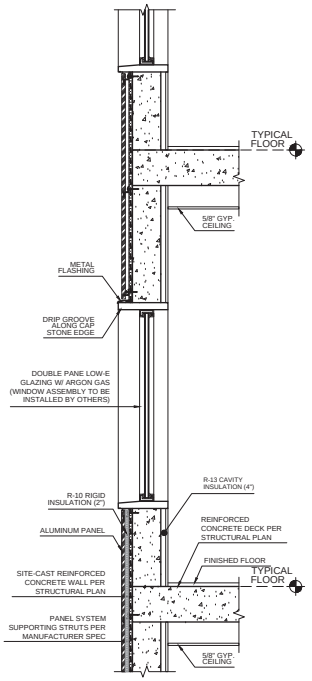
CONCRETE WALL & FURRING
SEE 1968 NY BLDG LAWS



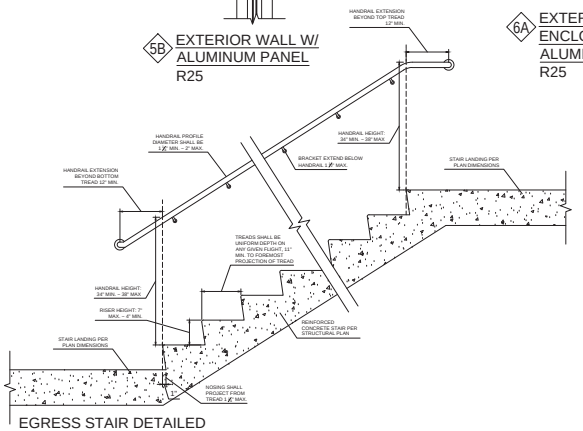
EXTERIOR WALL W/ ALUMINUM PANEL
R25



EXTERIOR WALL W/ ALUMINUM PANEL
R25



EXTERIOR STAIR ENCLOSURE WALL W/ ALUMINUM PANEL
R25



EGRESS STAIR DETAILED SECTION (TYP.)
NOT TO SCALE

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MICHAEL KANG, RA

NOTES:

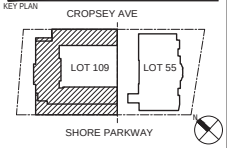
1. SEE STRUCTURE DRAWINGS FOR STRUCTURAL DETAILS AND SCHEDULES

3. SEE MEP DRAWINGS FOR MECHANCAL AND SPRINKLER SYSTEMS, ELECTRICAL SYSTEMS, PLUMBING SYSTEMS.

4. SEE SITE CONNECTION PROPOSAL FOR SEWER CONNECTION

5. COORDINATE ELEVATOR SHAFT, PIT, EQUIPMENT AND MACHINE ROOM WITH MANUFACTURER.

KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

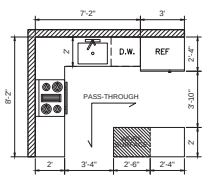
DETAILED WALL SECTIONS

SEAL & SIGNATURE

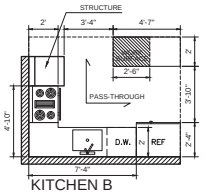
DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

A-303.00

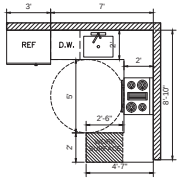
PAGE No: 36 OF 38



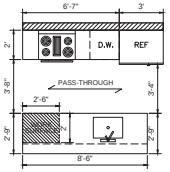
KITCHEN A
81.03 SF



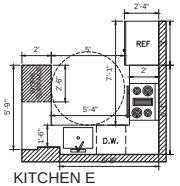
KITCHEN B
84.39 SF



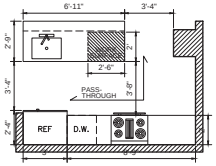
KITCHEN C
90.00 SF



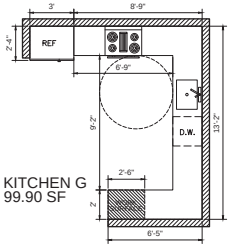
KITCHEN D
80.66 SF



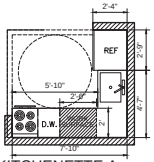
KITCHEN E
88.04 SF



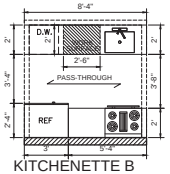
KITCHEN F
99.90 SF



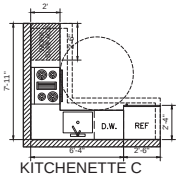
KITCHEN G
99.90 SF



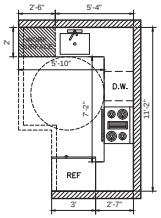
KITCHENETTE A
59.89 SF



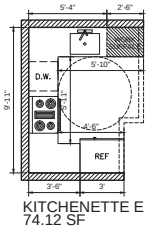
KITCHENETTE B
68.06 SF



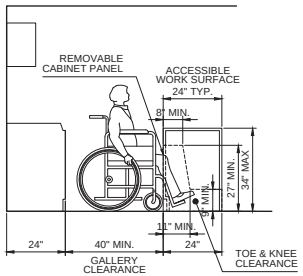
KITCHENETTE C
39.43 SF



KITCHENETTE D
78.10 SF



KITCHENETTE E
74.12 SF



TYPICAL KITCHEN /
KITCHENETTE
ADAPTABLE CABINET
NTS

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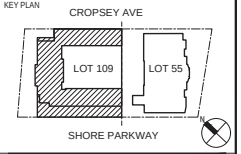
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE

BROOKLYN, NEW YORK

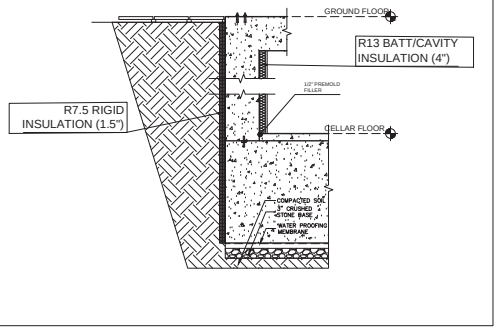
ACCESSIBLE KITCHEN
& KITCHENETTE TYPES

SEAL & SIGNATURE

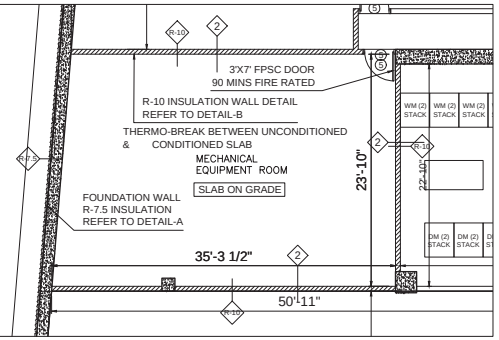
DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

A-304.00

Section # & Req. ID	Footing / Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
C402.2.4 [FO1] F	Below-grade wall insulation R-value.	R- 7.5	R- 7.5	✓Complies ☐Does Not ☐Not Observable ☐Not Applicable	SEE APPROVED DOCUMENTS
C303.2 [FO2] F	Below-grade wall insulation installed per manufacturer's instructions.			✓Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.



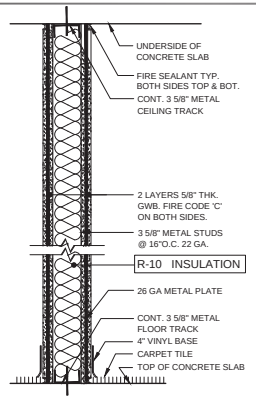
A EN-001 FOUNDATION WALL (R-7.5 INSULATION)



D EN-001 UNCONDITIONED SPACE - 2 (MECHANICAL EQUIPMENT ROOM)

SUPPORTING DOCUMENTATION REFERENCE:

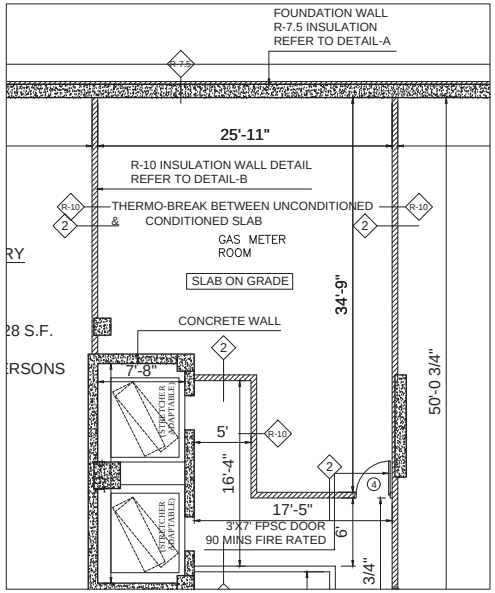
FOUNDATION TYPE:	A-303, EN-101
BASEMENT WALL TYPE:	A-303, EN-101
PROGRESS INSPECTION FOR ENVELOPE:	EN-100
ENERGY TABULAR ANALYSIS:	EN-100



2 HR. RATED PARTITION

GA FILE TYPE: WP 1548
FIRE TEST: WHI, 495-0236,1-30-80

B EN-001 INTERIOR WALL DETAIL (R-10 INSULATION)



C EN-001 UNCONDITIONED SPACE - 1 (GAS METER ROOM)

TABLE II - PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE COMMERCIAL BUILDINGS (1 RCNY §5000-01 CHAPTER 5000 NYCECC)

	INSPECTION/ TEST	FREQUENCY (MINIMUM)	REFERENCE STANDARD (SEE ECC CHAPTER 61 OR OTHER CRITERIA	ECC OR OTHER CRITATION	INSPECTION REQUIRED	
IIA	**ENVELOPE INSPECTIONS**				YES	NO
IIA1	**PROTECTION OF EXPOSED FOUNDATION INSULATION:** INSULATION SHALL BE VISUALLY INSPECTED TO VERIFY PROPER PROTECTION WHERE APPLIED TO THE EXTERIOR OF BASEMENT OR CELLAR WALLS, CRAWL-SPACE WALLS AND/OR THE PERIMETER OF SLAB-ON-GRADE FLOORS.	AS REQUIRED DURING FOUNDATION WORK AND PRIOR TO BACKFILL	APPROVED CONSTRUCTION DOCUMENTS	C402.2.1; ASHRAE 90.1 - 5.8.1.7	●	

TABULAR ANALYSIS

1 RCNY § 5000-01

NYCECC	PROVISION	ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE VALUE	SUPPORTING DOCUMENTS
C402	THERMAL ENVELOPE				
C402.2	**BASEMENT WALLS (FOUNDATION WALLS)**	**BASEMENT WALLS (FOUNDATION WALLS)**	**RIGID INSULATION ON BASEMENT WALL = R-7.5 BATTICAVITY INSULATION ON FOUNDATION WALL = R-13**	**R-7.5 BELOW GRADE WALL**	**SEE DWG # EN-100 & A-303 (WALL DETAIL SECTION)**

NO PLUMBING WORK PROPOSED FOR THIS STAGE OF WORK

TO THE BEST OF MY KNOWLEDGE, THE PROPOSED BUILDING IN COMPLIANCE WITH 2014 NEW YORK CITY ENERGY CONSERVATION CODE USING CHAPTER C4 (COMMERCIAL ENERGY EFFICIENCY)

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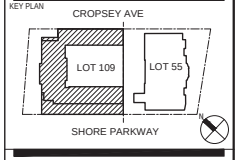
KEY PLAN



REV.#	DATE	DESCRIPTION

PROJECT

2286 CROPSEY AVE
BROOKLYN, NEW YORK

ENERGY ANALYSIS

SEAL & SIGNATURE

DATE: 08/16/2016
PROJECT No:
DRAWING BY: JL
CHK BY: MK
DWG No:

EN-100.00