1656 West 10th Street Rezoning

Environmental Assessment Statement

CEQR Number: 23DCP014K

Prepared by:

Environmental Studies Corp.

Prepared for:

Allstar Homecare Agency, Inc.

February 10, 2023

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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* 1656 West 10th Street Rezoning

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
23DCP014K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
22028ZMK N220286RK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
NYC City Planning Commission			Allstar Homecare Agency, Inc.		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Stephanie Shellooe, Director, EARD			Hiram A. Rothkrug, Environmental Studies Corp.		
ADDRESS 120 Broadway, 31st floor			ADDRESS 55 Water Mill Road		
CITY New York	STATE NY	ZIP 10271	CITY Great Neck	STATE NY	ZIP 10021
TELEPHONE 212-720-3328	EMAIL sshellooe@planning.nyc.gov		TELEPHONE 718-343-0026	EMAIL hrothkrug@environmentalstudiescorp.com	

5. *Project Description*

The applicant, Allstar Homecare Agency, Inc., seeks (1) a Zoning Map Amendment to rezone a 25,000 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The affected area consists of all or part of three lots (Block 6621, Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with Kings Highway in the East Bensonhurst section of Brooklyn CD 11. The action would facilitate the redevelopment of Lot 28 (Projected Development Site 1), now occupied by a 12,300 gsf (and zsf) building with two stories and a basement that is used as an adult day care center. The proposed new development would be a 35,901 gsf (25,135 zsf, 3.59 FAR) mixed use building with 6 stories, a cellar, and a sub-cellar that would have 27 residential units, an 8,109 gsf adult day care center, and a 5,539 gsf, 12-space accessory parking garage. The EAS assesses a similar but larger development with 35,966 gsf (25,200 sf, 3.60 FAR), with 8 rather than 6 stories, and with a height of 85 feet.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 11	STREET ADDRESS 1656 W. 10th Street
TAX BLOCK(S) AND LOT(S) Block 6621, Lot 28		ZIP CODE 11223
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS West side of W. 10th St. between Kings Highway and Avenue P		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R5B		ZONING SECTIONAL MAP NUMBER 22d

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
☐ RULEMAKING
☐ CONSTRUCTION OF PUBLIC FACILITIES
☐ 384(b)(4) APPROVAL
☐ OTHER, explain:
☐ FUNDING OF CONSTRUCTION, specify:
☐ POLICY OR PLAN, specify:
☐ FUNDING OF PROGRAMS, specify:
☐ PERMITS, specify:

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.): 25,000
Waterbody area (sq. ft) and type: 0
Roads, buildings, and other paved surfaces (sq. ft.): 23,500
Other, describe (sq. ft.): 1,500 (small undeveloped yards)

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): 35,966
NUMBER OF BUILDINGS: 1
GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 35,966
HEIGHT OF EACH BUILDING (ft.): 85
NUMBER OF STORIES OF EACH BUILDING: 8

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: 7,000
The total square feet not owned or controlled by the applicant: 18,000

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO
If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):
AREA OF TEMPORARY DISTURBANCE: 7,000 sq. ft. (width x length)
VOLUME OF DISTURBANCE: 140,000 cubic ft. (width x length x depth)
AREA OF PERMANENT DISTURBANCE: 7,000 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.)	22,318		8,109	
Type (*e.g.,* retail, office, school)	27 units		Adult day care	

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO
If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 70 NUMBER OF ADDITIONAL WORKERS:
Provide a brief explanation of how these numbers were determined: Residents: 27 households times 2.58 (the median household size in Kings County tract 428 per the ACS 2014-2018 five-year survey)

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

Has a No-Action scenario been defined for this project that differs from the existing condition? ☐ YES ☒ NO
If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly:

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2025		
ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 18 to 20		
WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO		IF MULTIPLE PHASES, HOW MANY?
BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE:		
10. ***Predominant Land Use in the Vicinity of the Project*** (check all that apply) ☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☐ OTHER, specify:		

Part II: TECHNICAL ANALYSIS

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

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

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☒	☐
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. Attached.		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☐	☒
5. *SHADOWS*: CEQR Technical Manual Chapter 8		

	YES	NO
(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. Attached.		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☒	☐
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions. Attached		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☒	☐
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☐	☒
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☐	☒
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☐	☒
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify:	☐	☒
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?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒

	YES	NO
(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):		
○ 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): 4,860,616,900		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☐	☒
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☐
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☐
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☐	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☐	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☒	☐
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed)	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☐	☒
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒

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

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

Construction activities may result in short-term disruption of both traffic and pedestrian movements. This would occur primarily due to the temporary loss of curbside lanes from the staging of equipment and the movement of materials to and from the site. Additionally, construction would result in the temporary closing of sidewalks adjacent to the site at times. These conditions would not lead to significant adverse effects on traffic and transportation conditions. In addition, there are no sensitive uses, suchas parks are schools, within 400 feet of the rezoning area.

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
Brian Kintish	February 10, 2023

SIGNATURE

Brian Kintish

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

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

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

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

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? ☐ ☒

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

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

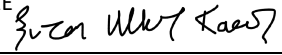
☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental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

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

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

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

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission
NAME	DATE
Evren Ulker-Kacar, AICP - Deputy Director	February 10, 2023

SIGNATURE 

NEGATIVE DECLARATION

Statement of No Significant Effect

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

Reasons Supporting this Determination

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

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions include a Zoning Map Amendment to rezone the project area (Brooklyn Block 6621, Lots 22, 28, and 42 (p/o), a.k.a. the "Rezoning Area") from an R5B zoning district to an R6A district, as well as a Zoning Text Amendment to map a Mandatory Inclusionary Housing area coterminous with the Rezoning Area (the "Proposed Actions") in the Bensonhurst neighborhood of Brooklyn Community District 11. The project area is located on the west side of West 10th Street, near its intersection with Kings Highway. The Proposed Actions would facilitate the redevelopment of Lot 28 with a 35,901 gsf mixed-use building with 27 residential units, an adult daycare center, and accessory parking. The Proposed Actions would result in changes in land use and zoning in the project area, however, these changes would be compatible with the existing character of the surrounding neighborhood and the proximity to Kings Highway, the change in land use and zoning would not constitute a significant adverse impact.

Urban Design and Visual Resources

A detailed analysis related to Urban Design and Visual Resources is included in this EAS. The Proposed Actions are consistent with the urban design character of the surrounding blocks and would not change the street grid or topography of the area. In addition, there were no visual resources identified in the vicinity of the project area. Furthermore, due to the characteristics of the surrounding area and of the proposed development, no pedestrian safety impacts due to wind channelization or vortex effects are anticipated. Therefore, the Proposed Actions would not result in significant adverse impacts due to urban design or visual resource considerations.

Hazardous Materials, Air Quality, and Noise

An (E) designation (E-710) related to hazardous materials and air quality would be established as part of the approval of the Proposed Actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The hazardous materials and air quality analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to hazardous materials and 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 ABRAHAM ABREU at aabreu@planning.nyc.gov..

TITLE	LEAD AGENCY
Deputy Director, Environmental Assessment and Review Division	Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME	DATE
Evren Ulker-Kacar, AICP	2/10/2023
SIGNATURE	

TITLE	
Chair, City Planning Commission	
NAME	DATE
Daniel R. Garodnick	2/13/2023
SIGNATURE	

Project Name: 1656 West 10th Street Rezoning
CEQR # 23DCP014K
SEQRA Classification: Unlisted

Determination of Significance Appendix

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

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 6621, Lot 28

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to hazardous materials, air quality, and noise an (E) designation (**E-710**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

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

Hazardous Materials

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

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

Project Name: 1656 West 10th Street Rezoning
CEQR # 23DCP014K
SEQRA Classification: Unlisted

Air Quality

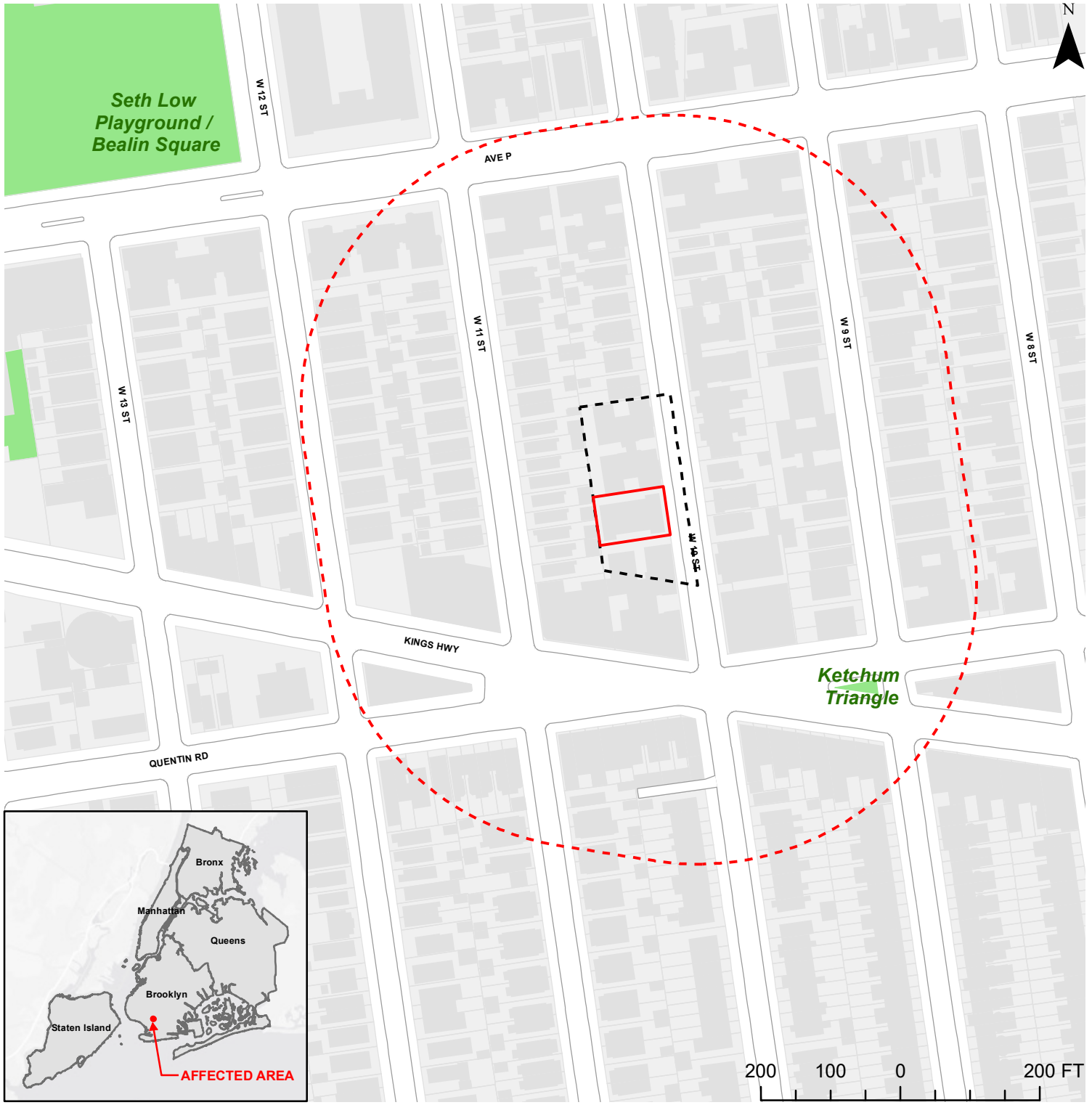
The (E) designation requirements for air quality would apply as follows:

> ***Projected Development Site 1:*** *To avoid any significant adverse HVAC source impacts from the proposed project on existing nearby sensitive receptors, an (E) designation would be placed on Projected Development Site 1. The air quality text of E-710 would be as follows:*
>
> ***Block 6621, Lot 28 (Projected Development Site 1):*** *Any new residential and/or community facility development on the above-referenced property must ensure the heating, ventilation, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 85 feet above grade to avoid any potential significant adverse air quality impacts.*

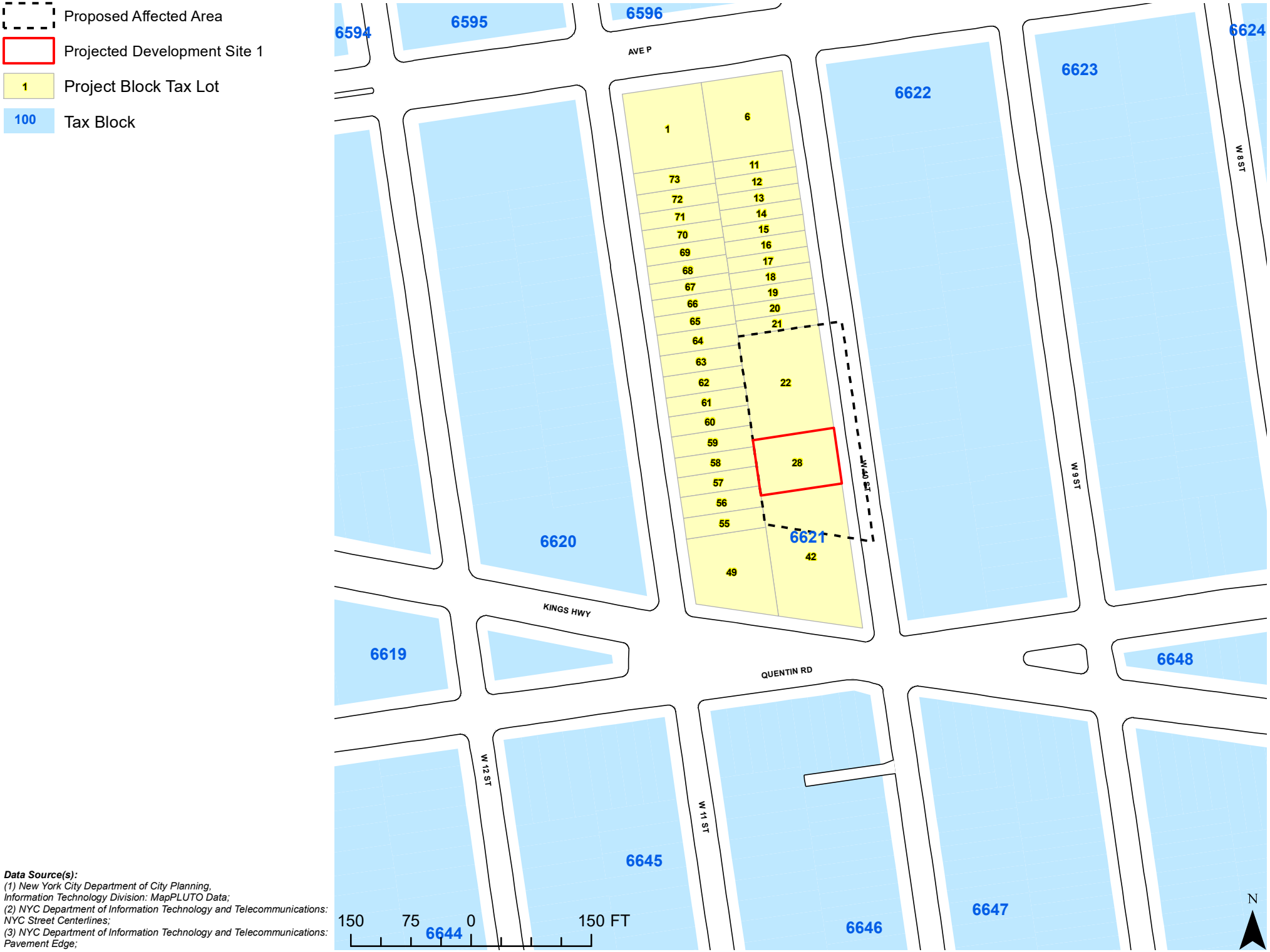
type

EAS Figure 1 - Site Location Map

- Proposed Affected Area
- Projected Development Site 1
- Open Space and Recreation

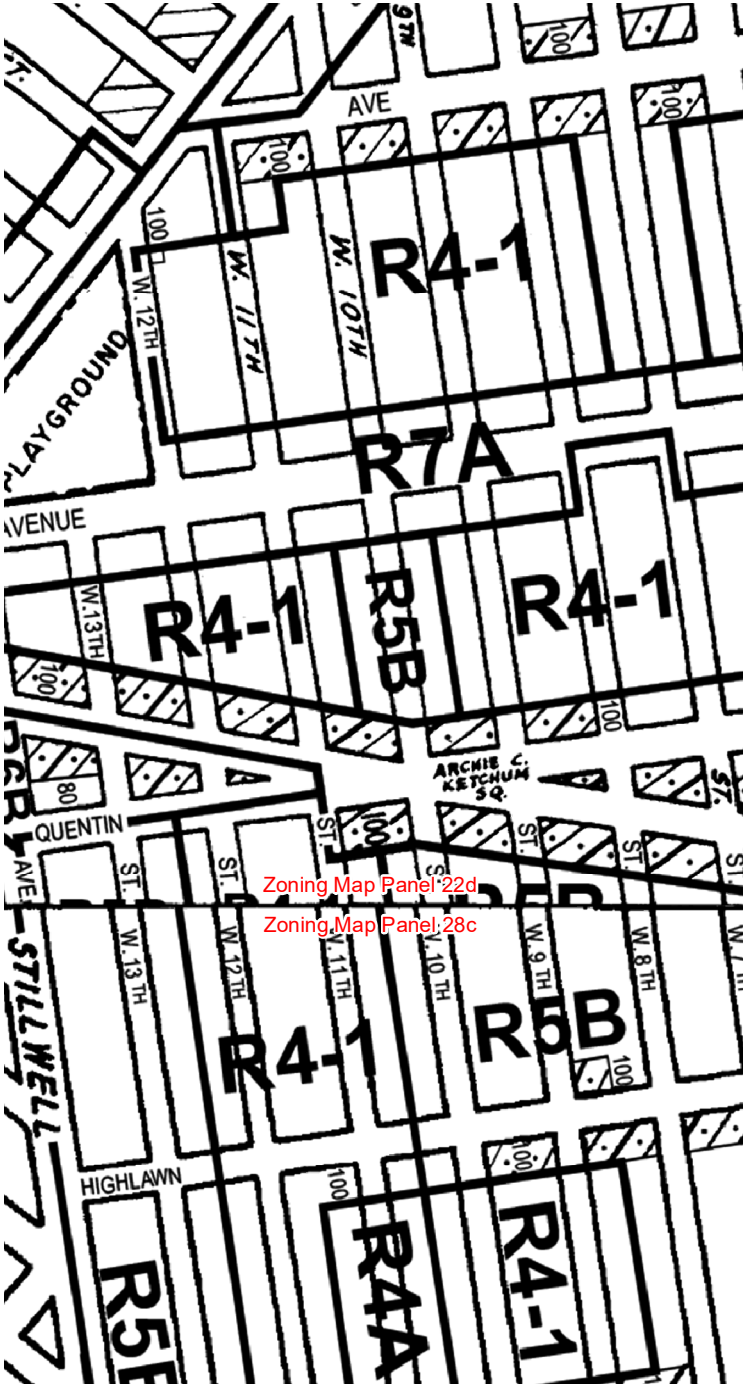


Data Source(s):
(1) New York City Department of City Planning, Information Technology Division: MapPLUTO Data;
(2) NYC Department of Information Technology and Telecommunications: NYC Street Centerlines;
(3) NYC Department of Information Technology and Telecommunications: Pavement Edge;
(4) NYC Department of Information Technology and Telecommunications: Building Footprints;
(5) NYC Department of Information Technology and Telecommunications: Open Space (Parks);
(6) NYC Department of Information Technology and Telecommunications: Hydrography;

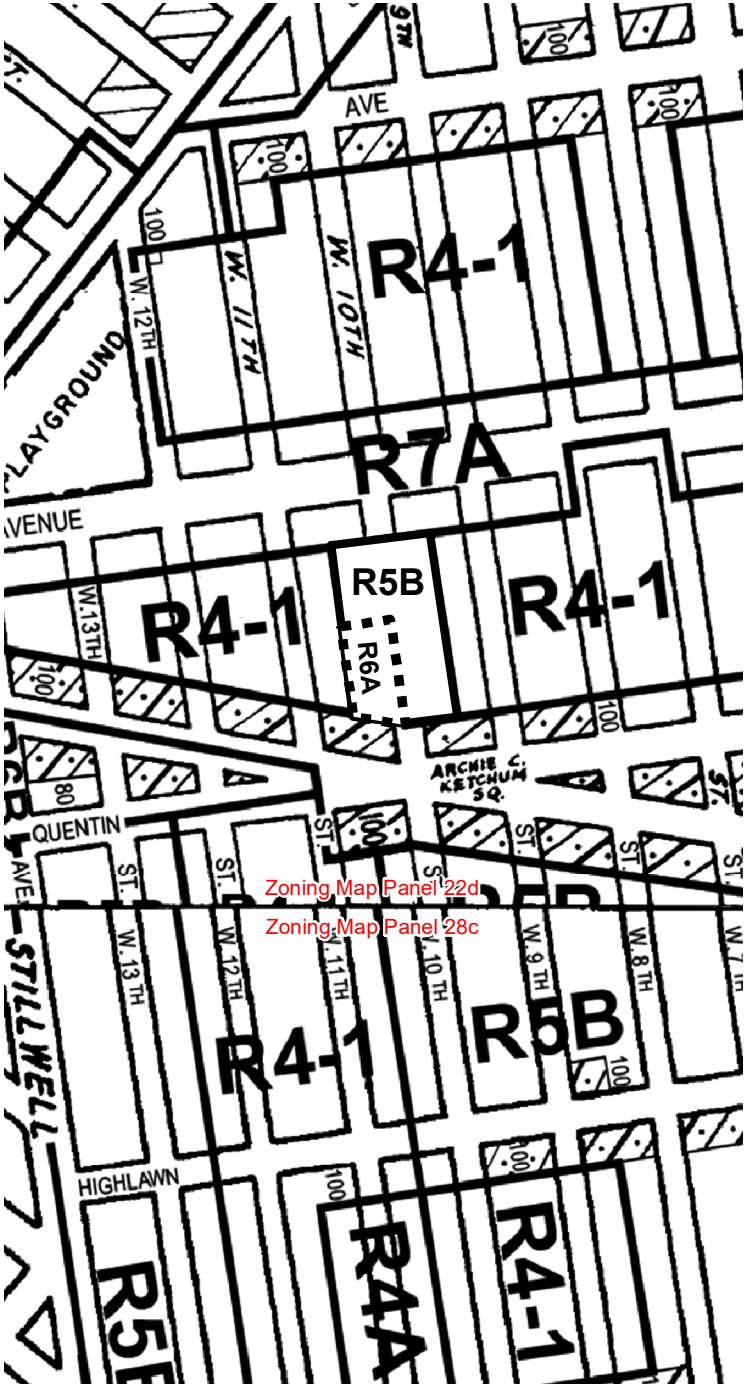


Data Source(s):
(1) New York City Department of City Planning, Information Technology Division: MapPLUTO Data;
(2) NYC Department of Information Technology and Telecommunications: NYC Street Centerlines;
(3) NYC Department of Information Technology and Telecommunications: Pavement Edge;

- Zoning District Boundary
- Special Purpose District
- Areas to be Rezoned
- C1-1 Commercial Overlay
- C1-2 Commercial Overlay
- C1-3 Commercial Overlay
- C1-4 Commercial Overlay
- C1-5 Commercial Overlay
- C2-1 Commercial Overlay
- C2-2 Commercial Overlay
- C2-3 Commercial Overlay
- C2-4 Commercial Overlay
- C2-5 Commercial Overlay



Current Zoning Maps (22d and 28c)



Proposed Zoning Map (22c) and Existing Zoning Map (28c)

Rezoning R5B to R6A

EAS Figure 4 - Existing Land Use Map

Proposed Affected Area

Projected Development Site 1

400-Foot Study Area Radius

Land Use

One & Two Family Buildings

Multi-Family Walkup Buildings

Multi-Family Elevator Buildings

Mixed Commercial / Residential Buildings

Commercial / Office Buildings

Industrial / Manufacturing

Transportation / Utility

Public Facilities & Institutions

Open Space

Parking Facilities

Vacant Land

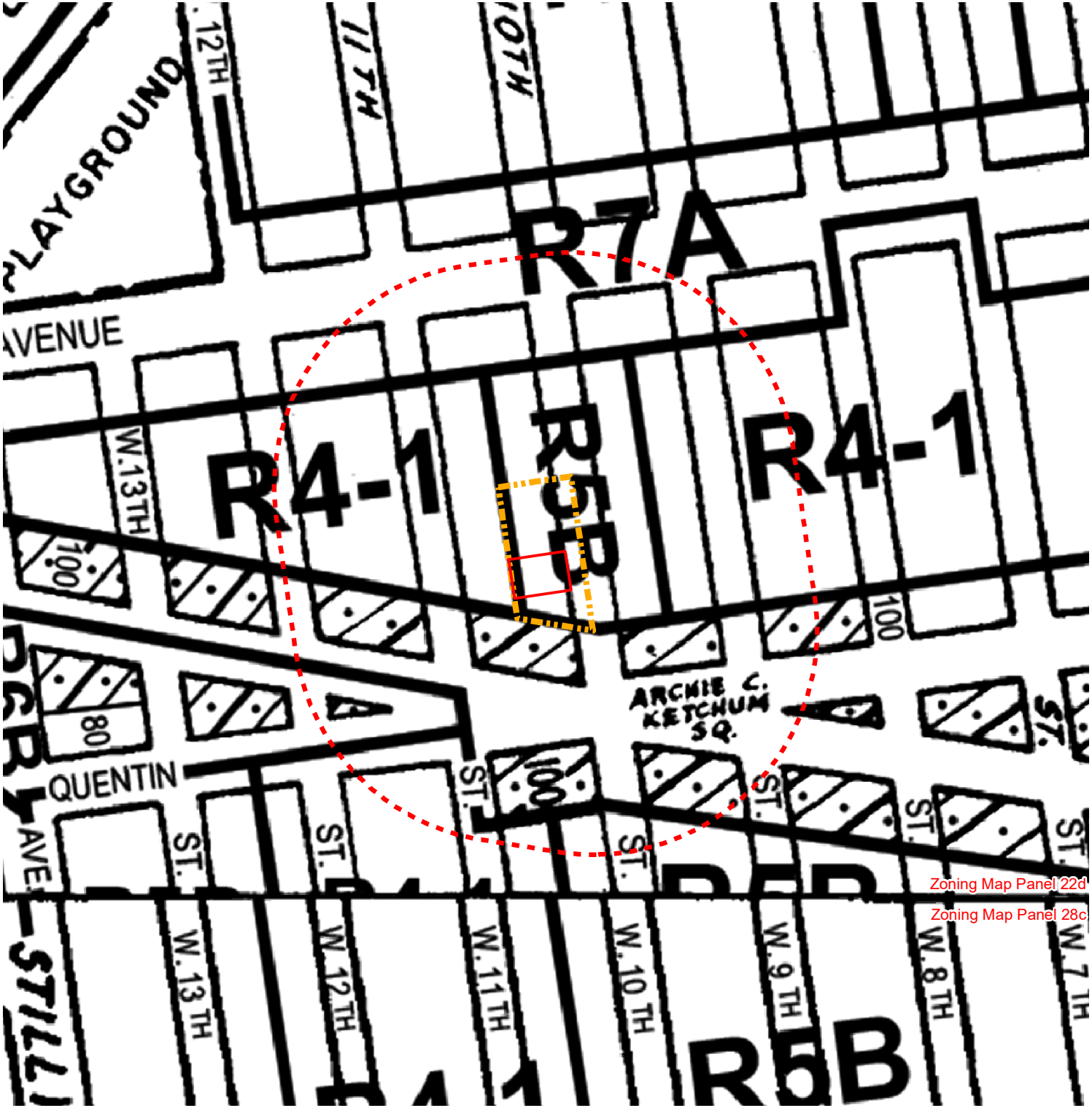
All Others or No Data



Data Source(s):
(1) New York City Department of City Planning, Information Technology Division: MapPLUTO Data;
(2) NYC Department of Information Technology and Telecommunications: NYC Street Centerlines;
(3) NYC Department of Information Technology and Telecommunications: Pavement Edge;
(4) NYC Department of Information Technology and Telecommunications: Building Footprints;
(5) NYC Department of Information Technology and Telecommunications: Hydrography;

Figure 5 - Existing Zoning Map

- Proposed Affected Area
- Projected Development Site 1
- 400-Foot Study Area Radius
- Zoning District Boundary
- Special Purpose District
- Areas to be Rezoned
- C1-1 Commercial Overlay
- C1-2 Commercial Overlay
- C1-3 Commercial Overlay
- C1-4 Commercial Overlay
- C1-5 Commercial Overlay
- C2-1 Commercial Overlay
- C2-2 Commercial Overlay
- C2-3 Commercial Overlay
- C2-4 Commercial Overlay
- C2-5 Commercial Overlay



Data Source(s):
(1) New York City Planning Commission Zoning Map Panel Nos. 22d and 28c

Proposed Affected Area

Projected Development Site 1

400-Foot Study Area



Data Source(s):
(1) New York City Department of City Planning, Information Technology Division: MapPLUTO Data;
(2) ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AerioGRID, IGN, and the GIS User Community



1. View of the Development Site facing southwest from West 10th Street.



2. View of the Development Site facing west from West 10th Street.



3. View of the Development Site facing northwest from West 10th Street.





4. View of the Project Area facing west from West 10th Street.



5. View of the Project Area facing northwest from West 10th Street.



6. View of West 10th Street facing north (Project Area at left).





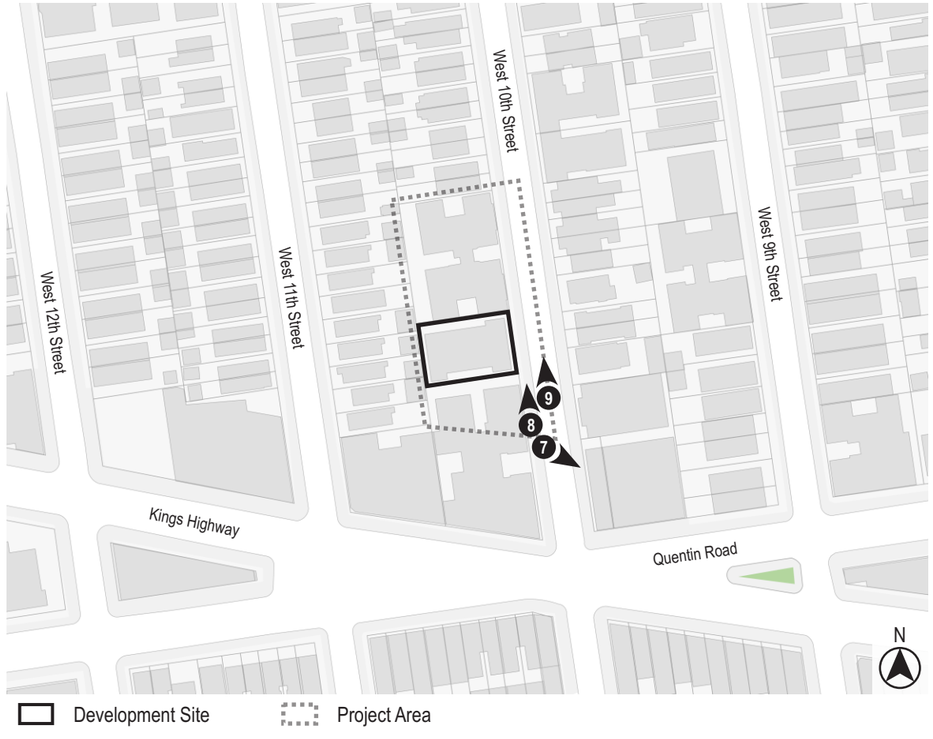
7. View of the east side of West 10th Street facing southeast from the Project Area.



8. View of the sidewalk along the west side of West 10th Street facing north (Project Area at left).



9. View of West 10th Street facing north (Development Site at left).





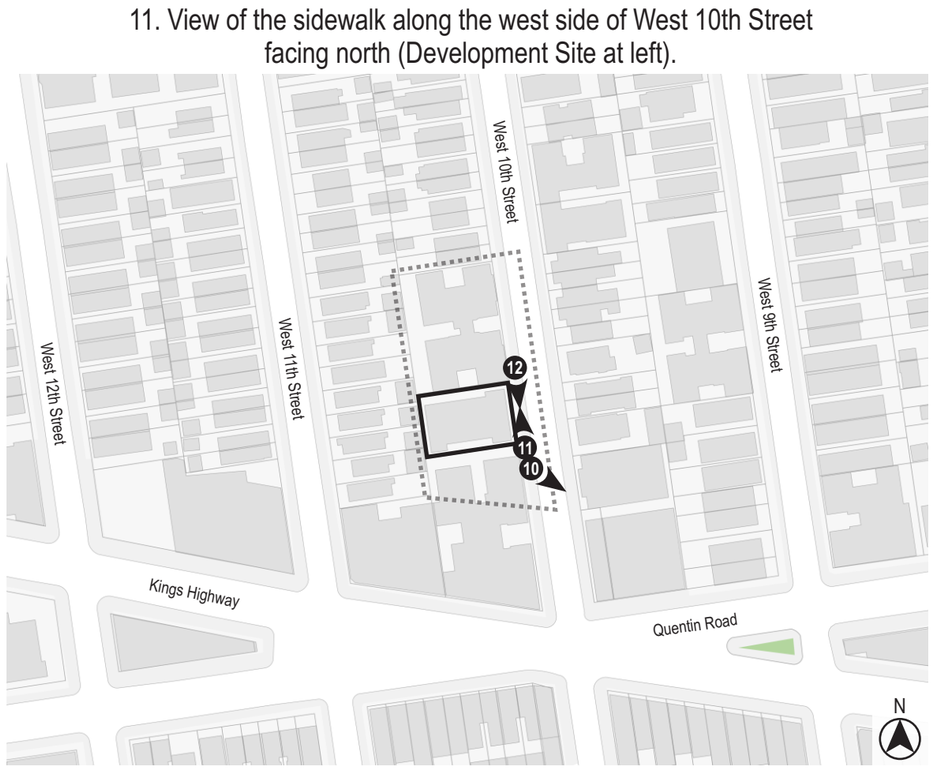
10. View of the east side of West 10th Street facing southeast from the Development Site.



12. View of the sidewalk along the west side of West 10th Street facing south (Development Site at right).



11. View of the sidewalk along the west side of West 10th Street facing north (Development Site at left).





13. View of the east side of West 10th Street facing northeast from the Development Site.



14. View of the sidewalk along the west side of West 10th Street facing north (Project Area at left).



15. View of West 10th Street facing south (Development Site at right).





16. View of the Project Area facing west from West 10th Street.



17. View of the Project Area facing southwest from West 10th Street.



18. View of West 10th Street facing south (Project Area at right).



1656 WEST 10TH STREET REZONING

PROJECT DESCRIPTION

INTRODUCTION

This Environmental Assessment Statement (EAS) is filed under the City Environmental Quality Review (CEQR) procedures in connection with an application made to the City Planning Commission (CPC) for a Zoning Map Amendment and a Zoning Text Amendment (the "proposed actions"). The zoning map amendment would rezone a 25,000 sf area on Block 6621 in Brooklyn Community District (CD) 11 from R5B to R6A, and the zoning text amendment would alter Appendix F to the Zoning Resolution by mapping a Mandatory Inclusionary Housing (MIH) area that would be coterminous with the proposed rezoning area.

PROPOSED ACTIONS

The applicant, Allstar Homecare Agency, Inc., seeks (1) a Zoning Map Amendment to rezone a 25,168 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The affected area consists of all or part of three lots (Block 6621, Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with King Highway in the East Bensonhurst section of Brooklyn CD 11.

The proposed zoning map amendment and the mapping of a Mandatory Inclusionary Housing area would alter the rezoning area's bulk regulations. The maximum permitted residential floor area ratio (FAR) would increase from 1.35 to 3.60; the maximum permitted community facility FAR would increase from 2.00 to 3.00, and the overall maximum permitted FAR would increase from 2.00 to 3.60. Front and side yards would no longer be required. The maximum permitted residential building height would increase from 33 feet to 85 feet. Maximum residential lot coverage would increase from 55 percent to 65 percent. Permitted lot coverage would also increase for community facilities, but the regulations would continue to be waived for any portion of a building under 23 feet in height.

REZONING AREA

The proposed rezoning area consists of 25,000 sf on Block 6621 (bounded by W. 10th St., Kings Highway, W. 11th St., and Avenue P) in the East Bensonhurst section of Brooklyn CD 11. It consists of all or part of three lots (Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with King Highway. It has 250 feet of frontage on W. 10th St. and is 100 feet deep.

Projected Development Site 1 (Lot 28, 1656 W. 10th St.) is the middle lot. It is a 7,000 sf parcel with 70 feet of street frontage. It is occupied by a 12,300 gsf (and zsf), 36-foot-tall building with two stories and a basement. The FAR is 1.75. The building was constructed as a church in 1927, became a synagogue in 1963, was used as a yeshiva beginning in 2006, and has been an adult social day care center known as Better Living Community Center since 2013. Its hours of operation are 8 AM to 3 PM weekdays and 8 AM to 2 PM Saturday and Sunday.

Lot 22 (1650 W. 10th St.) is a 13,000 sf parcel to the immediate north of Projected Development Site 1. It is occupied by a 6-story (and cellar), 64-foot tall, 63,000 gsf (54,000 zsf), 48-unit residential apartment building constructed in 1938.The FAR is 4.15.

Lot 42 (1684 W. 10th St.) is an 18,720 sf parcel to the immediate south of Projected Development Site 1. It is the southernmost lot on the blockfront, with frontage on both W. 10th St. and Kings Highway. Approximately 5,000 sf is within the rezoning area and the R5B district; the rest is in an R7A district mapped along Kings Highway. It is occupied by a 6-story (and cellar), 63-foot-tall, 87,000 gsf (75,000 zsf) mixed use building with 84 residential units and 7 commercial units, which was built in 1928. The upper floors are entirely residential, as is the portion of the ground floor fronting on W. 10th Street, and the portion of the ground floor fronting on Kings Highway is commercial. The FAR if 4.01.

PROJECT DESCRIPTION

The proposed actions would facilitate the redevelopment of Projected Development Site 1 with a new mixed use building with 6 stories, a cellar, and a sub-cellar. The upper floors would contain 27 residential units; the ground floor would contain part of a social adult day care center, the residential lobby, and a vehicular elevator connecting to a subsurface accessory parking garage for residents; the cellar would contain part of the adult day care center, part of the garage, and building service and utility rooms; and the sub-cellar would contain part of the adult day care center, part of the garage, a bicycle storage room, and building service areas. There would be 945 sf of rooftop recreational space for building residents, and a 2,100 sf rear yard garden would be part of the adult day care center. The building would have 35,901 gsf of floor area (22,253 residential gsf, 8,109 community facility gsf, and a 5,539 gsf garage), of which 25,135 sf would count as zoning floor area (21,588 zsf of residential floor area and 3,547 zsf of community facility floor area). The FAR would be 3.59 (3.08 residential FAR and 0,51 community facility FAR). The building would be 65 feet tall, with no setbacks. The development would comply with Inclusionary Housing Program, and approximately 6 of the 27 units would be affordable. The curb cut would be at the northern end of the lot. (Illustrative architectural plans are attached as Appendix A.)

PURPOSE AND NEED

The proposed actions would add needed affordable and market rate housing in a project that would also replace the existing community facility use at the site and would bring the existing buildings on the two adjacent lots into compliance with zoning bulk regulations. The proposed R6A district would match the character of the affected part of W. 10th St. better than the current R5B district. In addition, the proposed multifamily residential development is appropriate at this location because the area is well served by transit, with express bus service located at the corner of Kings Highway and W. 10th Street, and a subway station two blocks away at Kings Highway and W. 8th Street.

ANALYSIS FRAMEWORK

Existing Conditions

Existing conditions are as described above under Rezoning Area. To reiterate, Projected Development Site 1 is occupied by an adult social day care center in a 12,300 gsf building with two stories and a basement. It is flanked by a six-story, 63,000 gsf residential apartment building and a six-story, 87,000 gsf building with residential apartments above a ground floor that is divided between residential apartments facing W. 10th Street and commercial units fronting on Kings Hghway.

The Future without the Proposed Actions

Absent the proposed actions, no redevelopment would occur within the proposed rezoning area. The no-action scenario is the same as the existing conditions.

The Future with the Proposed Actions

The with-action reasonable worst-case development scenario (RWCDS) consists of a development that is similar to but larger than the proposed project described above. Projected Development Site 1 would be redeveloped with a new mixed use building with 8 stories, a cellar, and a sub-cellar. The upper floors would contain 27 residential units; the ground floor would contain part of a social adult day care center, the residential lobby, and a vehicular elevator connecting to a subsurface accessory parking garage for residents; the cellar would contain part of the adult day care center, part of the garage, and building service and utility rooms; and the sub-cellar would contain part of the adult day care center, part of the garage, a bicycle storage room, and building service areas. There would be 945 sf of rooftop recreational space for building residents, and a 2,100 sf rear yard garden would be part of the adult day care center. The building would have 35,966 gsf of floor area (22,318 residential gsf, 8,109 community facility gsf, and a 5,539 gsf garage), of which 25,200 sf would count as zoning floor area (21,653 zsf of residential floor area and 3,547 zsf of community facility floor area). The FAR would be 3.60 (3.09 residential FAR and 0,51 community facility FAR). The building would be 85 feet tall. The development would comply with Inclusionary Housing Program, and approximately 6 of the 27 units would be affordable. The curb cut would be at the northern end of the lot.

Existing conditions would continue on Lots 22 and 42.

REQUIRED APPROVALS

The proposed project would require (1) a Zoning Map Amendment to rezone a 25,000 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The zoning map amendment would be subject to the Uniform Land Use Review Procedure (ULURP).

BUILD YEAR

It is assumed that the rezoning will take approximately 18 months, including both precertification review and ULURP, that the Department of Buildings approval process would take approximately six months, and that demolition and construction would take approximately 18 to 20 months. The projected build year is therefore 2025.

PART II: TECHNICAL ANALYSES

INTRODUCTION

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

4. LAND USE, ZONING, AND PUBLIC POLICY

Introduction

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

According to the *CEQR Technical Manual*, a preliminary assessment that includes a basic description of existing and future land uses, as well as basic zoning information, is provided for most projects, regardless of their anticipated effects, and a consideration of the proposed action's consistency with relevant public policies may also be appropriate. An assessment of an action's consistency with the Waterfront Revitalization Program is required if an action would occur within the designated Coastal Zone.

Study Area

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

Because of the relatively modest size of the proposed project, the land use and zoning assessment for the proposed action considers a study area extending 400 feet around the proposed rezoning area. As shown in Figure 4, Existing Land Use Map (above, following the EAS form), the study area extends northward to Avenue P, eastward to the midblock between W. 8th and W. 9th Streets, southward approximately 200 feet beyond Quentin Road, and westward to W. 12th Street.

Need for a Preliminary Assessment

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

Land Use

<u>Existing Conditions within the Rezoning Area</u>

The proposed rezoning area consists of 25,000 sf on Block 6621 (bounded by W. 10th St., Kings Highway, W. 11th St., and Avenue P) in the East Bensonhurst section of Brooklyn CD 11. It consists of all or part of three lots (Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with King Highway. It has 250 feet of frontage on W. 10th St. and is 100 feet deep.

Projected Development Site 1 (Lot 28, 1656 W. 10th St.) is the middle lot. It is a 7,000 sf parcel with 70 feet of street frontage. It is occupied by a 12,300 gsf (and zsf), 36-foot-tall building with two stories and a basement. The FAR is 1.75. The building was constructed as a church in 1927, became a synagogue in 1963, was used as a yeshiva beginning in 2006, and has been an adult social day care center known as Better Living Community Center since 2013. Its hours of operation are 8 AM to 3 PM weekdays and 8 AM to 2 PM Saturday and Sunday.

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Existing Conditions within the Study Area

The study area is entirely residential except along Kings Highway, where development is divided between commercial buildings and mixed use buildings with commercial ground floors and residential upper floors. One- and two-family homes line W.11th and W. 12th Streets; a mix of one- and two-family homes and walkup apartment buildings with up to four stories and 23 dwelling units predominates along W. 9th and W. 10th Streets; and six-story elevator apartment buildings line the south side of Avenue P. Local retail and service establishments line the ground floors of Kings Highway, generally with one or two residential stories above them. The only exceptions to this pattern are a few ground floor commercial uses along W. 9th Street and Quentin Road, two six-story elevator apartment buildings on W. 9th Street, and the three buildings within the proposed rezoning area.

Future without the Proposed Actions

Absent the proposed actions, no land use changes are anticipated.

Future with the Proposed Actions

If the proposed actions are approved, Projected Development Site 1 would be redeveloped with a new mixed use building with 8 stories, a cellar, and a sub-cellar. The upper floors would contain 27 residential units; the ground floor would contain part of a social adult day care center, the residential lobby, and a vehicular elevator connecting to a subsurface accessory parking garage for residents; the cellar would contain part of the adult day care center, part of the garage, and building service and utility rooms; and the sub-cellar would contain part of the adult day care center, part of the garage, a bicycle storage room, and building service areas. There would be 945 sf of rooftop recreational space for building residents, and a 2,100 sf rear yard garden would be part of the adult day care center. The building would have 35,966 gsf of floor area (22,318 residential gsf, 8,109 community facility gsf, and a 5,539 gsf garage), of which 25,200 sf would count as zoning floor area (21,653 zsf of residential floor area and 3,547 zsf of community facility floor area). The FAR would be 3.60 (3.09 residential FAR and 0,51 community facility FAR). The building would be 85 feet tall. The development would comply with Inclusionary Housing Program, and approximately 6 of the 27 units would be affordable.

The new development would combine the use currently on the site (an adult social day care center) with the use currently occupying all other properties on the block (residences). It would thus be consistent with existing land use patterns. The proposed actions would not have a significant adverse land use impact.

Zoning

Existing Conditions within the Affected Area

The proposed rezoning area is now zoned R5B, a low density residential district that permits residential and community facility uses but prohibits the development of new commercial or industrial uses. R5B permits maximum FARs of 1.35 and 2.00 respectively for residential and community facility developments. Front, side, and rear yards are required; the front yard mut be at least ten feet deep for residential development and at least five feet deep for community facilities. For a residential building the maximum permitted lot coverage is 55 percent, the maximum permitted perimeter wall height is 30 feet, and the maximum permitted building height is 33 feet. For a community facility building, the maximum permitted lot coverage is 55 percent on an interior or through lot and 60 percent on a corner lot, but these regulations are waived for any portion of a building under 23 feet in height. For community facilities the maximum perimeter front wall height is 35 feet; above that height, no portion of the building may penetrate a sky exposure plane sloping upwards and rearwards over the property at a 45-degree angle.

All three properties wholly or partly within the proposed rezoning area support conforming uses, but two are developed with legally noncomplying buildings that predate the 1961 Comprehensive Amendment to the Zoning Resolution. The buildings on Lots 22 and 42 exceed the current maximum permitted FAR, lot coverage, and building height and lack the required yards.

Existing Conditions within the Study Area

The R5B district covers all but the southern and northern ends of the block of W. 10th Street between Avenue P and Kings Highway, and a few lots in the southernmost part of the study area are also zoned R5B. The southern end, the portion within 100 feet of Kings Highway, is zoned R7A/C2-3. On the west side of the street, the proposed rezoning area is adjacent to the R7A/C2-3 district. The northern end, the portion within 100 feet of Avenue P, is zoned R7A.

R7A is a contextual medium density residential district that permits residential and community facility development. The maximum permitted FAR is 4.00 for either residential or community facility development. (The maximum is 4.60 for a residential development satisfying the provisions of the Inclusionary Housing Program, but no part of the study area is within an Inclusionary Housing designated area or a Mandatory Inclusionary Housing area.) Rear yards are required, but front and side yards are not. For community facility development, the maximum permitted base (street wall) height is 65 feet, and the maximum permitted building height is 80 feet. For a residential building or a mixed-use building that combines residential use with community facility use, the maximums are also 65 feet and 80 feet if it does not include a qualifying ground floor, or 75 feet and 85 feet if it does include a qualifying ground floor.

The addition of the C2-3 commercial overlay district permits those commercial uses listed in Use Groups 6, 7, 8, 9, and 14. The maximum permitted commercial FAR is 2.00. Within a mixed-use building, commercial use is restricted to the ground floor and any subsurface level. In general, a commercial building is restricted to a maximum height of two stories or 30 feet, whichever is less.

The midblocks of W. 9th, W. 11th and W. 12th Streets between Kings Highway and Avenue P are zoned R4-1. R4-1 is a low density residential district that permits residential and community facility uses but prohibits the development of new commercial or industrial uses. The district permits a maximum FAR of 0.90 for residential development and a maximum FAR of 2.00 for community facility development. Front, side, and rear yards are required; the front yard mut be at least 10 feet deep for residential development and at least 15 feet deep for community facilities; however, if an adjacent front yard is deeper than 10 feet, a residential development must have a front yard at least as deep as its neighbor's, but in no case must it be deeper than 20 feet. For residential buildings the maximum permitted perimeter wall height is 25 feet, and the maximum permitted building height is 35 feet. For community facilities the maximum front wall height is 35 feet; above that height, no portion of the building may penetrate a sky exposure plane sloping upwards and rearwards over the property at a 45-degree angle.

The small, triangular block bounded by Kings Highway, W. 11th Street, Quentin Avenue, and W. 12th Street is zoned R6B/C2-3. R6B is a medium density residential district permitting an FAR of up to 2.00 for either residential or community facility development. The maximum street wall height is 40 feet, and the maximum building height is 50 feet. Rear yards are required, but not front or side yards. The addition of the C2-3 commercial overlay has the same effect as in the R7A district.

Future Conditions without the Proposed Actions

In the absence of the proposed actions, no zoning changes are anticipated within the rezoning area or the study area.

Future Conditions with the Proposed Action

The proposed actions are (1) a Zoning Map Amendment to rezone the proposed area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area.

R6A is a medium density contextual residential district. It has the same use regulations as R5B, permitting residential and community facility uses but prohibiting the development of new commercial or industrial uses. The proposed actions would alter the area's bulk regulations. The maximum permitted residential FAR would increase from 1.35 to 3.60; the maximum permitted community facility FAR would increase from 2.00 to 3.00, and the overall maximum permitted FAR would increase from 2.00 to 3.60. Front and side yards would no longer be required. The maximum permitted residential building height would increase from 33 feet to 85 feet. Maximum residential lot coverage would increase from 55 percent to 65 percent. Permitted lot coverage would also increase for community facilities, but the regulations would continue to be waived for any portion of a building under 23 feet in height.

The proposed R6A district more closely matches the built form within the proposed rezoning area than does the existing R5B district. The change would not cause any nonconformance or noncompliance. Rather, it would reduce the extent of noncompliance on Lots 22 and 42. Because the rezoning area abuts the R7A/C2-3 district along Kings Highway, the rezoning would create an intermediate district between the higher density R7A district and the lower density midblock R5B district. The proposed actions would not have a significant adverse impact regarding zoning.

Public Policy

The proposed actions are (1) a Zoning Map Amendment to rezone a 25,168 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The proposed actions would facilitate the redevelopment of Projected Development Site 1 with a new 6-story mixed use building with 27 residential units above an adult day care facility. Approximately 6 of the residential units would satisfy the affordability requirements of the Inclusionary Housing Program. If the proposed actions are not taken, no redevelopment would occur, and an adult day care facility would remain on the site.

The development of affordable and market rate housing is a public policy priority discussed in *OneNYC 2050: Building a Strong and Fair City* and *Housing Our Neighbors: A Blueprint for Housing and Homelessness*.

OneNYC 2050, released in 2019, is a nine-volume set that serves as New York City's long-term strategic plan. Volume 4, Thriving Neighborhoods, addresses housing policy. One stated goal is to "ensure all New Yorkers have access to safe, secure, and affordable housing." To accomplish this, a major commitment is to "create or preserve 300,000 affordable units by 2026 and increase overall housing supply."

Housing Our Neighbors: A Blueprint for Housing and Homelessness, released in 2022, presents the Mayor's commitments and strategies regarding affordable housing. The first stated commitment is "1. Accelerate and increase capacity for new housing supply citywide."

By facilitating the development of new mixed income housing, the proposed actions would promote the City's policies regarding housing.

Conclusion

The proposed actions would not result in any significant adverse impact with regard to land use, zoning, or public policy, and no further analysis is warranted.

8. SHADOWS

Introduction

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

The development resulting from the proposed actions under the with-action scenario would have a rooftop height of 85 feet and rooftop bulkheads rising another 10 feet. Their maximum height would thus be 95 feet.

Tier 1 Assessment

Shadow lengths vary by time of day, being longest in the early morning and late afternoon and shortest at noon, and by time of year, being longest at the winter solstice and shortest at the summer solstice. According to the *CEQR Technical Manual*, the longest shadow cast by a building is 4.3 times the building's height. The maximum height of portions of the projected development would be 95 feet. The longest shadow cast by the projected development would therefore be 408.5 feet in length.

Figure 8-1, Tiers 1 and 2 Screening Assessment, shows the area within a 408.5-foot radius of Projected Development Site 1. The only sunlight sensitive resource identified within the area is Ketchum Triangle, located southeast of the site and bounded by Kings Highway, Quentin Road, and W. 9th Street.

Tier 2 Assessment

The next step is to determine whether the sunlight-sensitive resources are within the arc in which shadows can be cast. That arc excludes the triangular area to the south of the action-induced development that extends from +108 degrees to -108 degrees from true north. As Figure 8-1 shows, Ketchum Triangle is located outside of the arc in which action-induced development would cast shadows.

Conclusion

Because no shadow cast by the projected development would ever fall on a sunlight sensitive resource, no significant adverse shadow impact would occur, and no further analysis is warranted.

Figure 8-1 - Tiers 1 and 2 Shadow Screening Analysis



Data Source(s):
(1) New York City Department of City Planning, Information Technology Division: MapPLUTO Data;
(2) NYC Department of Information Technology and Telecommunications: NYC Street Centerlines;
(3) NYC Department of Information Technology and Telecommunications: Pavement Edge;
(4) NYC Department of Information Technology and Telecommunications: Building Footprints;
(5) NYC Department of Information Technology and Telecommunications: Open Space (Parks);
(6) NYC Department of Information Technology and Telecommunications: Hydrography;

9. HISTORIC AND CULTURAL RESOURCES

Introduction

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

Archaeological Resources

According to the *CEQR Technical Manual*, archaeological resources generally need to be assessed for any project that would result in any in-ground disturbance. In-ground disturbance is any disturbance to an area not previously excavated, including new excavation that is deeper and/or wider than previous excavation on the same site.

The proposed action would result in redevelopment involving in-ground disturbance on Projected Development Site 1 (Block 4981, Lot 94). Portions of the lot have not previously been disturbed.

In correspondence dated October 14, 2021 (which is included in Appendix B to this report), the LPC stated that none of the lots in the proposed rezoning area have archaeological significance. The proposed actions would therefore not have a significant adverse impact on archaeological resources.

Architectural Resources

The vacant former restaurant building on Projected Development Site 1 is undistinguished, and no architectural resources have been identified within 400 feet of the proposed rezoning area. In correspondence dated October 14, 2021 (which is included in Appendix B to this report), the LPC confirmed that the area has no architectural significance. The proposed actions would therefore not have a significant adverse impact on architectural resources.

Conclusion

The proposed actions would not result in significant adverse impacts related to archaeological or architectural resources, and further assessment is not warranted.

10. URBAN DESIGN AND VISUAL RESOURCES

Introduction

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

1. Projects that permit the modification of yard, height, and setback requirements;

2. Projects that result in an increase in built floor area beyond what would be allowed "as-of-right" or in the future without the proposed project.

A preliminary urban design and visual resources assessment is required because the proposed actions include a zoning map amendment that would alter the rezoning area's use and bulk regulations. The applicant seeks (1) a Zoning Map Amendment to rezone a 25,000 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The affected area consists of all or part of three lots (Block 6621, Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with King Highway Under the reasonable worst-case development scenario (RWCDS) that forms the basis of analyses of future with-action conditions, Lot 28 (Projected Development Site 1) would be redeveloped with a new 8-story, 85-foot-tall mixed-use building with 27 residential units above an adult social day care center.

Pedestrian Wind Conditions

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

The proposed rezoning is to an R6A contextual district, which has bulk regulations designed to produce buildings that align with their neighbors, maintain the perimeter block form, and have the massing associated with mid-twentieth century apartment buildings – the antithesis of low coverage towers that channel winds and create vortex effects. The proposed actions would result in the redevelopment of Projected Development Site 1 with a building spanning the width of the lot with a street wall aligning with the two flanking buildings, maintaining the street wall along this part of the block. Such a building would not cause pedestrian level vortex effects, which tend to form around towers surrounded by open space. As the *CEQR Technical Manual* explains, "Channelized wind pressure from between tall buildings and downwashed wind pressure from parallel tall buildings may cause winds that affect pedestrian comfort and safety." The proposed action would not have a significant adverse impact on pedestrian wind conditions, and a detailed wind conditions assessment is not required.

Existing Conditions

The Rezoning Area

The rezoning area consists of Brooklyn Block 6621, Lots 22, 28 and 42 (p/o), on the west side of W. 10th St. near its intersection with King Highway. It has 250 feet of frontage on W. 10th St. and is 100 feet deep.

Projected Development Site 1 (Lot 28, 1656 W. 10th St.) is the 7,000 square foot middle lot. It is occupied by a 12,300 gsf (and zsf), 36-foot-tall building with two stories and a basement. The FAR is 1.75. The building was constructed as a church in 1927, became a synagogue in 1963, was used as a yeshiva beginning in 2006, and has been an adult social day care center known as Better Living Community Center since 2013. The entrance is recessed behind a shallow set of steps, which is itself recessed from the street line. The façade consists of a central element beneath a pediment and two flanking bays. The central portion is flanked by pilasters and divided into three bays separated by two additional pilasters. On the ground floor, three doorways topped by arched transoms and arched canopies fill the central bays, and the outer bays consist of red brick walls with plain rectangular windows set in arched reveals. The upper floor consists of a brick wall punctuated by plain rectangular windows. (See Photos 1 through 3 preceding this report.)

Lot 22 (1650 W. 10th St.) is a 13,000 sf parcel to the immediate north of Projected Development Site 1. It is occupied by a 6-story (and cellar), 64-foot tall, 63,000 gsf (54,000 zsf), 48-unit residential apartment building constructed in 1938.The FAR is 4.15. The building rises without setback, except that in the center, directly above the building's entrance, the second through sixth stories are recessed. The brick façade is unembellished except for a stone course above the first floor. (See Photos 16 and 17.)

Lot 42 (1684 W. 10th St.) is an 18,720 sf parcel to the immediate south of Projected Development Site 1. It is the southernmost lot on the blockfront, with frontage on both W. 10th St. and Kings Highway. Approximately 5,000 sf is within the rezoning area and the R5B district; the rest is in an R7A district mapped along Kings Highway. It is occupied by a 6-story (and cellar), 63-foot-tall, 87,000 gsf (75,000 zsf) mixed use building with 84 residential units and 7 commercial units, which was built in 1928. The upper floors are entirely residential, as is the portion of the ground floor fronting on W. 10th Street, and the portion of the ground floor fronting on Kings Highway is commercial. The FAR if 4.01. The building is set behind a shallow planting strip, except at the entrance, which is deeply recessed from the street. The red brick building rises without setbacks. (See Photos 1, 4, and 5.)

Urban Design in the Vicinity of the Rezoning Area

The urban design context of the proposed rezoning area consists of the blocks between Kings Highway and Quentin Road on the south and Avenue P on the north, from W. 9th Street through W. 11th Street. The area is entirely residential except along Kings Highway, where development is divided between commercial buildings and mixed use buildings with commercial ground floors and residential upper floors. One- and two-family homes line W.11th Street; a mix of one- and two-family homes and walkup apartment buildings with up to four stories predominates along W. 9th and W. 10th Streets; and six-story elevator apartment buildings line the south side of

Avenue P. Local retail and service establishments line the ground floors of Kings Highway, generally with one or two residential stories above them. The only exceptions to this pattern are a few ground floor commercial uses along W. 9th Street and along Quentin Road, two six-story elevator apartment buildings on W. 9th Street, a five-story residential condominium on W. 10th Street, and the three buildings within the proposed rezoning area. The five-story building (1671 W. 10th Street) is on the east side of the block opposite the southern end of the rezoning area; it is 60 feet tall and was completed in 2011. To its north is a 2½-story three-family home behind a small front yard, with a second story porch and an overhanging roof between the second story and the peaked attic. To its north are two attached brick two-family homes with two full stories above garages and entry and stairways leading to the front entrances. These three buildings face Projected Development Site 1. Opposite Lot 22 (the northernmost property in the proposed rezoning area) are two- and three-story two-family homes and a two-story single-family home. Directly north of the rezoning area on the west side of W. 10th Street are pairs of attached two-family homes. The tallest building in the area is a seven-story, 70-foot-tall mixed residential and commercial building at 103 Quentin Road between 9th and 10th Streets. (See Photos 6, 9, 10, 13, 15, and 18.)

The streets are arranged in a regular grid pattern of 650-foot-long north-south blocks and 200-foot-long east-west blocks. Kings Highway is not part of the grid, however; it predates the layout of streets in the area and is aligned in a northwest-southeast orientation, resulting in small triangular blocks in the vicinity of its intersection with Quentin Road. (See Figure 6, Aerial Imagery.) The north-south streets are 60 feet wide; the other streets vary in width.

The sidewalks and adjacent properties are generally well maintained, and there are numerous street trees along the north-south blocks.

Visual Resources in the Vicinity of the Rezoning Area

According to the *CEQR Technical Manual*, "a visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources." No visual resources have been identified in the vicinity of the rezoning area.

Future without the Proposed Action

Absent the proposed actions, redevelopment of Projected Development Site 1 would not occur. No other changes would occur within the vicinity of the proposed rezoning area.

Future with the Proposed Action

The proposed actions would rezone the affected area from R5B to R6A and would map an MIH area over it.

As a result of the rezoning, Projected Development Site 1 (Block 6621, Lot 28) would be redeveloped. Under the with-action RWCDS, the new development would be a mixed use building with eight stories, a cellar, and a sub-cellar. The upper floors would contain residential units; the ground floor would contain part of a social adult day care center, the residential lobby, and a vehicular elevator connecting to a subsurface accessory parking garage for residents; the

cellar would contain part of the adult day care center, part of the garage, and building service and utility rooms; and the sub-cellar would contain part of the adult day care center, part of the garage, a bicycle storage room, and building service areas. The ground floor would be 15 feet tall, would span the width of the lot, and would align with the adjacent street walls. The upper floors would each be 10 feet tall and would be recessed from the side lot lines. There would be a 35-foot-deep, 2,100 sf rear yard with a garden that would serve the adult day care center. The building would have 35,966 gsf of floor area, of which 25,200 sf would count as zoning floor area. The FAR would be 3.60. The building would be 85 feet tall, with 1 15-foot front setback above the sixth floor (at a height of 65 feet). The building would have a brick façade. The curb cut would be at the northern end of the lot.

Existing conditions would continue on Lots 22 and 42.

Table 10-1 compares the development characteristics of Projected Development Site 1 under existing, future no-action, and future with-action conditions.

Table 10-1
Existing, No-Action, and With-Action Conditions

	Existing Conditions	No-Action Conditions	With-Action Conditions
Development scenario	Adult social day care center	Adult social day care center	Residential apartments above an adult social day care center
Gross/(net) floor area	12,300 gsf/12,300 zsf (1.75 FAR)	12,300 gsf/12,300 zsf (1.75 FAR)	35,966 gsf/25,200 zsf (3.60 FAR)
Lot coverage	4,100 sf (59%)	4,100 sf (59%)	4,900 sf (70%)
Building height	2½ stories (36 feet)	2½ stories (36 feet)	8 stories (85 feet)

The new development would be two stories and approximately 20 feet taller than the adjacent buildings, and it would be the tallest building in the area. (See the street perspective diagrams on the following pages.) It would nevertheless be similar in type to the two adjacent buildings: a blocky brick midrise apartment building filling the width of the lot. (The two other buildings in the rezoning area actually have higher FARs than the new development would have.) The R6A contextual district was designed specifically to result in a building type reminiscent of the apartment buildings constructed under the 1916 Zoning Resolution. The 15-foot-deep front setback above the sixth floor would align with the rooftops of the 63- and 64-foot-tall rooftops of the adjacent six-story buildings. The street wall would align with those of the adjacent buildings, so the development would maintain the street wall along this part of the block, which the existing building on the site breaks.

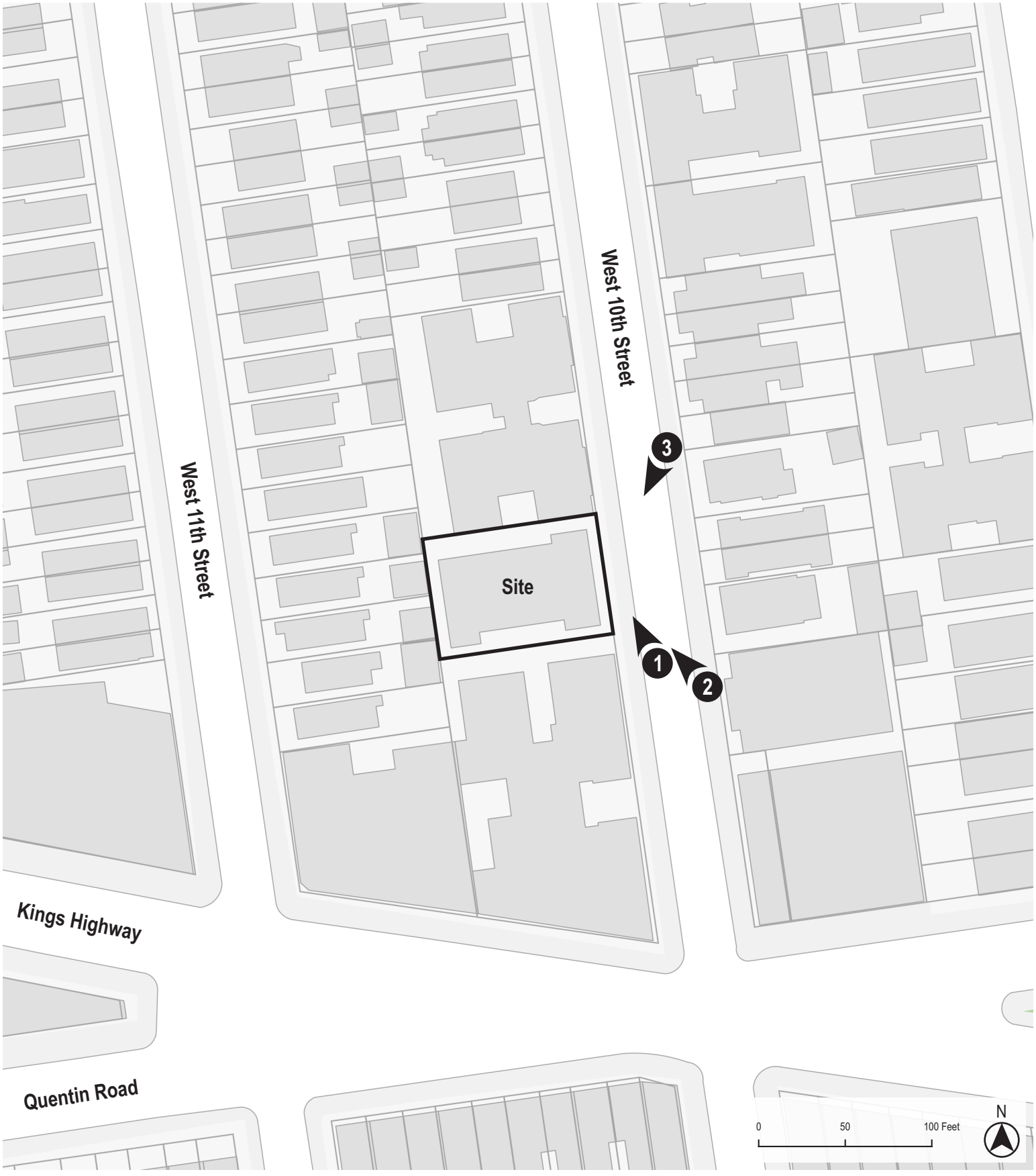
The proposed action would not affect the topography, street system, block forms, or building arrangements within the vicinity of the proposed rezoning area.

The proposed actions would not result in a significant adverse urban design impact.

1656 West 10th Street, Brooklyn

Figure 1: Urban Design Diagram

Context Map



Urban Cartographics

1656 West 10th Street, Brooklyn

Figure 1: Urban Design Diagram

View 1

No-Action Scenario

West 10th Street facing north (Site at left)



With-Action Scenario

West 10th Street facing north (Site at left)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (85')
Maximum Permitted Bulkhead Height (110')
Proposed Base Height
Proposed Building Height (includes parapet)
Proposed Bulkhead Height

1656 West 10th Street, Brooklyn

Figure 1: Urban Design Diagram

View 2

No-Action Scenario

West 10th Street facing northwest (Site at left)



With-Action Scenario

West 10th Street facing northwest (Site at left)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (85')
Maximum Permitted Bulkhead Height (110')
Proposed Base Height
Proposed Building Height (includes parapet)
Proposed Bulkhead Height

1656 West 10th Street, Brooklyn

Figure 1: Urban Design Diagram

View 3

No-Action Scenario

West 10th Street facing southwest (Site at right)



With-Action Scenario

West 10th Street facing southwest (Site at right)



Maximum Permitted Base Height (65')
Maximum Permitted Building Height (85')
Maximum Permitted Bulkhead Height (110')
Proposed Base Height
Proposed Building Height (includes parapet)
Proposed Bulkhead Height

Urban Cartographics

No visual resources have been identified in the vicinity of the rezoning area. The proposed actions would therefore not have a significant adverse impact on visual resources.

Conclusion

The proposed actions would not result in a significant adverse impact to urban design or visual resources, and no further analysis is warranted.

14. HAZARDOUS MATERIALS

Phase I Environmental Site Assessment

Introduction

Environmental Studies Corp. has performed a Phase I Environmental Site Assessment (ESA) of the subject property located at 1656 West 10th Street in March 2022. This Phase I ESA was prepared in accordance with the ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Designation E 1527-13). The goal of an ESA is to identify, to the extent feasible in accordance with ASTM E 1527-13, Recognized Environmental Conditions (RECs) in connection with the property.

Site Description

The subject property consists of a 7,000+/- square foot, rectangular shaped parcel which is occupied by a 2-story (plus basement) building. At the time of the site visit, the building was occupied by the Better Living Community Center, an adult day care facility. The building contains a boiler room, a small kitchen, a cafeteria, an auditorium with stage and balcony, a recreation area, general meeting rooms, offices, storage areas, and bathrooms. Heat and hot water for the building are provided by gas-fired systems. Exterior portions of the property consist of narrow, concrete-paved side and rear yards. No operations involving the storage or use of hazardous substances or petroleum products were observed at the property during the site visit.

Site History

Research into the history of the property shows that the building was constructed sometime between 1906 and 1924 and was originally occupied by the First Presbyterian Church of Bensonhurst. Sometime between 1930 and 1945 the use in the building was changed to the Temple Beth El of Bensonhurst, which occupied the building until circa 2015. From 2015 to the present time, the building has been occupied by the Better Living Community Center as an adult day care facility. Prior to the construction of the building, the property was vacant, undeveloped land as shown on the 1906 Sanborn map.

The identified uses of the property (i.e., religious institutions and adult day care facility) are not types of operations that typically involve the storage or use of hazardous substances. Given the identified former uses of the property, it is considered unlikely that these uses would have impacted the property.

Site Drainage

Typical lavatory drainage structures such as sinks and toilets are present in the building. A small floor drain is present in the floor of the kitchen in the basement of the building. In addition, several small storm drains are located in the exterior yards of the property. The drainage destination of these structures is not known; however, it is likely that they discharge to the municipal sewer system. No staining or other indications of past spills, leaks or discharges or hazardous substances or petroleum products were observed around any of the drainage structures at the property.

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Petroleum Storage Tanks

No aboveground storage tanks (ASTs) or indications of the presence of underground storage tanks (USTs), such as tank fillports, vent lines, associated mechanical equipment, etc., were observed at the property during the site visit.

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

There are two Oil Burner Applications on file for the property in the New York City Department of Buildings (NYCDOB) records, one issued in 1944 and one issued in 1962. Therefore, it is likely that the building formerly contained an oil-fired heating system and associated fuel oil storage tank. It is considered likely that the former fuel oil tank for this system was located aboveground in the basement and was removed at the time the building was converted to gas heat. However, any former fuel oil tanks discovered during the re-development of the property should be properly removed in accordance with all applicable regulations.

Regulatory Agency Database Records

The property does not appear in the Federal or State environmental databases reviewed including the United States Environmental Protection Agency (USEPA's) Superfund, CERCLIS or ERNS databases, the RCRA Hazardous Waste Generators list or hazardous waste Treatment/Storage/Disposal Facilities list, or NYSDEC's Spill Logs or Petroleum Bulk Storage (PBS) database, Solid Waste Facilities database, Voluntary Cleanup Program database, Brownfield Cleanup Program database, or the Registry of Inactive Hazardous Waste Disposal Sites.

Nearby Properties

There were not any off-site, potential sources of contamination, which are considered likely to have impacted the environmental condition of the property, identified in the information reviewed for this report.

(E) Designation

The New York City Department of Environmental Protection (DEP) reviewed the Phase I ESA and responded by email in September 2022 that "based on the historical on-site and/or surrounding area land uses including an upgradient dry cleaner in close proximity to the subject property, a Phase II Environmental Site Assessment (Phase II) is necessary to adequately identify/characterize the surface and subsurface soils, groundwater and soil vapor of the subject property, and to inform and disclose the measures necessary to avoid impacts from hazardous materials."

Because a building in active use covers most of Projected Development Site 1, DEP agreed that the Phase II ESA need not be completed and submitted during the CEQR review but that an (E) Designation for hazardous materials should be placed on the zoning map pursuant to Section 11-15 of the New York City Zoning Resolution.

The hazardous materials text of E-710 would be as follows:

Block 6621, Lot 28

Task 1-Sampling Protocol

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

Task 2-Remediation Determination and Protocol

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

If remediation is indicated from test results, a proposed remediation plan must be submitted to OER for review and approval. The applicant must complete such remediation as determined necessary by OER. The applicant should then provide proper documentation that the work has been satisfactorily completed.

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

Conclusion

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

17. AIR QUALITY

Introduction

Ambient air quality, or the quality of the surrounding air, may be affected by air pollutants produced by motor vehicles, referred to as "mobile sources"; by fixed facilities, usually referenced as "stationary sources"; or by a combination of both. Under the City Environmental Review (CEQR), an air quality assessment determines both a proposed project's effects on ambient air quality and the effects of ambient air quality on the project.

Mobile Source

According to the *CEQR Technical Manual,* projects 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 (e.g., diesel trains, helicopters, boats), or add new uses near mobile sources (e.g., roadways, garages, parking lots). Detailed analyses are required to predict whether a proposed action could potentially result in significant adverse air quality impact if certain threshold criterions are met or exceeded. Proposed actions that do not meet or exceed the threshold criterions (screen out) are not expected to result in mobile source impacts.

Screening Assessment

Screening analyses for the project's peak hour auto traffic and peak hour heavy-duty diesel vehicle (HDDVs) traffic are presented in this section. Per the *CEQR Technical Manual*, a detailed analysis for carbon monoxide (CO) is required if the generated peak hour auto traffic or diversion of existing peak hour traffic would result in an increment of 170 auto trips (in this area of the city). A detailed analysis for particles with an aerodynamic diameter of less than or equal to 2.5 micrometers ($PM_{2.5}$) is required if the generated peak hour HDDVs traffic or its equivalent in vehicular emissions, depending on the type of road, would be met or exceeded.

The peak-hours project generated traffic would not exceed the threshold of 170 vehicular trips (condition outlined in Sections 210 of Chapter 17 of the 2021 *CEQR Technical Manual*). Therefore, no CO detailed analysis is required.

The PM2.5 equivalent truck calculation in vehicular emission screen ranges from 12 to 23 HDDVs depending on the type of road.

The proposed project would result in an increment of 12 off-street parking spaces. Based on CEQR guidelines, the maximum capacity of a parking facility is evaluated with a threshold capacity to determine whether a detailed analysis is required. The threshold capacity, per CEQR guidelines, is 85 new off-street parking spaces (Zone 2 threshold). Therefore, no analysis is required.

In addition, the proposed project is located near a highway or a large parking facility. Therefore, no significant adverse impact is predicted from existing mobile source of pollutant.

Stationary Source

Heating and Hot Water Systems Screening Assessment

A stationary source analysis is conducted to determine if a development heating/hot water, ventilation, and air conditioning (HVAC) system(s) emission could result in a significant impact to other land uses in the area. Based on the *CEQR Technical Manual*, a preliminary screening assessment may be conducted as a first step to predict whether there is a potential for significant

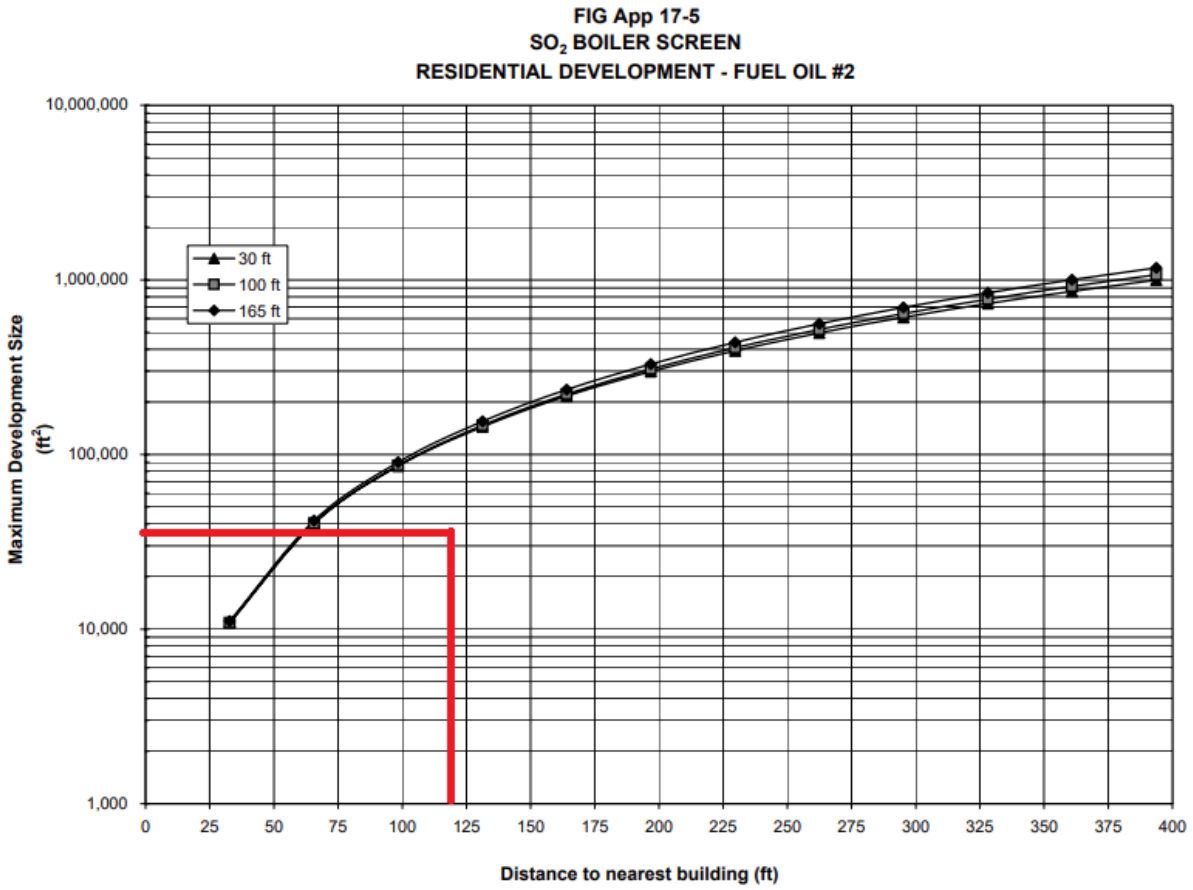
impact, where the screening analysis determines the threshold of a development size below which the action would not have a significant impact. This screening assessment is applicable to buildings located 30-400 feet from the nearest building of similar or greater height. A detailed analysis is required if the screening assessment failed.

Impacts from boiler emissions are a function of fuel type, stack height, minimum distance from the source to the nearest receptor (building), and floor area (square footage) of the development resulting from the project. Floor area is considered an indicator of fuel usage rate. The *CEQR Technical Manual* screening assessment is based on these factors.

While the Reasonable Worst Case Scenario (RWCDS) would facilitate an 85-foot-tall building, the proposed building height was considered for the screening analysis. As such, a screening analysis was conducted for the proposed 65-foot-tall building (the building rooftop height rather than the mechanical bulkhead height was considered as a conservative measure), containing 30,427 gsf, which is the RWCDS floor area excluding the parking garage floor area. For the screening assessment purpose, it is assumed that fuel oil No. 2 would be the type of fuel used in the building's HVAC system(s), as according to 15 RCNY 2-15 no new boiler or burner installations may use No. 6 or No. 4 fuel oils. A distance of 120 feet was used in the screening analysis, which is approximately the distance between the Projected Development Site 1 and the 7-story, 94-foot-tall, mixed residential and commercial building located at 103 Quentin Road (Block 6622, Lot 7502).[1] **Figures 17-1** (using Figure 17-5 of the *CEQR Technical Manual Appendices)* shows the proposed building screening analysis on existing land uses nomograph.

[1] New York City Department of Building (NYCDOB). Job No: 321598035, Oct. 11th, 2021.

Figure 17-1: Proposed Building-on-Existing Land Uses – HVAC Screen



As seen in the screening analysis (see **Figure 17-1**), using the nomograph provided in the *CEQR Technical Manual*, the RWCDS gsf would fall below the curve for fuel oil No. 2. As such, the proposed building passes the HVAC screening assessment on existing land uses.

(E) Designation

To avoid any significant adverse HVAC source impacts from the proposed project on existing nearby sensitive receptors, an (E) designation would be placed on Projected Development Site 1. The air quality text of E-710 would be as follows:

Block 6621, Lot 28 (Projected Development Site 1): Any new residential and/or community facility development on the above-referenced property must ensure the heating, ventilation, and air conditioning (HVAC) system and hot water equipment stack is located at the highest tier and at least 85 feet above grade to avoid any potential significant adverse air quality impacts.

Industrial Sources

Identifying Potential Emission Sources

Per the *CEQR Technical Manual*, projects that would result in new uses (particularly schools, hospitals, parks, and residences) within 400 feet of manufacturing processing facilities may result in potentially significant adverse impacts. The analysis first determines if there are any existing

manufacturing uses within the 400-foot study area containing exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project. If warranted, an air dispersion analysis is then conducted for any existing industrial source(s) located in the study area.

Existing manufacturing uses with exhaust stacks, vents, or other emission sources that may have the potential to adversely affect the uses introduced by the project were identified by reviewing the DEP online Clean Air Tracking System (CATS) database, the NYSDEC map application (DECinfo Locator), and through a field survey. The field survey took place on October 20th, 2021.

The study area encompasses all or part of Blocks 6620, 6621, 6622, 6623, 6645, 6646, and 6647 and includes properties along Quentin Road, Kings Highway, West 9th Street, West 10th Street, West 11th Street, and West 12th Street. Land uses in the study area are predominantly residential, with commercial/retail uses located Quentin Road and Kins Highway.

A search of the CATS database found that there are not any facilities with DEP Processing permits located in the study area. The New Paris Cleaners, a dry-cleaning facility located at 226 Kings Highway (Block 6647, Lot 14), has a canceled DEP permit PB000300, which was canceled on December 21st, 2020. A search of the NYSDEC database found that there are not any facilities with NYSDEC permits in the study area. No other potential source(s) of toxic air emissions was identified in the study area during the field survey. As such, no analysis is warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

Major and Large Source

Per the *CEQR Technical Manual*, projects that would introduce new uses near major sources, large sources, or odor producing facilities may result in potentially significant adverse air quality impacts. The study area considers major sources, large sources, and odor producing facilities within 1,000 feet of the proposed project. Major emission sources are identified as those sources located at Title V facilities; large emission sources are identified as sources located at facilities which require an Air State Facility permit. Solid waste or medical waste incinerators, asphalt and concrete plants, power generating plants, large boilers of large public facilities for example, and large industrial facilities are typical type of sources requiring these permits. Odor producing facilities are operations that have the potential to cause discomfort, such as: solid waste management facilities, water pollution control plants (i.e., sewage treatment plants), and incinerators.

No existing large combustion source(s), such as power plants, cogeneration facilities, etc., located within 1,000 feet of the Proposed Project, was identified[2], and no odor producing facility was identified within 1,000 feet of the Proposed Project. As such, no analysis is warranted, and no significant adverse air quality impacts are predicted from these types of facilities.

[2] New York State Department of Environmental Conservation (2021). DECinfo Locator. <https://gisservices.dec.ny.gov/gis/dil/> (Aug. 21, 2021).

Conclusion

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

19. NOISE

Introduction

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

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

The proposed actions consist of (1) a Zoning Map Amendment to rezone a 25,000 sf area from R5B to R6A and (2) a Zoning Text Amendment to map a Mandatory Inclusionary Housing area that would be coterminous with the proposed rezoning area. The affected area consists of all or part of three lots (Block 6621, Lots 22, 28 and 42 (p/o)) on the west side of W. 10th St. near its intersection with King Highway Under the reasonable worst-case development scenario (RWCDS) that forms the basis of analyses of future with-action conditions, Lot 28 (Projected Development Site 1) would be redeveloped with a new 8-story mixed-use building with 27 residential units above an adult social day care center.

Noise Fundamentals

Noise is defined as any unwanted sound, and sound is defined as any pressure variation that the human ear can detect. Humans can detect a large range of sound pressures, from 20 to 20 million micropascals, but only those air pressure variations occurring within a particular 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.

Because the human ear can detect such a wide range of sound pressures, sound pressure is converted to sound pressure level (SPL), which is measured in units called decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Because the dB scale is logarithmic, a relative increase of 10 dB represents a sound pressure that is 10 times higher. However, humans do not perceive a 10-dB increase as 10 times louder. Instead, they perceive it as twice as loud.

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 frequency weightings used are the A- and C-weightings. 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-weighting is the most commonly used for environmental measurements, 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.

Table 19-1: 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: 2021 CEQR Technical Manual	

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.

Impact Determination and Noise Standards and Guidelines

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 Exposure Guidelines classify noise exposure into four categories: Acceptable, Marginally Acceptable, Marginally Unacceptable and Clearly Unacceptable. The ranges for each category vary by type of use. The standards are presented in Table 19-2.

Table 19-2

CEQR Noise Exposure Guidelines for Use in City Environmental Impact Review[1]

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
1. Outdoor area requiring serenity and quiet[2]		$L_{10} \leq 55$ dBA	DNL ≤ 60 dBA		----------60 < DNL ≤ 65 dBA----------		(I) 65 < DNL ≤ 75 dBA		---------- 75 dBA < DNL ----------
2. Hospital, nursing home		$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 65$ dBA		65 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
3. Residence, residential hotel, or motel	(7 AM to 10 PM)	$L_{10} \leq 65$ dBA		65 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	(10 PM to 7 AM)	$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
4. School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, out-patient public health facility		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
5. Commercial or office		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)		Same as Residential Day (7 AM-10 PM)	
6. Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

For sensitive receptors introduced by the proposed action, the L_{10} noise levels measured directly outside the projected development site are compared with the values in the Noise Exposure Guidelines. If the measured noise levels exceed those in the Marginally Acceptable range, a sufficient level of window/wall noise attenuation is required to prevent a significant adverse impact. The minimum attenuation requirements are presented in Table 19-3.

Table 19-3

Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Vehicular Traffic	$70<L_{10}\leq73$	$73<L_{10}\leq76$	$76<L_{10}\leq78$	$78<L_{10}\leq80$	$80<L_{10}$
Aircraft[A]	$65<DNL\leq68$	$68<DNL\leq71$	$71<DNL\leq73$	$73<DNL\leq75$	$75<DNL$
Train	$65<L_{dn}\leq68$	$68<L_{dn}\leq71$	$71<L_{dn}\leq73$	$73<L_{dn}\leq75$	$75<L_{dn}$
Attenuation[B]	(I) 28 dB(A)	(II) 31 dB(A)	(III) 33 dB(A)	(IV) 35 dB(A)	See note [C]

Note:

[A] DNL descriptor based on average values of L_{dn} over a year period.

[B] The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office spaces and meeting rooms would be 5 dB(A) less in each category. All of the above categories require a closed window situation and hence an alternate means of ventilation.

[C] The required attenuation value is the difference between L_{build} and $L_{interior,}$, using the appropriate noise descriptor

Where:

L_{build} is the projected noise level under the build condition rounded up to the whole number

$L_{interior}$ is the designed interior noise level (45 dB(A) for vehicular noise, 40 dB(A) for aircraft and train noise)

Source: New York City Department of Environmental Protection

New Stationary Noise Sources

The proposed actions would result in the redevelopment of Projected Development Site 1 with a building containing residential units and an adult social day care center. All rooftop mechanical equipment, including air conditioner compressors, would be enclosed and would comply with New York City Noise Code requirements, which limit noise levels generated by such equipment to 65 dBA during the daytime (7AM to 10 PM) and 55 dBA during the nighttime. The proposed action would therefore not have the potential to cause a significant adverse stationary source noise impact.

New Mobile Noise Sources

Under the with-action scenario, 27 residential units and an 8,109 gsf adult social day care center would replace the existing 12,300 gsf adult social day care center. According to *CEQR Technical Manual* Table 16-1, in this part of the city (Zone 2), a minimum of 200 residential units or 25,000 square feet of community facility space would be required to generate 50 vehicular trips in one hour. The addition of 27 housing units and the loss of 4,191 square feet of community facility space would not be expected to increase traffic or mobile source noise. The proposed actions would therefore not have the potential to cause a significant adverse mobile source noise impact.

Existing Ambient Noise Levels

An action can cause a significant adverse noise impact if it introduces new noise-sensitive uses in an area characterized by high ambient noise levels. The proposed actions would lead to the development of new residential units.

Noise measurement was conducted during peak weekday vehicular travel periods (AM, Midday, PM) on a typical midweek day. The weather was normal with calm wind conditions, suitable for an ambient noise measurement.

A Type 1 sound level meter (Larson Davis LxT) with wind shield was used to conduct the noise monitoring. The meter was calibrated prior to and following each monitoring session. The meter was placed on a tripod at a height of approximately five feet above the ground, away from any reflective surfaces.

Monitoring was conducted at one location, on the sidewalk in front of Projected Development Site 1, on the W. 10th Street midblock between Kings Highway and Avenue P. (See Figures 19-1 and 19-2.)

Figure 19-1: Noise Monitoring Location



Figure 19-2: Meter Setup at the Monitoring Location



Based on the noise measurements, the predominant source of noise is vehicular traffic.

Table 19-4 shows the noise monitoring results. Table 19-5 shows traffic volumes and vehicle classifications.

Table 19-4: Noise Monitoring Results

Noise Levels (dB) at Location 1			
June 8, 2022 (Wednesday)			
Time	**8:35 am – 8:55 am**	**12:22 am – 12:42 pm**	**17:30 pm – 17:50 pm**
L_{eq}	59.4	59.4	64.0
L_{max}	77.4	79.2	88.6
L_{10}	**63.0**	**61.9**	**63.1**
L_{50}	55.4	55.5	55.6
L_{90}	51.0	51.7	51.9
L_{min}	48.3	50.0	50.2

Table 19-5: Traffic Volumes and Vehicle Classifications

Location 1: *Traffic volumes and vehicle classifications*			
Time	**8:35 am – 8:55 am**	**12:22 am – 12:42 pm**	**17:30 pm – 17:50 pm**
Car/ Taxi/ Van/SUV	48	53	69
Bus	2	0	0
Medium Truck	1	3	1
Heavy Truck	0	0	0
Motorcycle	0	0	0

The 2021 *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} lower than 65 dB(A) is identified as marginally acceptable general external exposure. 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} at Location 1 was 63.1 dB(A) during the PM monitoring period. That is within the Acceptable category under the noise exposure guidelines, for which there are no window/wall attenuation requirements.

Conclusion

The proposed actions would not cause a significant adverse noise impact. Further analysis is not warranted.

APPENDIX A: ARCHITECTURAL PLANS

Architectural plans are for illustrative purposes only.

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS
R6A



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NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET,
BROOKLYN, NY

DRAWING TITLE

3D RENDERING
AERIAL VIEW

JOB NUMBER

Project No. :

Date: 04-26-2021

Drawn by : | Check by : F.C.

SEAL

Drawing Number
T-001.00

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ZONING ANALYSIS
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DRAWING TITLE

3D RENDERING
STREET VIEW

JOB NUMBER

Project No. :

Date: 04-26-2021

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T-002.00

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ADDRESS

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BROOKLYN, NY

DRAWING TITLE

3D RENDERING
HIGH RESOLUTION VIEWS

JOB NUMBER

Project No. :

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Drawn by : | Check by : F.C.

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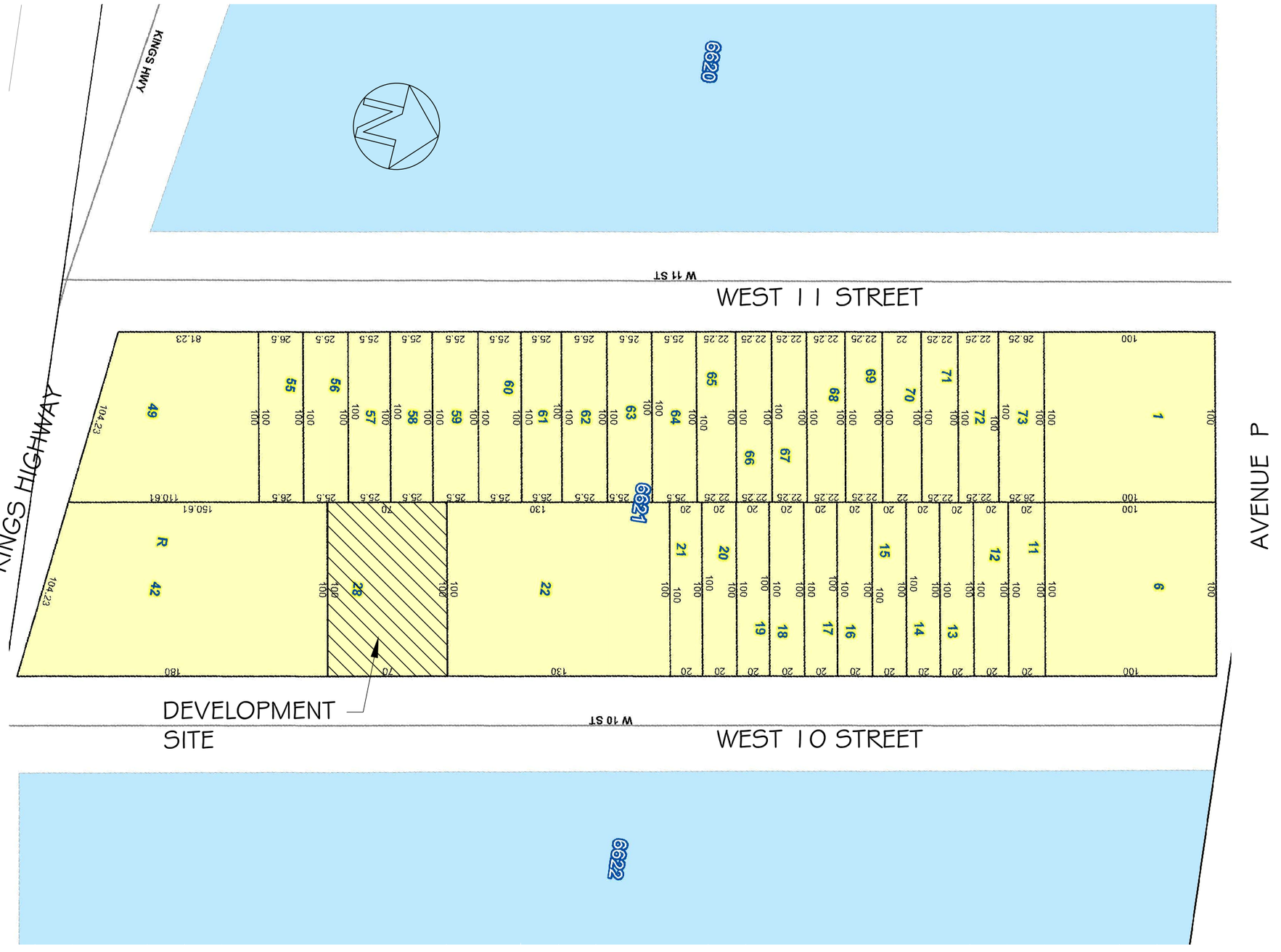
Drawing Number
T-003.00

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS
R6A



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NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

LOCATION MAP

JOB NUMBER

Project No. :

Date: 04-26-2021

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Drawing Number

Z-001.00

Sheet 4 Of 17

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS R6A

ZONING ANALYSIS ~~~ R6A

BSA CALENDAR NO.:

BOROUGH: BROOKLYN

LOCATION	BLOCK	LOT	EXISTING ZONING DISTRICT	OVERLAY	PROPOSED ZONING DISTRICT	OVERLAY	SPECIAL DISTRICT
1656 WEST 10 STREET	6621	28	R5B	NONE	R6A	NONE	N/A

TOTAL LOT AREA (ZONING LOT) 70'x100'=7000 S.F.

	ZR SECTION	REQUIRED/MAXIMUM PERMITTED R6A	PROPOSED SUBMITTAL R6A	COMPLIANCE
FLOOR AREA REGULATIONS				
RESIDENTIAL - MIH DEVELOPMENT & AFFORDABLE INDEPENDENT RESIDENCES FOR SENIORS (AIRs)				
FLOOR AREA RATIO	ZR 74-32; ZR 23-154(d)(2); ZR 23-154(b);	MIH - 3.6	3.01	YES
RESIDENTIAL FLOOR AREA		25200 S.F.	21588 S.F.	YES
LOW INCOME FLOOR AREA		21588 x 20% = 4317.60 S.F.	MIN. 4317.60 S.F.	YES
RESIDENTIAL GROSS AREA	---	---	22253 S.F.	---
COMMUNITY FACILITY				
FLOOR AREA RATIO	ZR 24-11	3.0	0.51	YES
COMM. FAC. FLOOR AREA @ 1FL.		21000 S.F.	3547 S.F.	YES
COMM. FAC. GROSS AREA	---	---	8109 S.F.	---
TOTAL BLDG. FLOOR AREA - RESIDENTIAL + COMMUNITY FACILITY				
FLOOR AREA RATIO	ZR 23-15; ZR 23-155	3.6	3.59	YES
TOTAL BLDG. FLOOR AREA		25200 S.F.	25135 S.F.	YES
LOT COVERAGE REGULATIONS				
RESIDENTIAL COVERAGE	ZR 23-153	65% (INTERIOR LOT)	59%	YES
COMMUNITY FACILITY COVERAGE	ZR 24-11; ZR 24-12	COMM. FAC. USE < 23' HEIGHT ABOVE CURB LEVEL, COVERAGE EXCLUDED.	COMM. FAC. USE @ 1ST FL. < 23' HEIGHT ABOVE CURB LEVEL.	YES
YARD REGULATIONS				
RESIDENTIAL - FRONT YARD	N/A	NONE	NONE	YES
SIDE YARD	ZR 23-462(c)	NONE (IF PROVIDED, MIN. 8'-0")	NONE	YES
REAR YARD	ZR 23-47	30'-0"	35'-0"	YES
COMM. FAC. - FRONT YARD	N/A	NONE	NONE	YES
SIDE YARD	ZR 24-35(b)	NONE (IF PROVIDED, MIN. 8'-0")	NONE	YES
REAR YARD	ZR 24-36	30'-0"	30'-0"	YES
HEIGHT AND SETBACK REGULATIONS				
STREET WALL LOCATION	ZR 23-952; ZR 23-951; ZR 23-661(a)	LOCATED NO CLOSER TO THE STREET LINE THAN THE CLOSEST STREET WALL OF AN EXISTING ADJACENT BUILDING, BOTH LOCATED WITHIN 10 FEET OF THE STREET LINE & WITHIN 25' OF THE BUILDING.	STREET WALL ON STREET LINE AS PER ADJACENT BUILDING.	YES
MIN. BASE HEIGHT	ZR 23-952; ZR 23-951; ZR 23-664(b) (TABLE 1)	40'-0"	65'-0"	YES
MAX. BASE HEIGHT		65'-0"	65'-0"	YES
MAX. BUILDING HEIGHT		80'-0" (W/ NON-QUALIFYING GROUND FLOORS)	65'-0"	YES
MAX. NUMBER OF STORIES		8	6	YES
SETBACK	ZR 23-662(c)(1)	15'-0" ABOVE MAX. BASE HEIGHT	NOT REQUIRED	YES

	ZR SECTION	REQUIRED/MAXIMUM PERMITTED R6A	PROPOSED SUBMITTAL R6A	COMPLIANCE
DENSITY, PLANTING AND STANDARD OF ADDITIONAL SPACES				
DENSITY FACTOR FOR DWELLING UNITS	ZR 23-22	680	---	---
NUMBER OF DWELLING UNITS		25200 - 4050 / 680 = 31 UNITS	27 UNITS	YES
NOT AFFORDABLE HOUSING UNITS	---	---	21 UNITS	---
AFFORDABLE HOUSING UNITS	ZR 23-96	• AFFORDABLE HOUSING UNITS SHALL BE DISTRIBUTED ON NOT LESS THAN 65 PERCENT OF THE RESIDENTIAL STORIES. • NOT MORE THAN ONE-THIRD OF THE DWELLING UNITS ON ANY STORY SHALL BE AFFORDABLE HOUSING UNITS. • NOT LESS THAN 50 PERCENT OF THE AFFORDABLE HOUSING UNITS SHALL CONTAIN TWO OR MORE BEDROOMS. • NOT LESS THAN 75 PERCENT OF THE AFFORDABLE HOUSING UNITS SHALL CONTAIN ONE OR MORE BEDROOMS.	MIN. 6 UNITS	YES
STREET TREE PLANTING	ZR 23-03/ZR 26-41	1 TREE PER 25' FRONTAGE = 3 TREES	3 TREES	YES
PLANTING AREAS	ZR 28-23	THE AREA OF THE ZONING LOT BETWEEN THE STREET LINE AND ALL STREET WALLS OF THE BUILDING AND THEIR PROLONGATIONS SHALL BE PLANTED AT GROUND LEVEL, EXCEPT THAT SUCH PLANTINGS SHALL NOT BE REQUIRED AT THE ENTRANCES TO AND EXITS FROM THE BUILDING, WITHIN DRIVEWAYS ACCESSING OFF-STREET PARKING SPACES LOCATED WITHIN, TO THE SIDE, OR REAR OF SUCH BUILDING, OR BETWEEN NON-RESIDENTIAL USES AND THE STREET LINE.	STREET WALL ON STREET LINE, PLANTING AREA NOT APPLICABLE.	YES
DAYLIGHT IN CORRIDORS	ZR 28-14	50% OF THE SQUARE FOOTAGE OF A CORRIDOR MAY BE EXCLUDED FROM THE DEFINITION OF FLOOR AREA IF A WINDOW WITH A CLEAR, NON-TINTED, GLAZED AREA OF AT LEAST 20 SQUARE FEET IS PROVIDED IN SUCH CORRIDOR.		
REFUSE - ENCLOSED STORAGE	ZR 28-12	2.9 CU. FT /UNIT = 78.3 CU. FT.	1416 CU. FT.	YES
REFUSE - DISPOSAL ROOM		MIN. 12 S.F. PER STORY WITH ENTRANCES TO DWELLING UNITS	PROVIDED	YES
LAUNDRY FACILITIES	ZR 28-13	LAUNDRY ROOM WHICH IS USED TO MEET THE MINIMUM REQUIREMENTS SHALL BE EXCLUDED FROM THE DEFINITION OF FLOOR AREA.	N/A	---
RECREATION SPACE	ZR 28-21	3.3% OF RESIDENTIAL FLOOR AREA: 21588 x 3.3% = 712.40 S.F.	945 S.F.	YES
RECREATION STANDARD	ZR 28-22	ALL RECREATION SPACE SHALL BE ACCESSIBLE TO THE RESIDENTS OF THE BUILDING.		YES
		• MIN. DIMENSION: 15'-0" • MIN. SIZE OF ANY OUTDOOR RECREATION SPACE: 225 S.F. • MIN. SIZE OF ANY INDOOR RECREATION SPACE: 300 S.F.	MIN. REQUIREMENT MET.	YES
		OUTDOOR RECREATION SPACE SHOULD BE OPEN TO THE SKY.		YES
PARKING REQUIREMENTS				
RESIDENTIAL				
NOT AFFORDABLE HOUSING UNITS	ZR 25-23	50% OF UNITS =21 x 50% = 11 SPACES	12 SPACES	YES
AFFORDABLE HOUSING UNITS	ZR 25-251	NONE REQUIRED (TRANSIT ZONE)	0	YES
COMMUNITY FACILITY				
SOCIAL ADULT DAY CARE	ZR 25-31	1 PER 20 PERSONS	ZR 25-261 MAX. PARKING SPACES WAIVED: 25 - REQUIREMENT < 25, WAIVED	YES

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CONSULTANTS

OWNER

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REVISIONS

NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

ZONING ANALYSIS

JOB NUMBER

Project No. :
Date: 04-26-2021
Drawn by : | Check by : F.C.
SEAL

Drawing Number
Z-002.00
Sheet 5 Of 17

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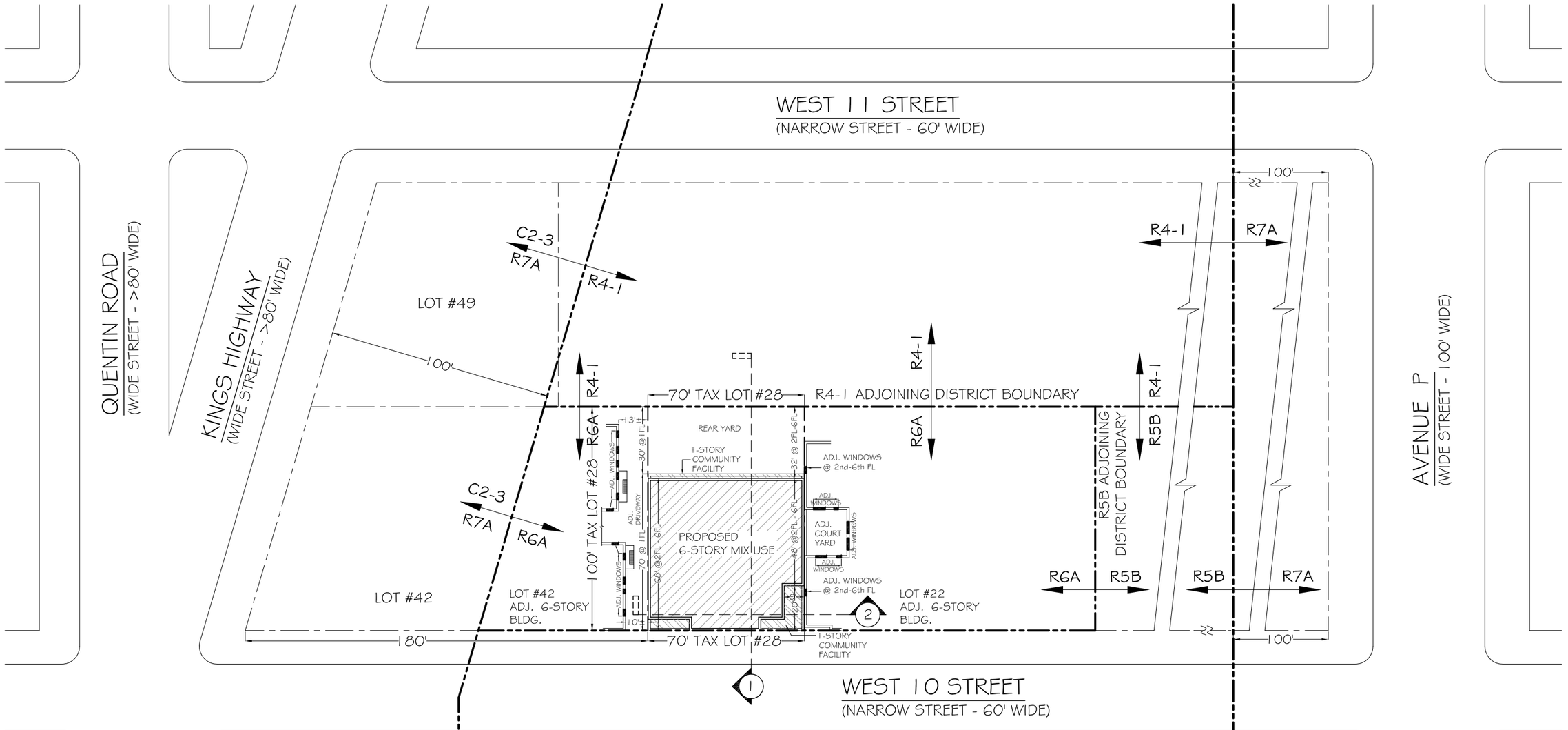
ZONING ANALYSIS
R6A



LEGEND:

- DISTRICT BOUNDARY
- PROPERTY LINE
- RESIDENTIAL USE (FLOOR 2-6)
- COMMUNITY FACILITY USE (FLOOR 1 & CEL)

SITE PLAN
SCALE: N.T.S.

0' 10' 25' 50'
5' 15'

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DRAWING TITLE

SITE PLAN

JOB NUMBER

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Drawing Number
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Sheet 6 Of 17

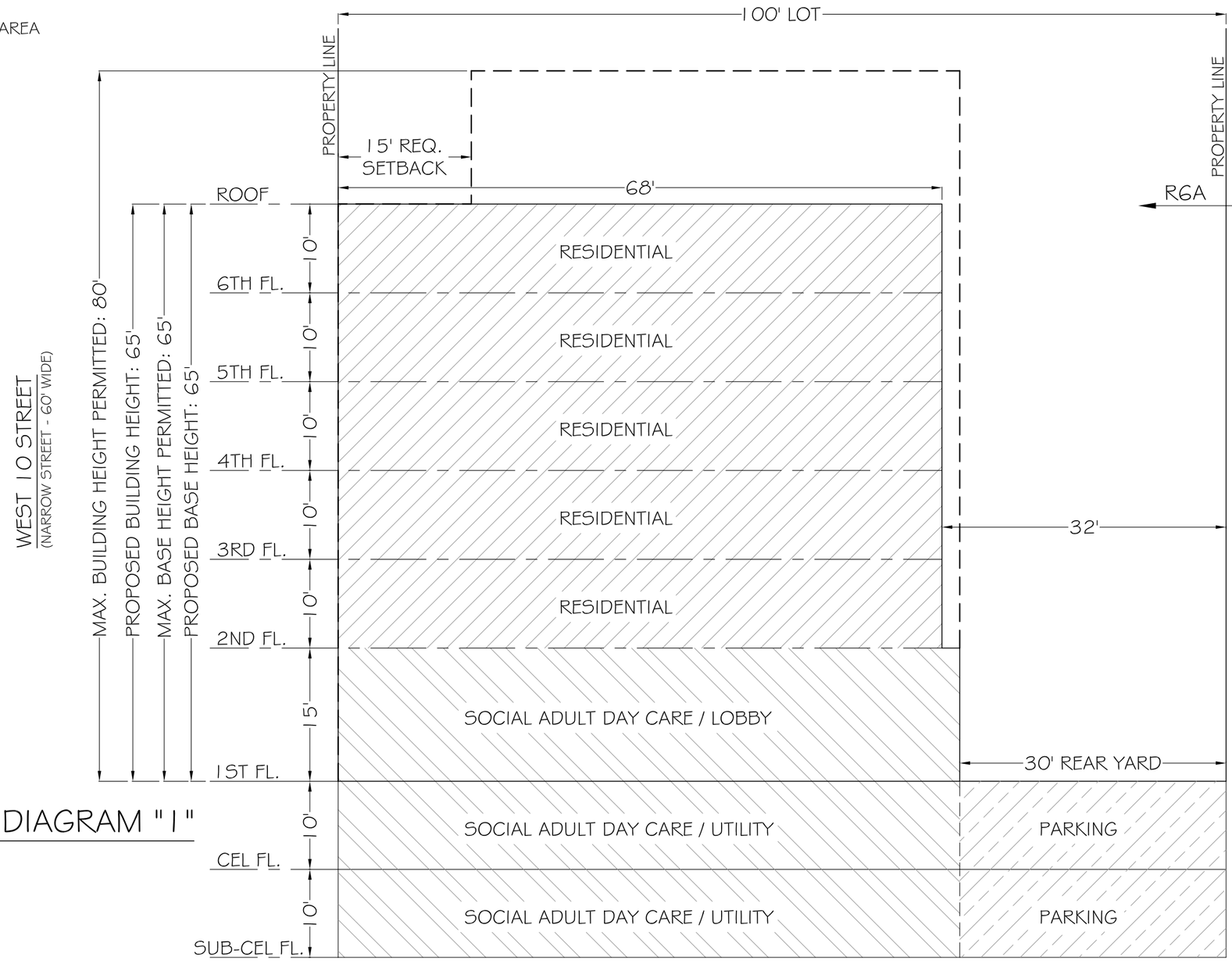
1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS R6A

LEGEND:

- PROPERTY LINE
- MAX. PERMITTED BUILDING BOUNDARY
- PROPOSED RESIDENTIAL USE
- PROPOSED COMMUNITY FACILITY USE
- PROPOSED PARKING AREA

0' 5' 10' 15' 25' 50'



BUILDING HEIGHT DIAGRAM "1"

SCALE: N.T.S.

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DRAWING TITLE

BUILDING HEIGHT DIAGRAM #1

JOB NUMBER

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Sheet 7 Of 17

LEGEND:

PROPERTY LINE

MAX. PERMITTED BUILDING BOUNDARY

PROPOSED RESIDENTIAL USE

PROPOSED COMMUNITY FACILITY USE

0' 5' 10' 15' 25' 50'

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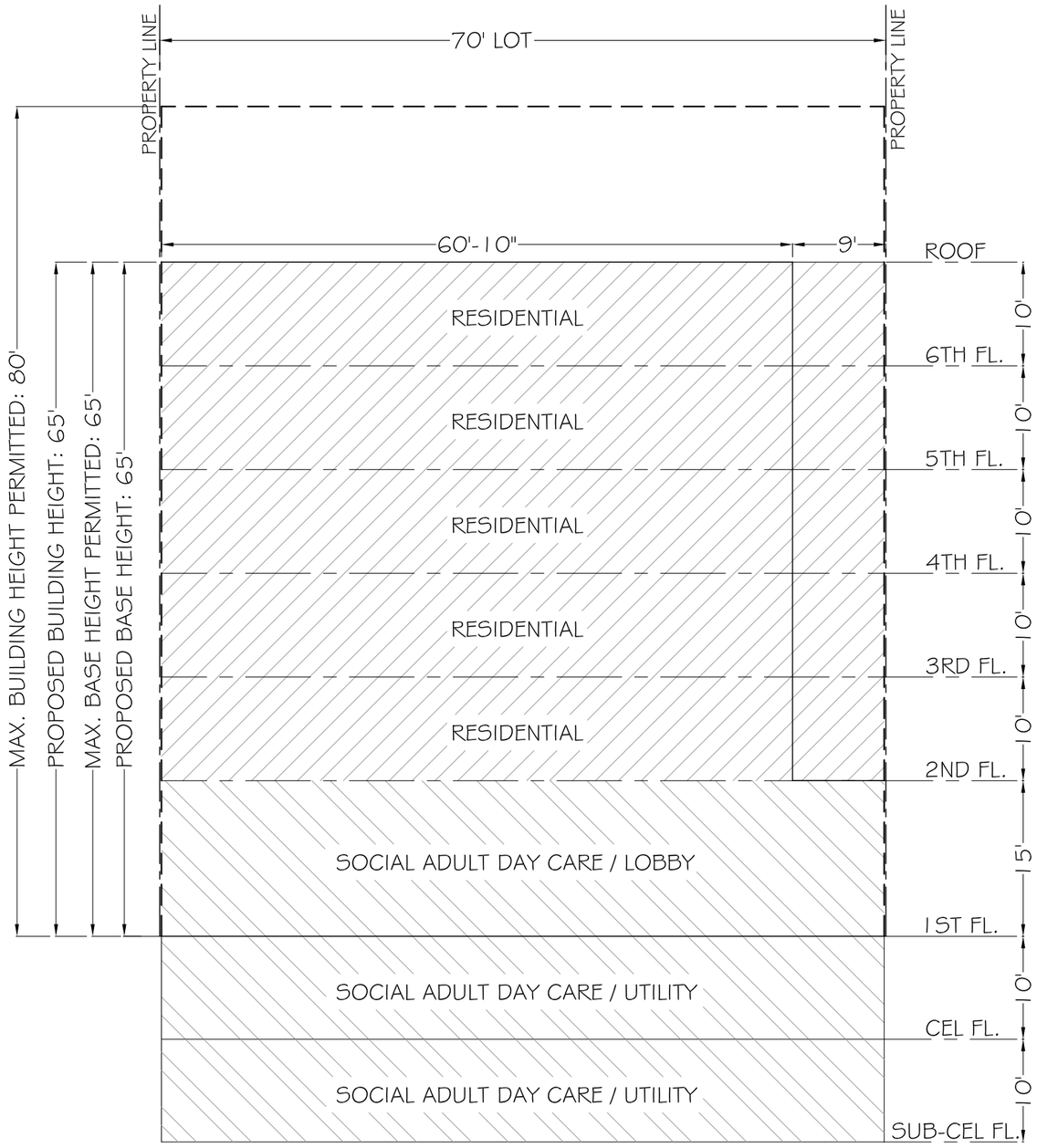
ZONING ANALYSIS
R6A



WEST 10 STREET
(NARROW STREET - 60' WIDE)

BUILDING HEIGHT DIAGRAM "2"
SCALE: N.T.S.

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DRAWING TITLE
BUILDING HEIGHT DIAGRAM #2

JOB NUMBER

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Date: 04-26-2021
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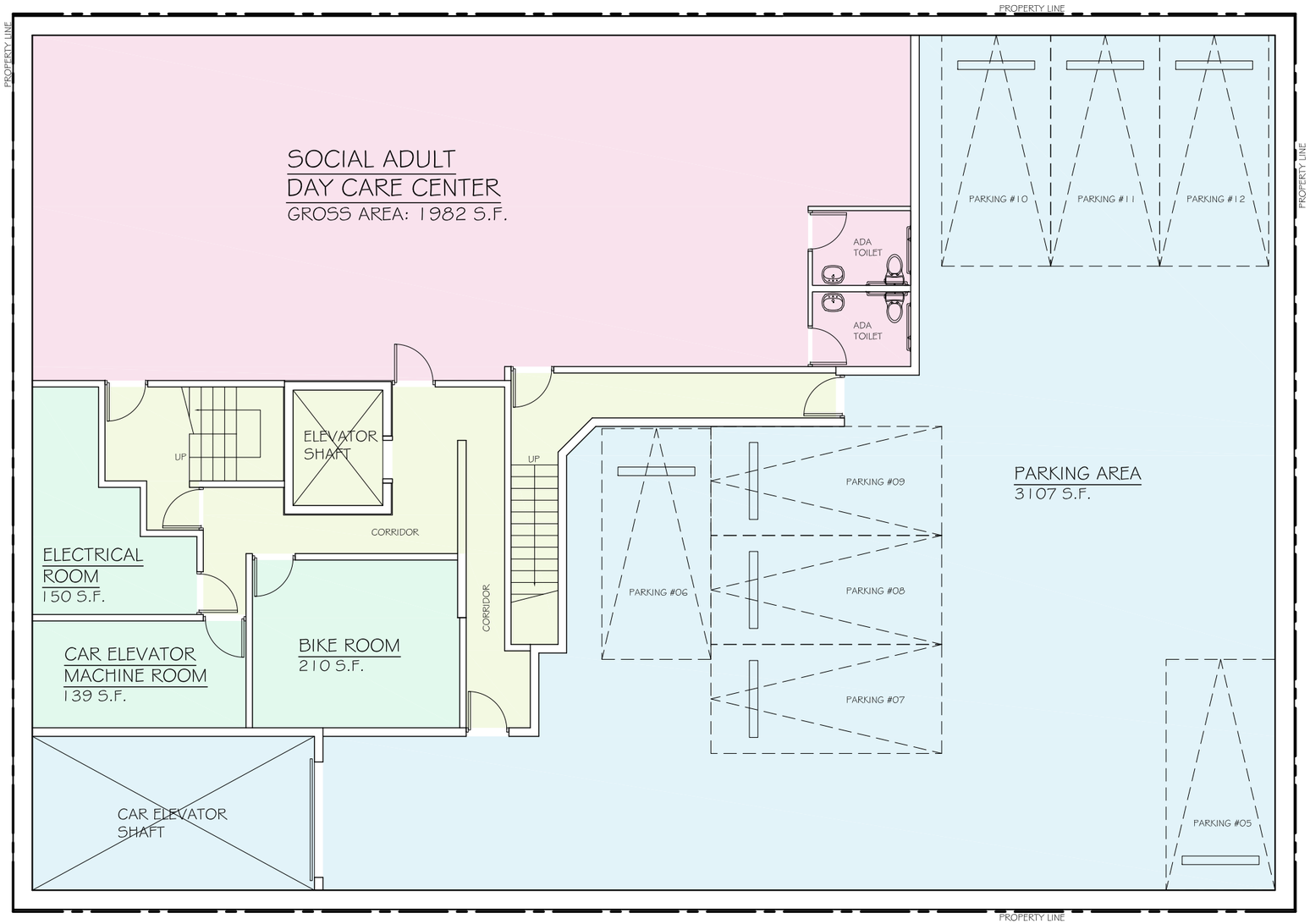
ZONING ANALYSIS
R6A

WEST 10 ST.



PROPOSED SUB-CELLAR FLOOR PLAN

SCALE: N.T.S.

LEGEND

- COMMUNITY FACILITY AREA
- PUBLIC AREA (RESID. USE)
- PUBLIC AREA (MIX USE)
- MECH. & MISC. AREA

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DRAWING TITLE

PROPOSED SUB-CELLAR FLOOR PLAN

JOB NUMBER

Project No. :

Date: 04-26-2021

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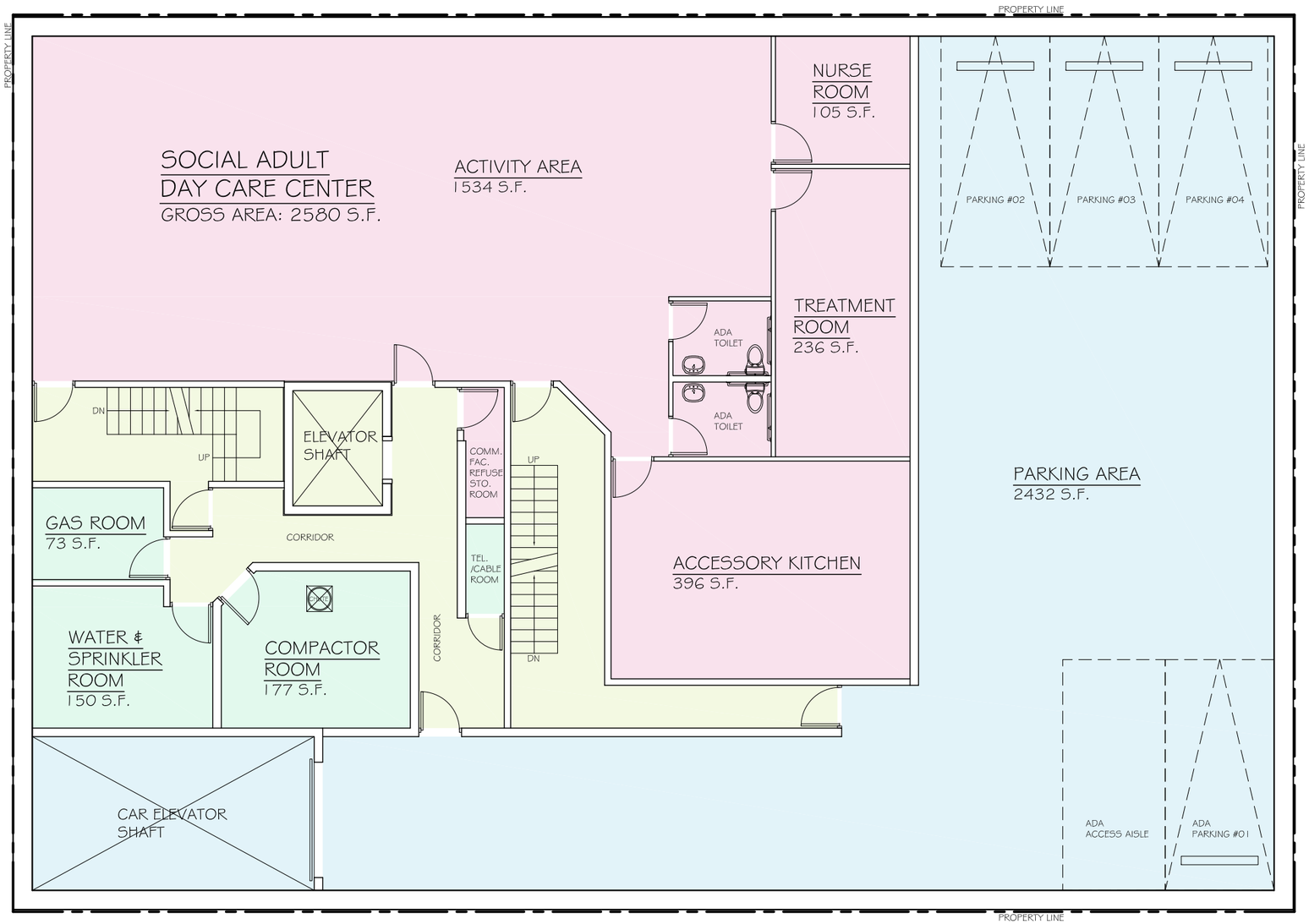
ZONING ANALYSIS R6A

WEST 10 ST.



PROPOSED CELLAR FLOOR PLAN

SCALE: N.T.S.

LEGEND

- COMMUNITY FACILITY AREA
- PUBLIC AREA (RESID. USE)
- PUBLIC AREA (MIX USE)
- MECH. & MISC. AREA

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PROPOSED CELLAR FLOOR PLAN

JOB NUMBER

Project No. :
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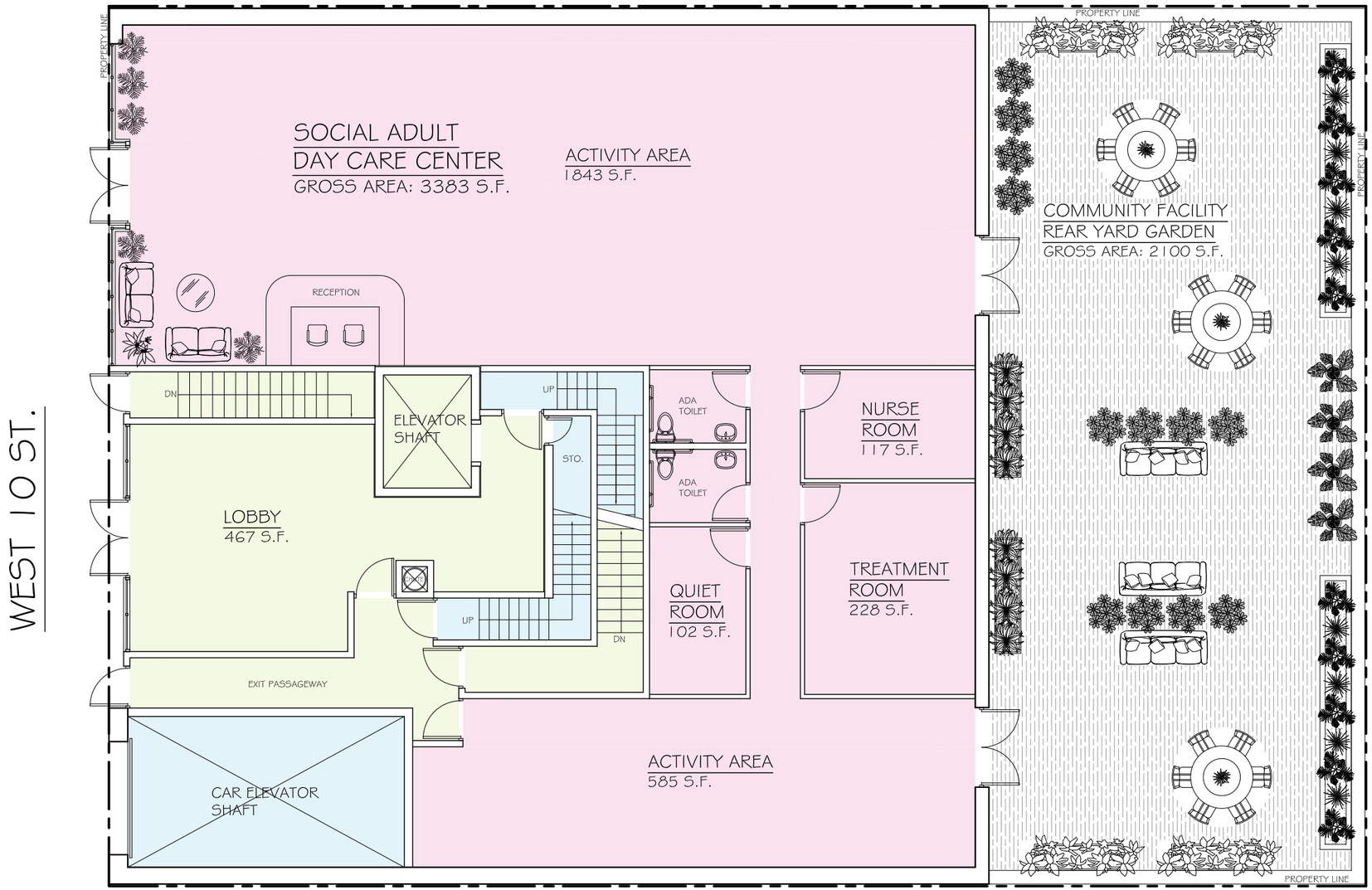
ZONING ANALYSIS
R6A



PROPOSED 1ST FLOOR PLAN

SCALE: N.T.S.

LEGEND

- COMMUNITY FACILITY AREA
- PUBLIC AREA (RESID. USE)
- PUBLIC AREA (MIX USE)
- MECH. & MISC. AREA

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PROPOSED 1ST FLOOR PLAN

JOB NUMBER

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Date: 04-26-2021

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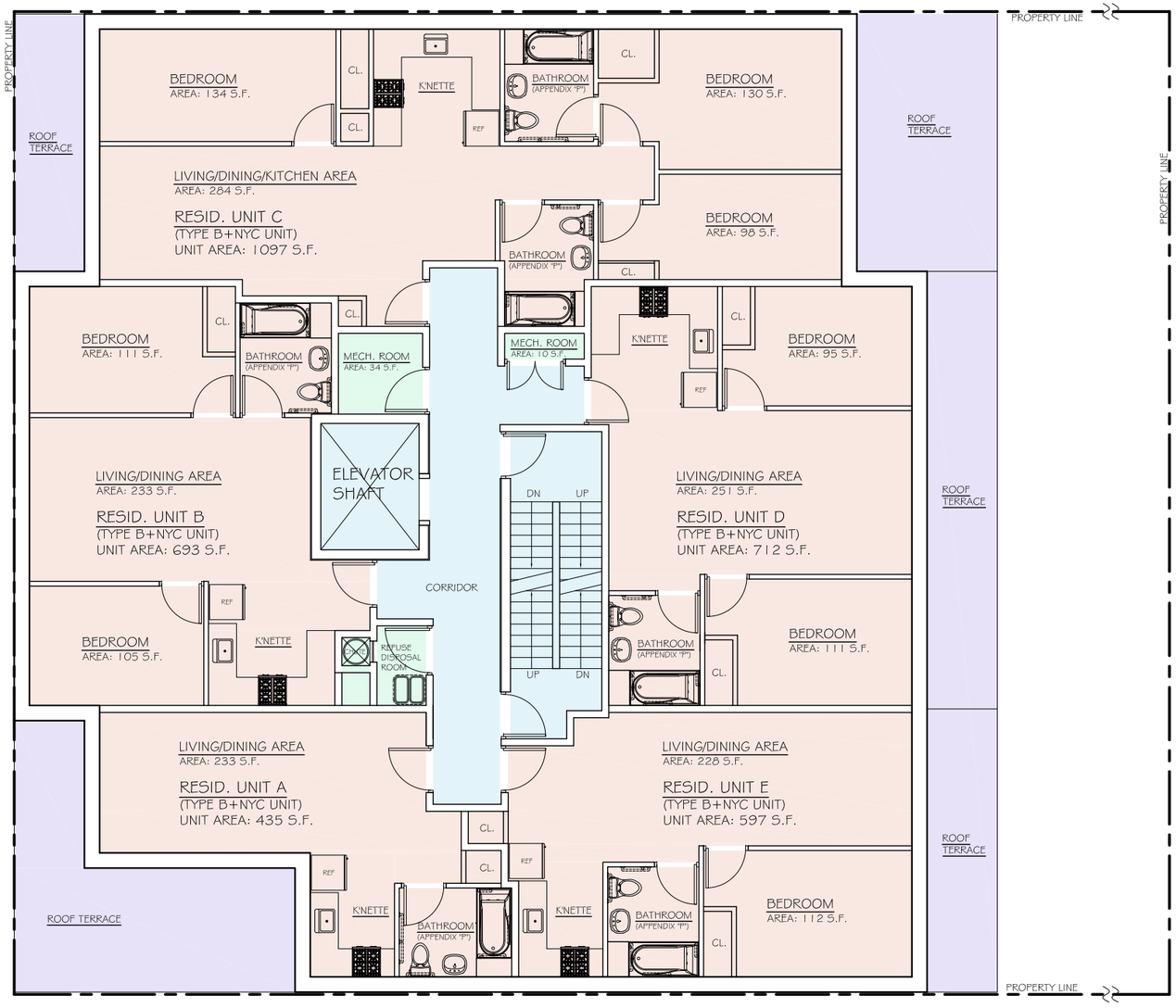
ZONING ANALYSIS
R6A



PROPOSED 2ND FLOOR PLAN

SCALE: N.T.S.

FLOOR	# OF BEDROOM / UNIT				# OF UNITS
	STUDIO	ONE	TWO	THREE	
002	1	1	2	1	5
003	1	3	2	0	6
004	1	3	2	0	6
005	1	1	2	1	5
006	1	1	2	1	5
TOTAL	5	9	10	3	27

LEGEND

- RESIDENTIAL UNITS
- RESIDENTIAL BALCONY / TERRACE
- PUBLIC AREA (RESID. USE)
- MECH. & MISC. AREA

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DRAWING TITLE

PROPOSED 2ND
FLOOR PLAN

JOB NUMBER

Project No. :

Date: 04-26-2021

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Sheet 12 Of 17

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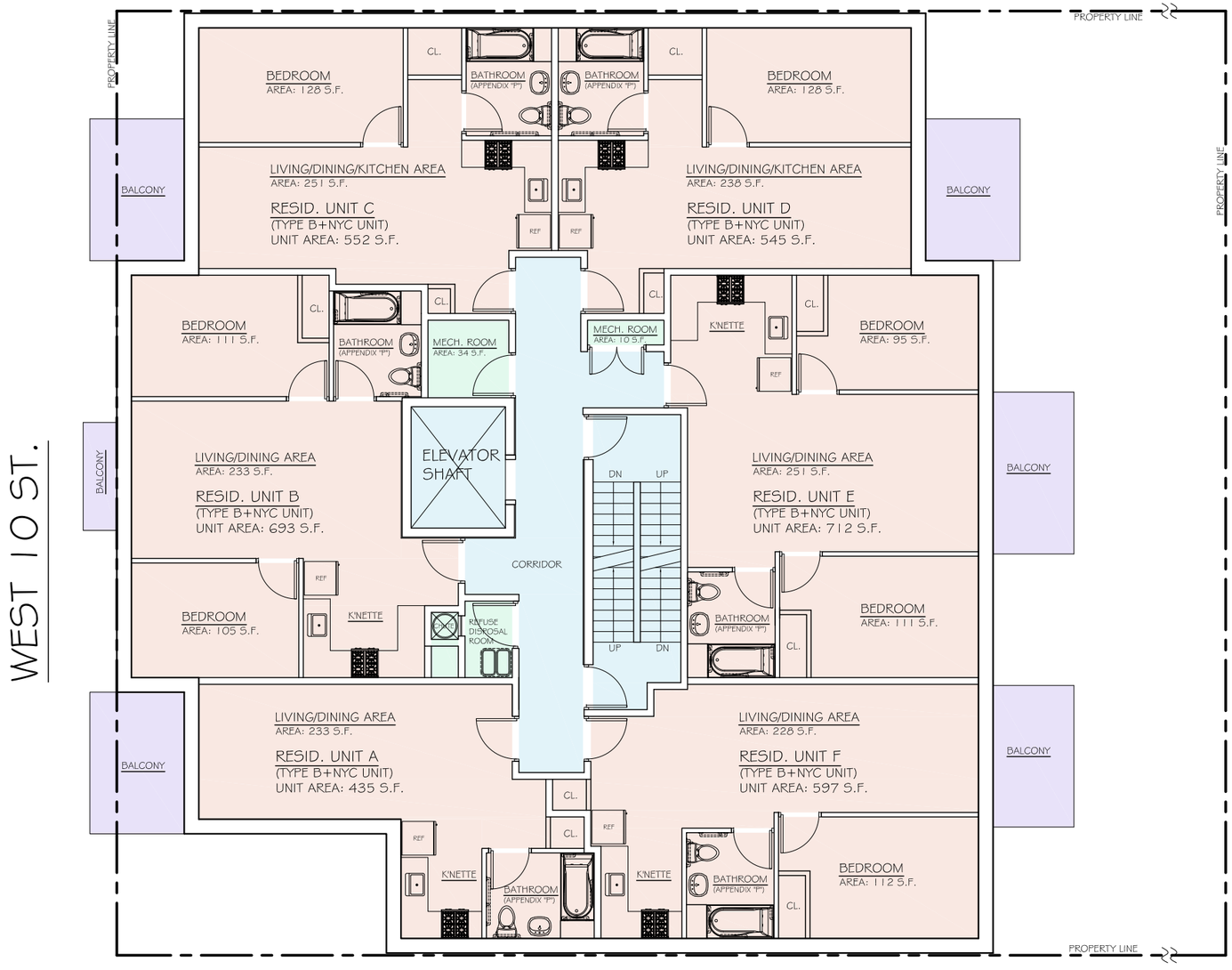
ZONING ANALYSIS
R6A



PROPOSED 3RD & 4TH FLOOR PLAN

SCALE: N.T.S.

FLOOR	# OF BEDROOM / UNIT				# OF UNITS
	STUDIO	ONE	TWO	THREE	
002	1	1	2	1	5
003	1	3	2	0	6
004	1	3	2	0	6
005	1	1	2	1	5
006	1	1	2	1	5
TOTAL	5	9	10	3	27

LEGEND

- RESIDENTIAL UNITS
- RESIDENTIAL BALCONY / TERRACE
- PUBLIC AREA (RESID. USE)
- MECH. & MISC. AREA

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NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

PROPOSED 3RD & 4TH FLOOR PLAN

JOB NUMBER

Project No. :

Date: 04-26-2021

Drawn by : | Check by : F.C.

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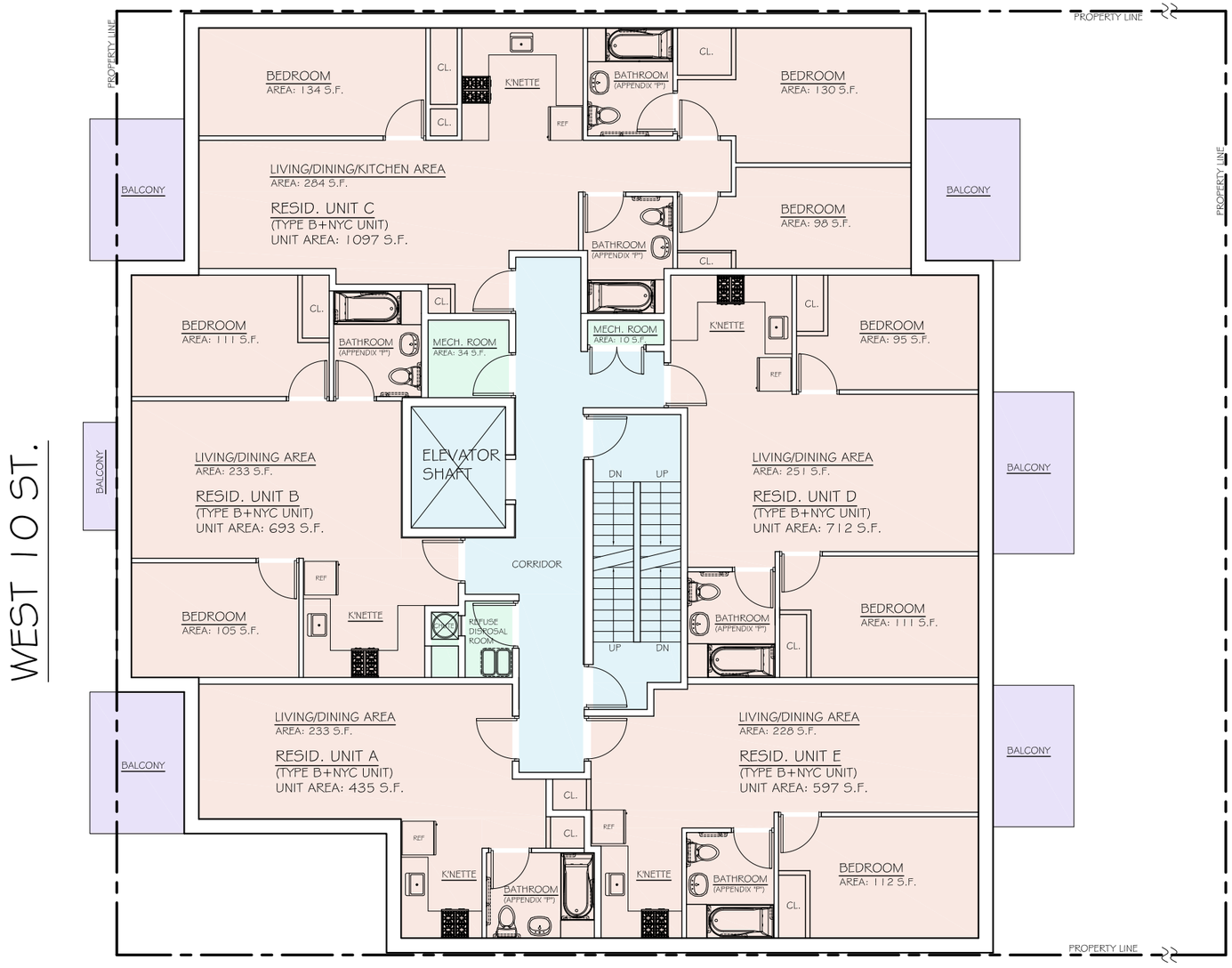
ZONING ANALYSIS
R6A



PROPOSED 5TH & 6TH FLOOR PLAN

SCALE: N.T.S.

FLOOR	# OF BEDROOM / UNIT				# OF UNITS
	STUDIO	ONE	TWO	THREE	
002	1	1	2	1	5
003	1	3	2	0	6
004	1	3	2	0	6
005	1	1	2	1	5
006	1	1	2	1	5
TOTAL	5	9	10	3	27

LEGEND

- RESIDENTIAL UNITS
- RESIDENTIAL BALCONY / TERRACE
- PUBLIC AREA (RESID. USE)
- MECH. & MISC. AREA

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REVISIONS

NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

PROPOSED 5TH & 6TH FLOOR PLAN

JOB NUMBER

Project No. :

Date: 04-26-2021

Drawn by : | Check by : F.C.

SEAL

Drawing Number

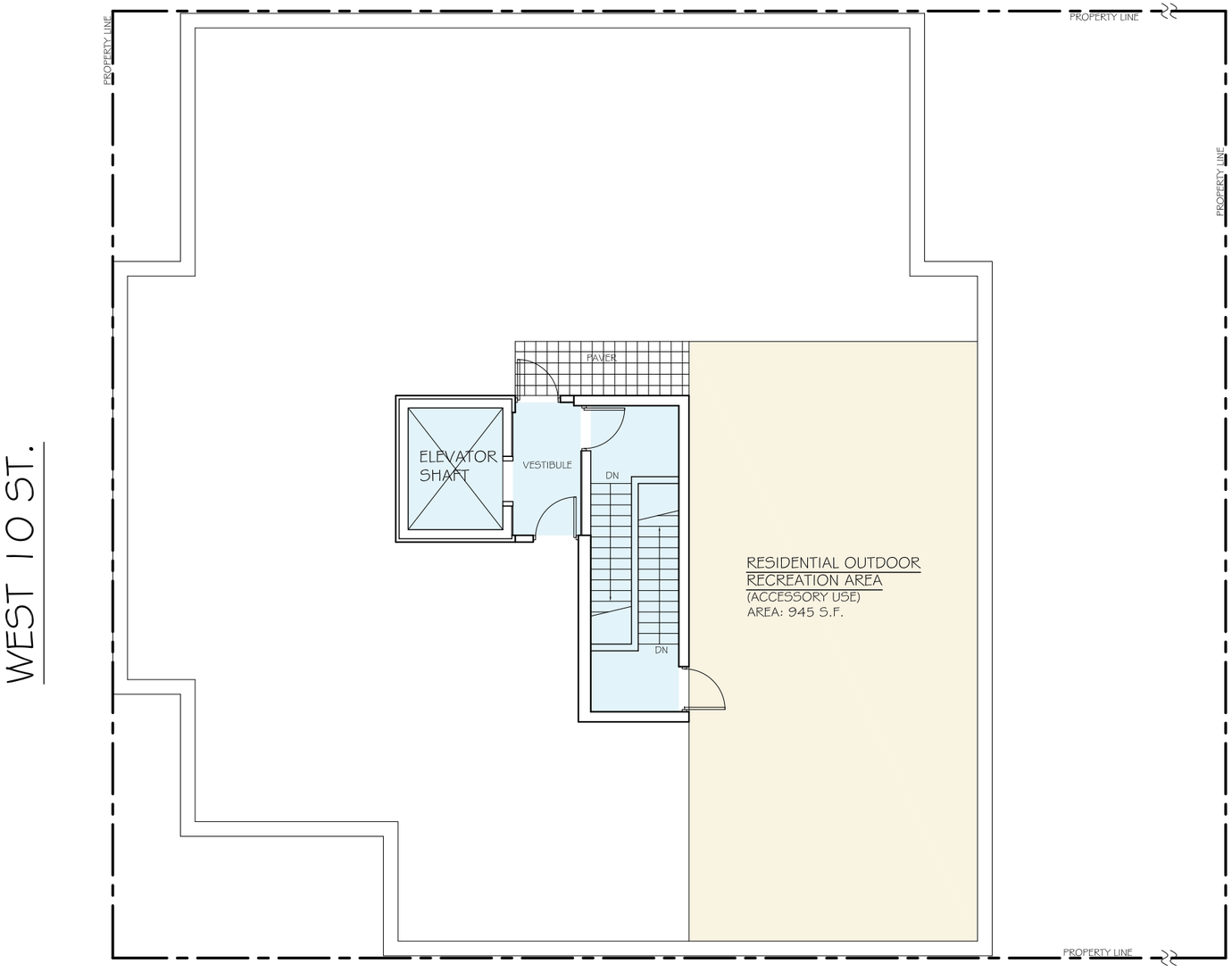
A-006.00

Sheet 14 Of 17

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS
R6A

WEST 10 ST.



PROPOSED ROOF PLAN

SCALE: N.T.S.

LEGEND

- RESIDENTIAL RECREATION AREA
- PUBLIC AREA (RESID. USE)

ARCHITECT

FC ARCHITECT PLLC
775 50TH ST. #C1, BROOKLYN, NY 11220
TEL: 646-662-6352
EMAIL: FC.ARCHITECT.NY@GMAIL.COM

CONSULTANTS

OWNER

GENERAL NOTES

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REVISIONS

NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

PROPOSED ROOF PLAN

JOB NUMBER

Project No. :

Date: 04-26-2021

Drawn by : | Check by : F.C.

SEAL

Drawing Number

A-007.00

Sheet 15 Of 17

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS
R6A



WEST 10 STREET

FRONT ELEVATION
SCALE: N.T.S.

ARCHITECT

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REVISIONS

NO.	DATE	REMARKS

ADDRESS

1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE

PROPOSED FRONT ELEVATION

JOB NUMBER

Project No. :

Date: 04-26-2021

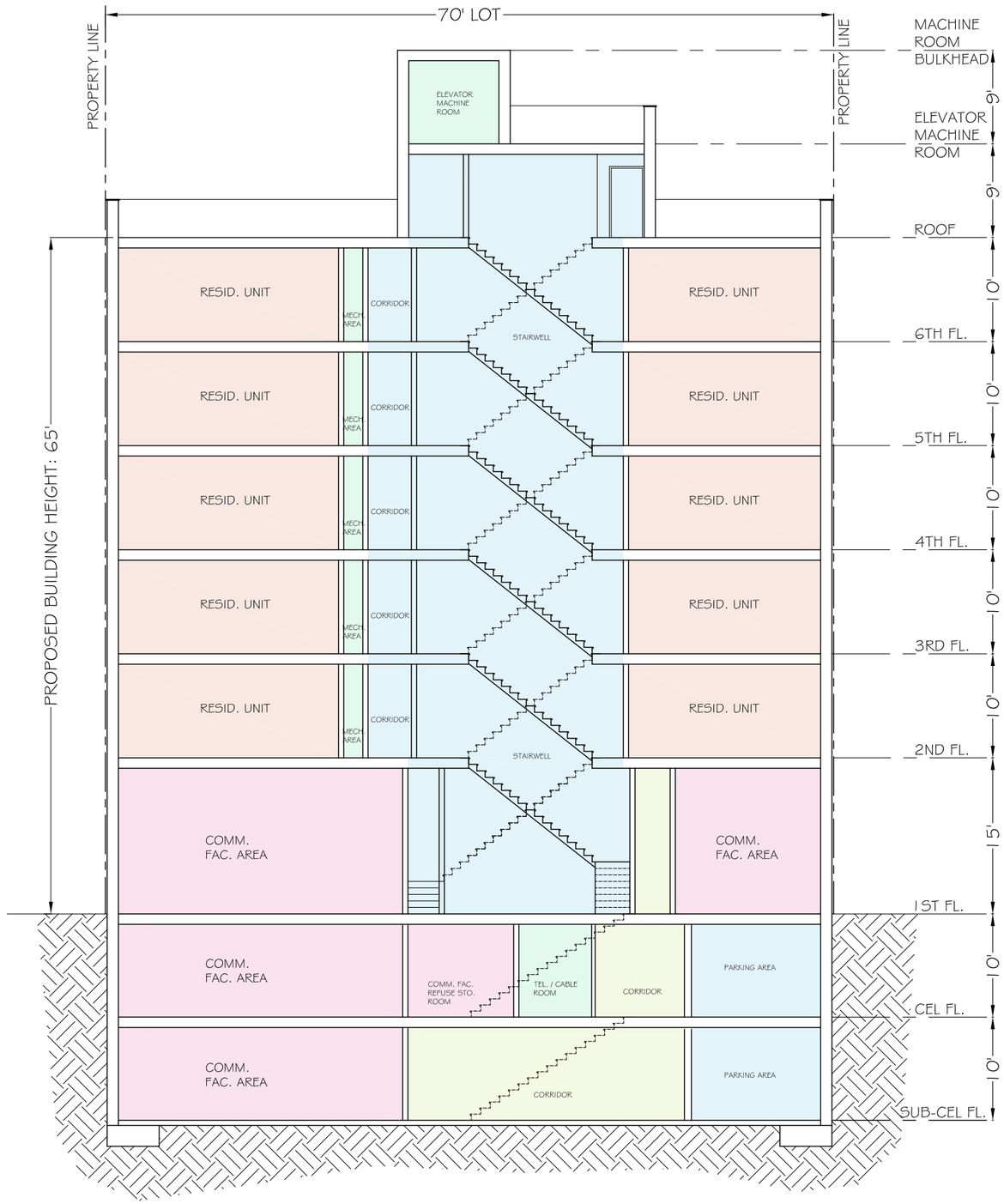
Drawn by : | Check by : F.C.

SEAL

Drawing Number
A-008.00

1656 WEST 10 STREET, BROOKLYN, NY 11223

ZONING ANALYSIS
R6A



CROSS SECTION
SCALE: N.T.S.

LEGEND

- RESIDENTIAL UNITS
- COMMUNITY FACILITY AREA
- PUBLIC AREA (RESID. USE)
- PUBLIC AREA (MIX USE)
- MECH. & MISC. AREA

ARCHITECT

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REVISIONS

NO.	DATE	REMARKS

ADDRESS
1656 WEST 10 STREET, BROOKLYN, NY

DRAWING TITLE
CROSS SECTION

JOB NUMBER

Project No. :
Date: 04-26-2021
Drawn by : | Check by : F.C.
SEAL

Drawing Number
A-009.00

Sheet 17 Of 17

APPENDIX B: AGENCY CORRESPONDENCE

Landmarks Preservation Commission

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

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

ENVIRONMENTAL REVIEW

Project number: DEPARTMENT OF CITY PLANNING / LA-CEQR-K
Project: 1656 WEST 10 STREET
Date Received: 10/6/2021

Properties with no Architectural or Archaeological significance:
1) 1650 WEST 10 STREET, BBL: 3066210022
2) 1656 WEST 10 STREET, BBL: 3066210028
3) 1684 WEST 10 STREET, BBL: 3066210042

Within radius: 130 Avenue P, S/NR eligible.

Gina Santucci 10/14/2021

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 35902_FSO_DNP_10142021.docx

APPENDIX C: NOISE BACKUP DATA

Measurement Report

Report Summary

Meter's File Name	LxT_Data.069	Computer's File Name	SLM_0003707_LxT_Data_069.00.ldbin
Meter	LxT SE 0003707		
Firmware	2.404		
User		Location	
Description			
Note			
Start Time	2022-06-08 08:35:38	Duration	0:20:11.1
End Time	2022-06-08 08:55:50	Run Time	0:20:11.1
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	59.4 dB		
LAE	90.2 dB	SEA	--- dB
EA	117.5 µPa²h		
LAS_{peak}	102.5 dB	2022-06-08 08:54:56	
LAS_{max}	77.4 dB	2022-06-08 08:54:56	
LAS_{min}	48.3 dB	2022-06-08 08:50:42	
LA_{eq}	59.4 dB		
LC_{eq}	69.3 dB	LC_{eq} - LA_{eq}	9.9 dB
LAI_{eq}	65.3 dB	LAI_{eq} - LA_{eq}	5.9 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpeak > 135.0 dB	0	0:00:00.0
LASpeak > 137.0 dB	0	0:00:00.0
LASpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
59.4 dB	59.4 dB	0.0 dB

LDEN	LDay	LEve	LNight
59.4 dB	59.4 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	59.4 dB		--- dB		--- dB	
$L_{S(max)}$	77.4 dB	2022-06-08 08:54:56	--- dB		--- dB	
$L_{S(min)}$	48.3 dB	2022-06-08 08:50:42	--- dB		--- dB	
$L_{Peak(max)}$	102.5 dB	2022-06-08 08:54:56	--- dB		--- dB	

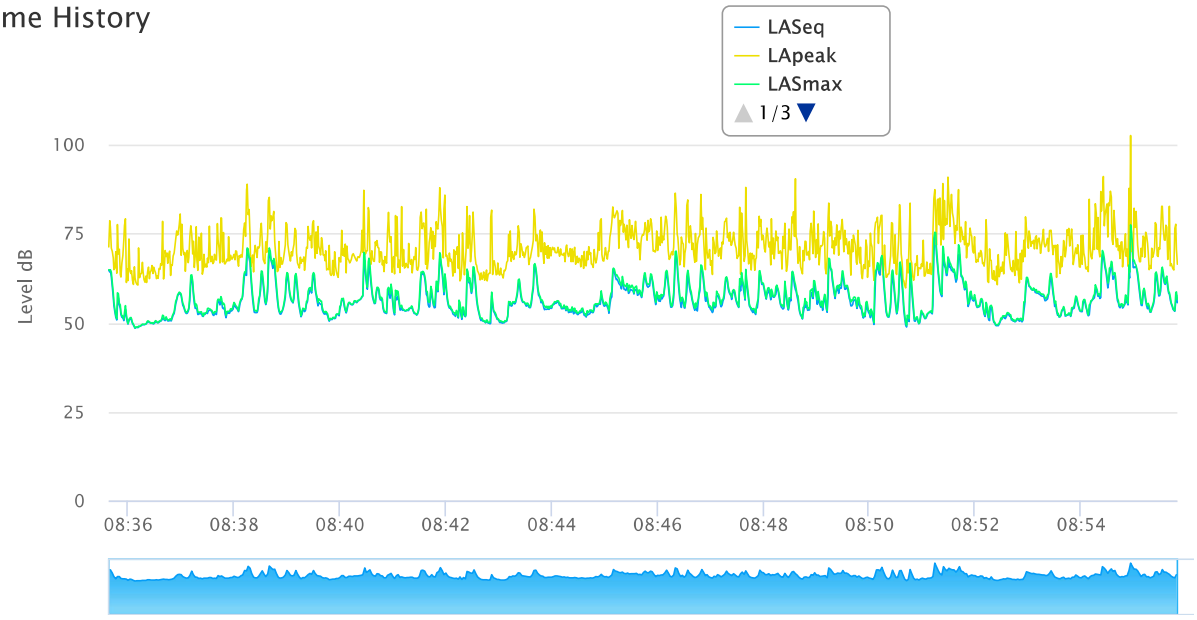
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	11	0:00:26.9

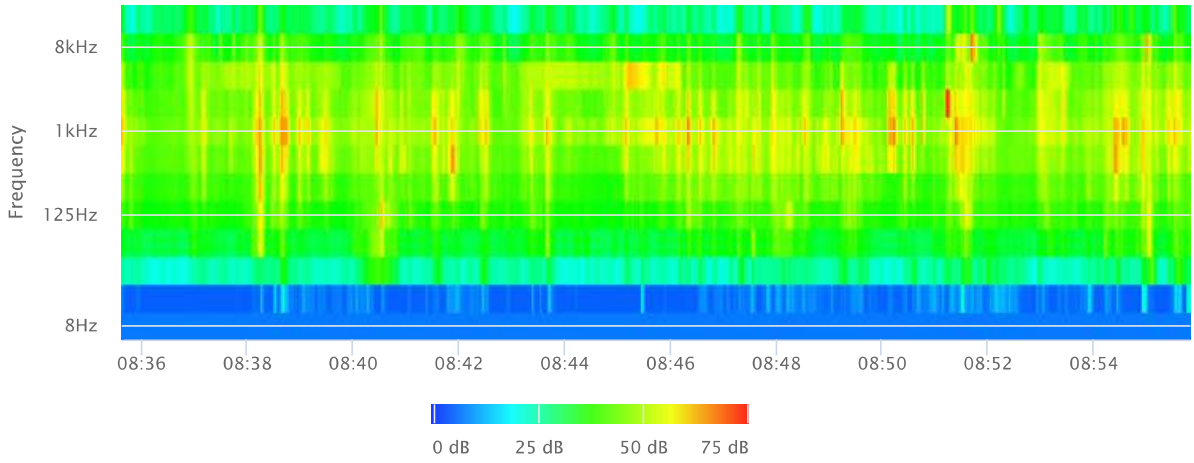
Statistics

LAS 1.0	69.1 dB
LAS 10.0	63.0 dB
LAS 33.0	57.5 dB
LAS 50.0	55.4 dB
LAS 90.0	51.0 dB
LAS 99.0	49.1 dB

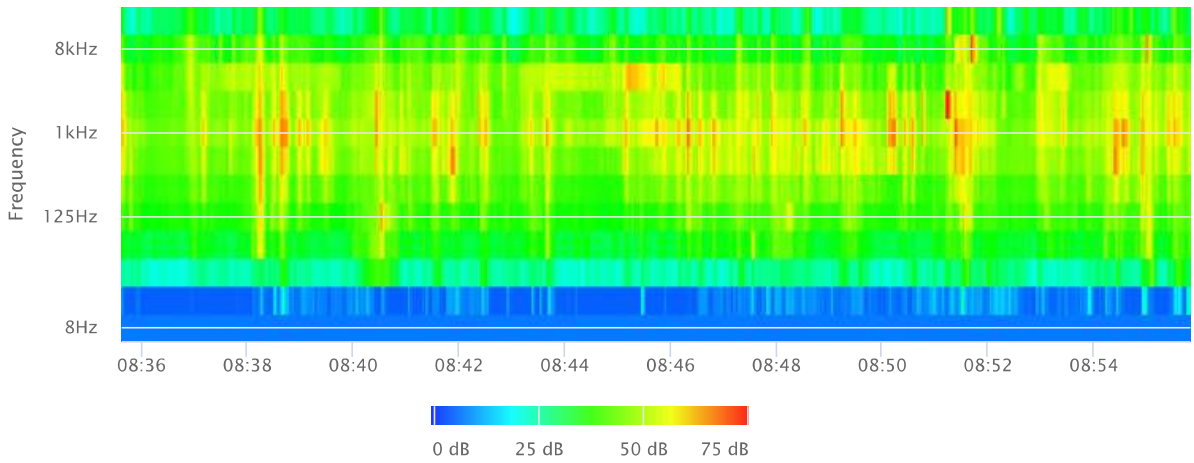
Time History



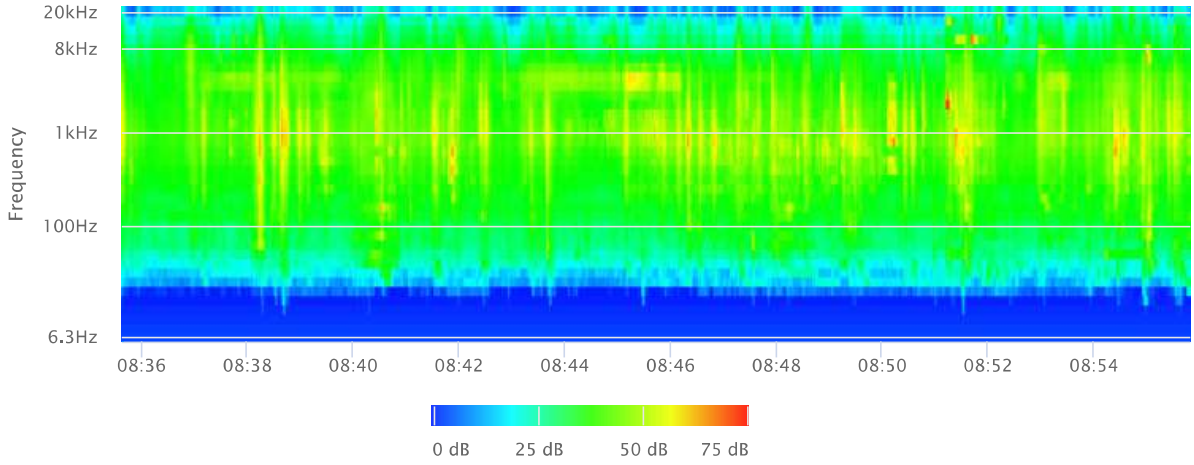
OBA 1/1 Leq



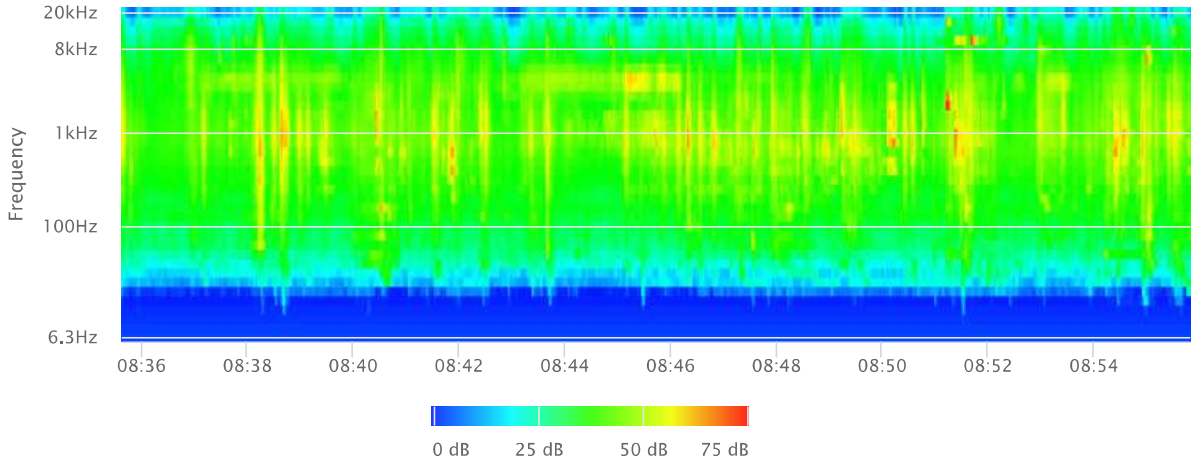
OBA 1/1 Lmax



OBA 1/3 Leq



OBA 1/3 Lmax



Measurement Report

Report Summary

Meter's File Name	LxT_Data.070	Computer's File Name	SLM_0003707_LxT_Data_070.01.ldbin
Meter	LxT SE 0003707		
Firmware	2.404		
User		Location	
Description			
Note			
Start Time	2022-06-08 12:22:39	Duration	0:20:26.8
End Time	2022-06-08 12:43:05	Run Time	0:20:20.7
Pause Time	0:00:06.1		

Results

Overall Metrics

LA_{eq}	59.4 dB		
LAE	90.3 dB	SEA	--- dB
EA	118.7 µPa²h		
LAS_{peak}	96.5 dB	2022-06-08 12:39:14	
LAS_{max}	79.2 dB	2022-06-08 12:32:27	
LAS_{min}	50.0 dB	2022-06-08 12:28:44	
LA_{eq}	59.4 dB		
LC_{eq}	69.9 dB	LC_{eq} - LA_{eq}	10.5 dB
LAI_{eq}	63.1 dB	LAI_{eq} - LA_{eq}	3.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LASpeak > 135.0 dB	0	0:00:00.0
LASpeak > 137.0 dB	0	0:00:00.0
LASpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
59.4 dB	59.4 dB	0.0 dB

LDEN	LDay	LEve	LNight
59.4 dB	59.4 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	59.5 dB		--- dB		--- dB	
$L_{S(max)}$	79.2 dB	2022-06-08 12:32:27	--- dB		--- dB	
$L_{S(min)}$	50.0 dB	2022-06-08 12:28:44	--- dB		--- dB	
$L_{Peak(max)}$	96.5 dB	2022-06-08 12:39:14	--- dB		--- dB	

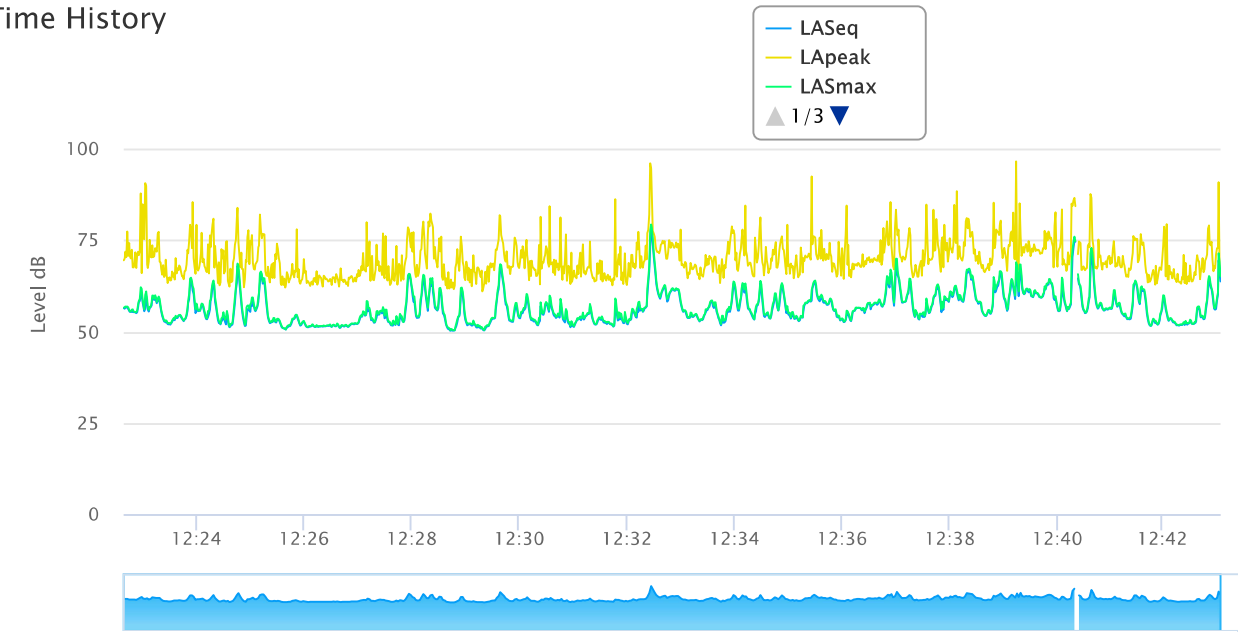
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	12	0:00:31.6

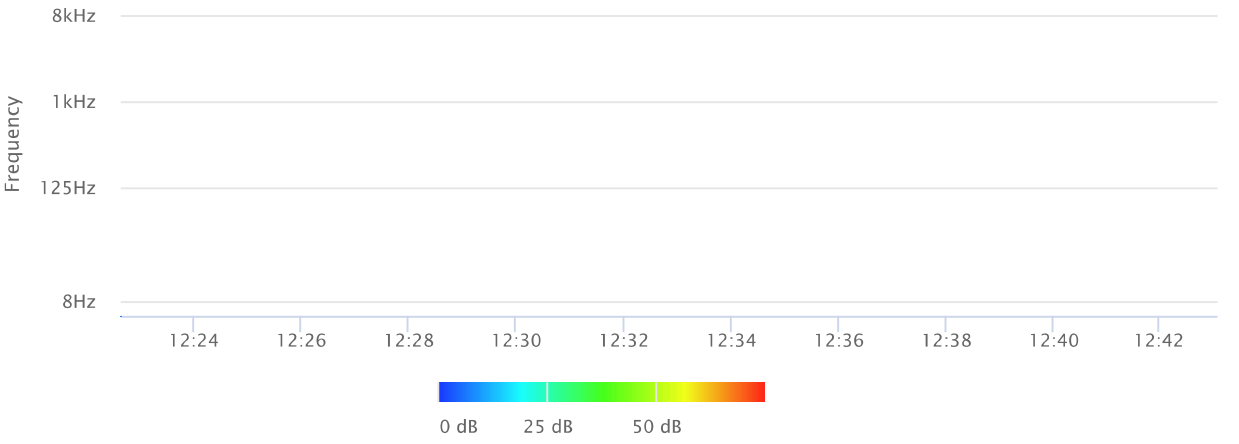
Statistics

LAS 1.0	68.6 dB
LAS 10.0	61.9 dB
LAS 33.0	57.5 dB
LAS 50.0	55.5 dB
LAS 90.0	51.7 dB
LAS 99.0	50.6 dB

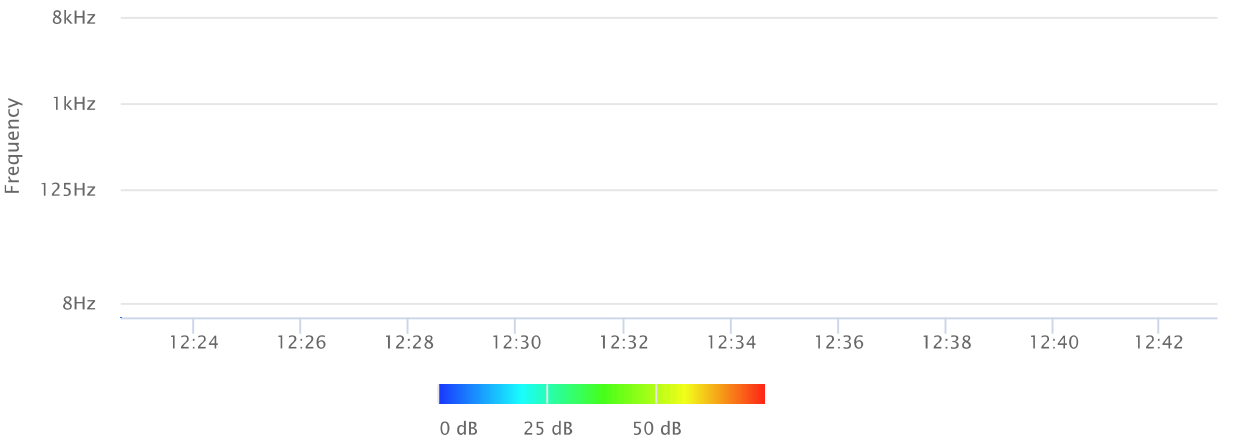
Time History



OBA 1/1 Leq



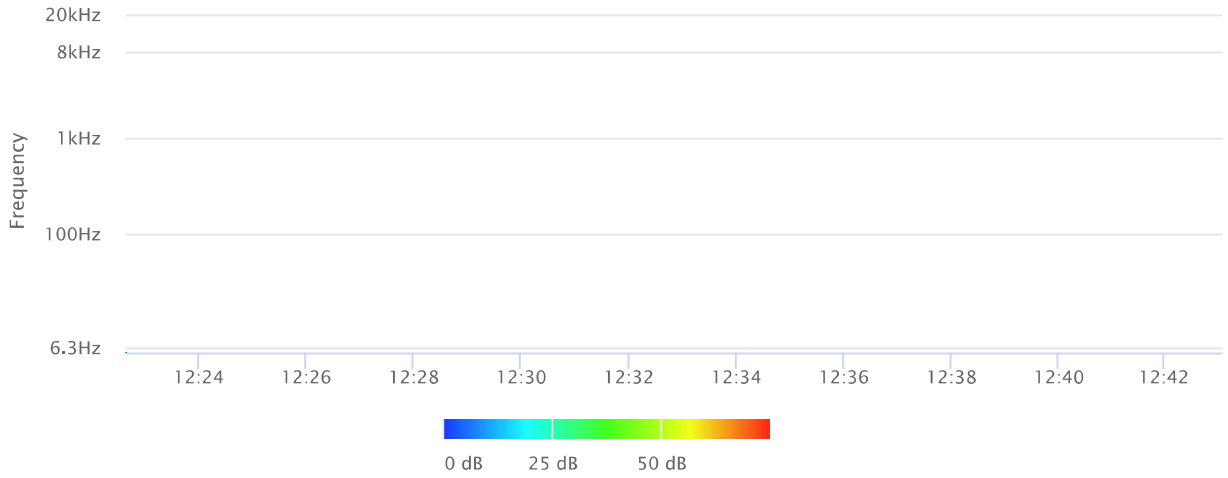
OBA 1/1 Lmax



OBA 1/3 Leq



OBA 1/3 Lmax



Measurement Report

Report Summary

Meter's File Name	LxT_Data.071	Computer's File Name	SLM_0003707_LxT_Data_071.01.ldbin
Meter	LxT SE 0003707		
Firmware	2.404		
User		Location	
Description			
Note			
Start Time	2022-06-08 17:30:40	Duration	0:21:02.2
End Time	2022-06-08 17:51:43	Run Time	0:21:02.2
Pause Time	0:00:00.0		

Results

Overall Metrics

LA_{eq}	64.0 dB		
LAE	95.0 dB	SEA	--- dB
EA	354.6 µPa²h		
LAS_{peak}	104.3 dB	2022-06-08 17:43:39	
LAS_{max}	88.6 dB	2022-06-08 17:43:39	
LAS_{min}	50.2 dB	2022-06-08 17:37:17	
LA_{eq}	64.0 dB		
LC_{eq}	72.3 dB	LC_{eq} - LA_{eq}	8.2 dB
LAI_{eq}	70.1 dB	LAI_{eq} - LA_{eq}	6.1 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	2	0:00:04.1
LAS > 115.0 dB	0	0:00:00.0
LASpeak > 135.0 dB	0	0:00:00.0
LASpeak > 137.0 dB	0	0:00:00.0
LASpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
64.0 dB	64.0 dB	0.0 dB

LDEN	LDay	LEve	LNight
64.0 dB	64.0 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	64.0 dB		--- dB		--- dB	
$L_{S(max)}$	88.6 dB	2022-06-08 17:43:39	--- dB		--- dB	
$L_{S(min)}$	50.2 dB	2022-06-08 17:37:17	--- dB		--- dB	
$L_{Peak(max)}$	104.3 dB	2022-06-08 17:43:39	--- dB		--- dB	

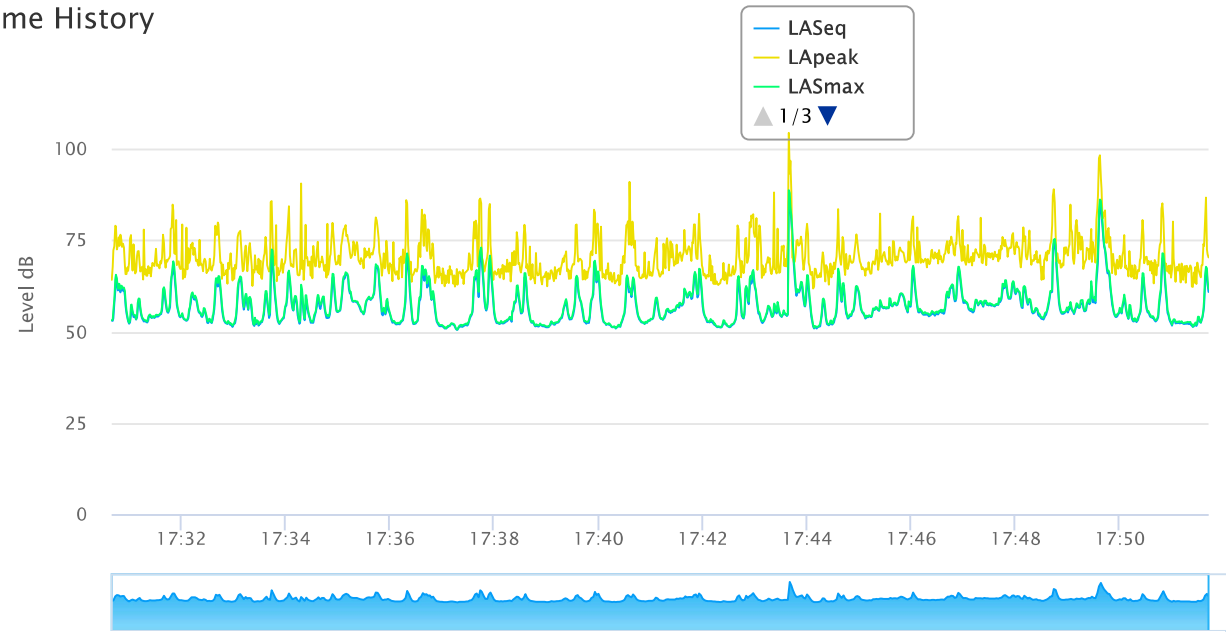
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	8	0:00:26.4

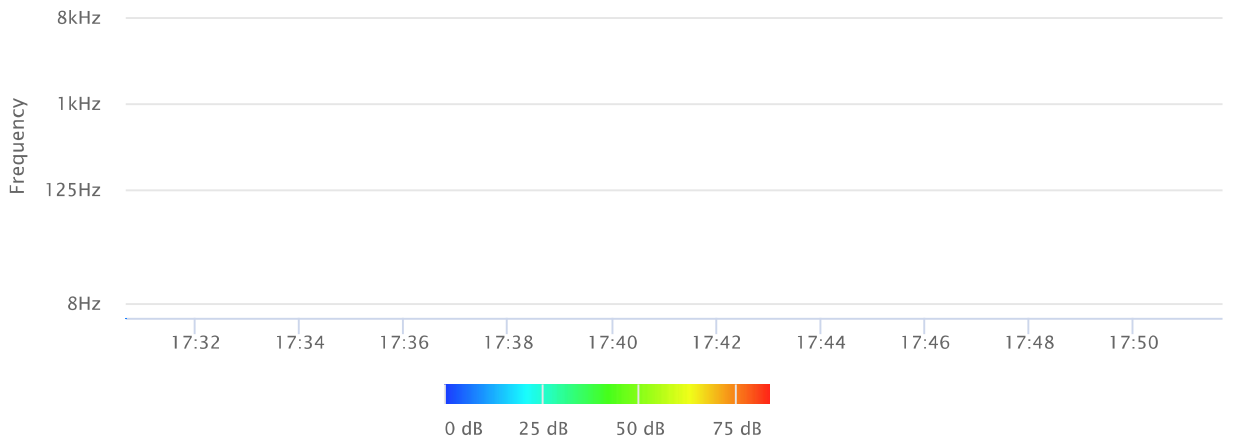
Statistics

LAS 1.0	73.4 dB
LAS 10.0	63.1 dB
LAS 33.0	57.7 dB
LAS 50.0	55.6 dB
LAS 90.0	51.9 dB
LAS 99.0	50.9 dB

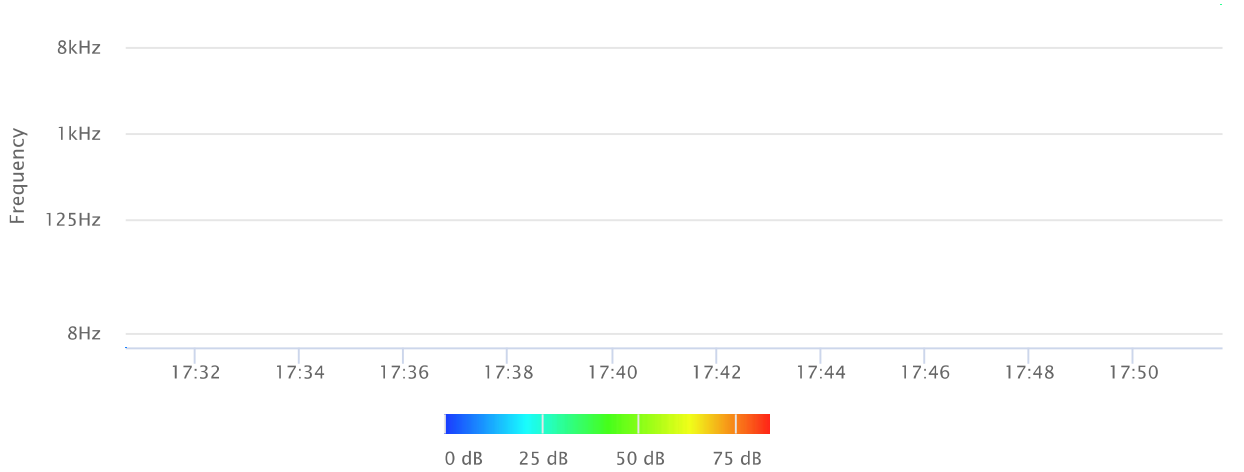
Time History



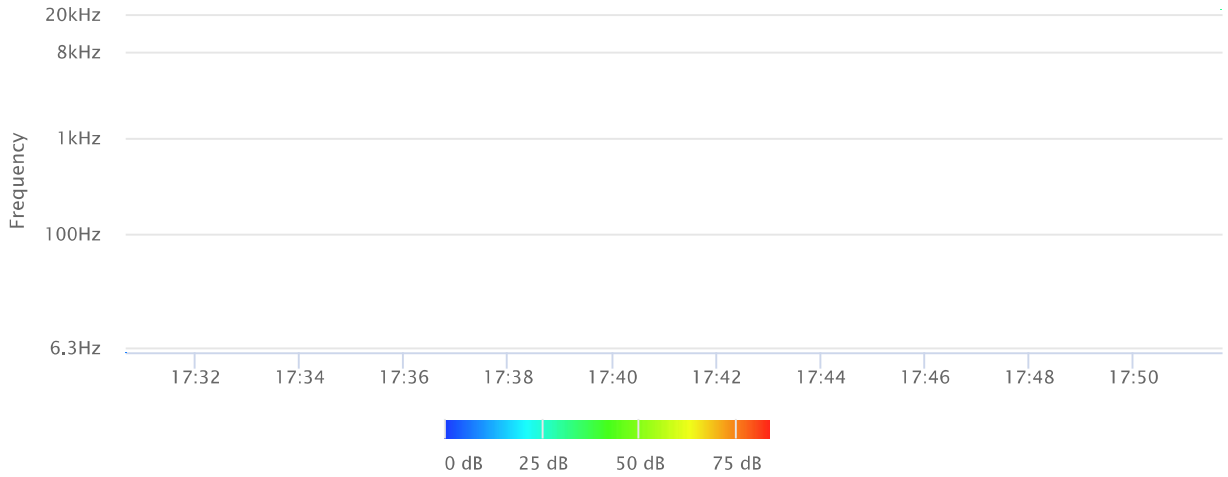
OBA 1/1 Leq



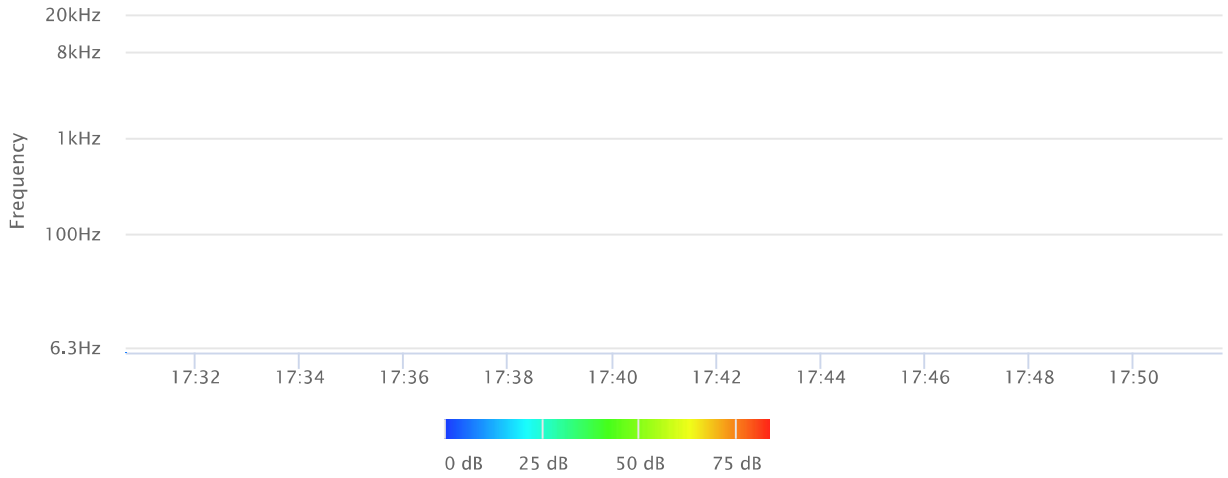
OBA 1/1 Lmax



OBA 1/3 Leq



OBA 1/3 Lmax



Calibration Certificate

Certificate Number 2021014250
Customer:

Model Number	LxT SE		***Procedure Number***	D0001.8378	
Serial Number	0003707		***Technician***	Eric Olson	
Test Results	**Pass**		***Calibration Date***	8 Nov 2021	
Initial Condition	AS RECEIVED same as shipped		***Calibration Due***	8 Nov 2022	
Description	Sound Expert LxT Class 1 Sound Level Meter Firmware Revision: 2.404		***Temperature***	23.69 °C	± 0.25 °C
			Humidity	51.3 %RH	± 2.0 %RH
			Static Pressure	86.49 kPa	± 0.13 kPa

Evaluation Method Tested electrically using Larson Davis PRMLxT1L S/N 028010 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 23.6 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis LxT Manual for SoundTrack LxT & SoundExpert Lxt, I770.01 Rev O Supporting Firmware Version 4.0.5, 2019-09-10

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa

Periodic tests were performed in accordance with precedures from IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part3.

LARSON DAVIS - A PCB PIEZOTRONICS DIV.
1681 West 820 North
Provo, UT 84601, United States
716-684-0001

ACCREDITED Cert. #3622.01

LARSON DAVIS
A PCB DIVISION

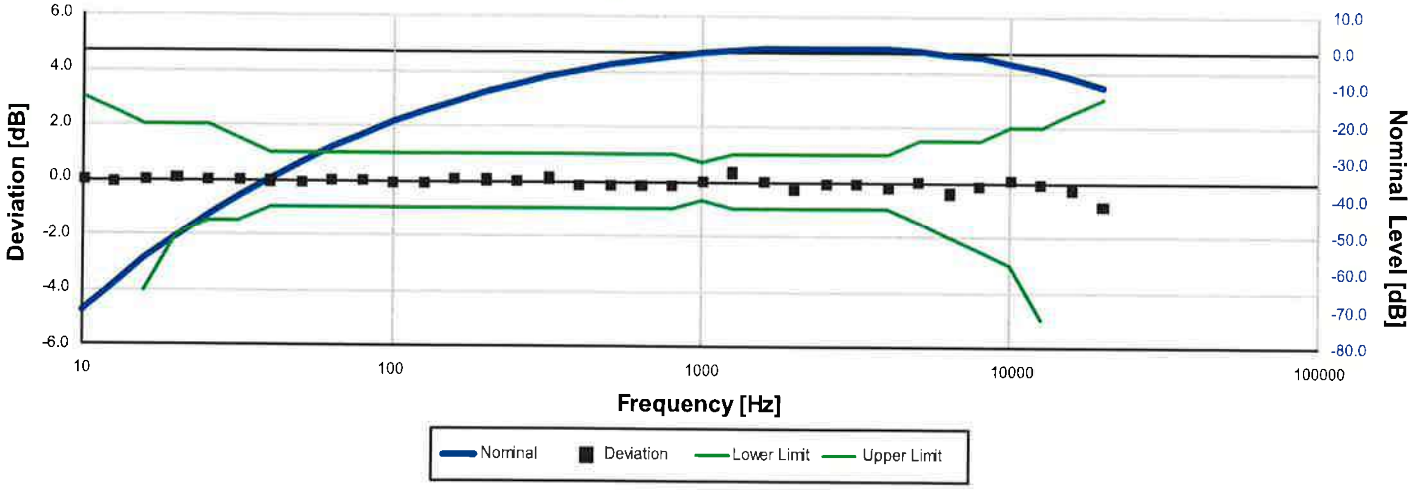
No Pattern approval for IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 available.

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part 3, for the environmental conditions under which the tests were performed. However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 because (a) evidence was not publicly available, from an independent testing organization responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part 3 cover only a limited subset of the specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Hart Scientific 2626-H Temperature Probe	2021-02-04	2022-08-04	006767
SRS DS360 Ultra Low Distortion Generator	2021-09-02	2022-09-02	007167

A-weight Filter Response

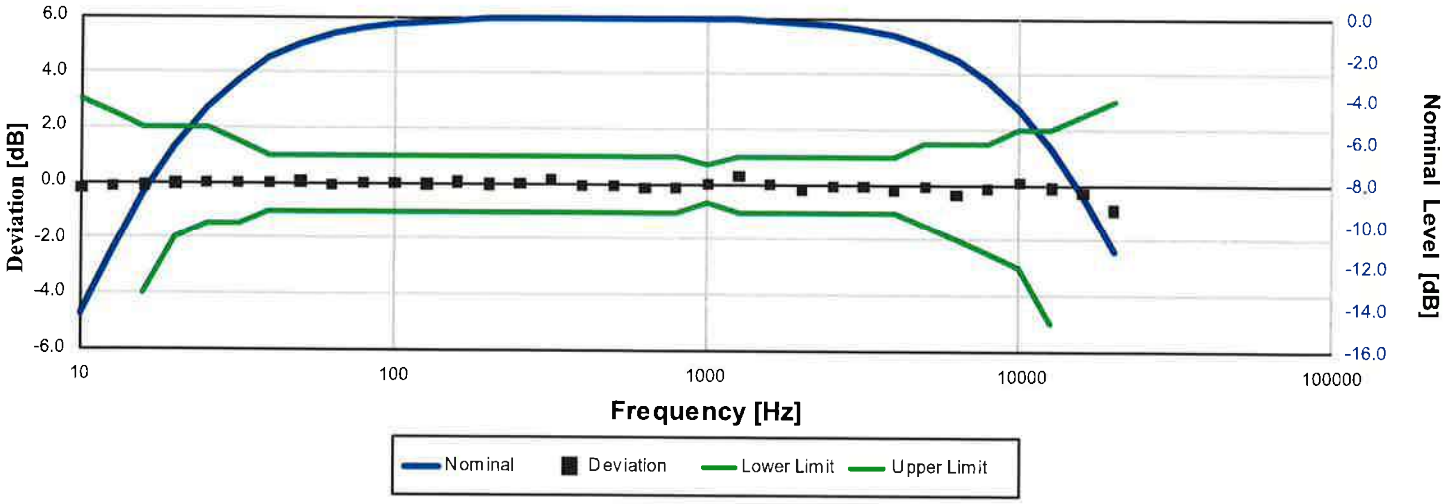


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
10.00	-70.37	0.03	-inf	3.00	0.25	Pass
12.59	-63.46	-0.06	-inf	2.50	0.25	Pass
15.85	-56.72	-0.02	-4.00	2.00	0.25	Pass
19.95	-50.43	0.07	-2.00	2.00	0.25	Pass
25.12	-44.70	0.00	-1.50	2.00	0.25	Pass
31.62	-39.41	-0.01	-1.50	1.50	0.25	Pass
39.81	-34.63	-0.03	-1.00	1.00	0.25	Pass
50.12	-30.28	-0.08	-1.00	1.00	0.25	Pass
63.10	-26.21	-0.01	-1.00	1.00	0.25	Pass
79.43	-22.48	0.02	-1.00	1.00	0.25	Pass
100.00	-19.14	-0.04	-1.00	1.00	0.25	Pass
125.89	-16.15	-0.05	-1.00	1.00	0.25	Pass
158.49	-13.32	0.08	-1.00	1.00	0.25	Pass
199.53	-10.85	0.05	-1.00	1.00	0.25	Pass
251.19	-8.61	-0.01	-1.00	1.00	0.25	Pass
316.23	-6.48	0.12	-1.00	1.00	0.25	Pass
398.11	-4.91	-0.11	-1.00	1.00	0.25	Pass
501.19	-3.35	-0.15	-1.00	1.00	0.25	Pass
630.96	-2.06	-0.16	-1.00	1.00	0.25	Pass
794.33	-0.95	-0.15	-1.00	1.00	0.25	Pass
1,000.00	0.00	0.00	-0.70	0.70	0.25	Pass
1,258.93	0.93	0.33	-1.00	1.00	0.25	Pass
1,584.89	1.00	0.00	-1.00	1.00	0.25	Pass
1,995.26	0.95	-0.26	-1.00	1.00	0.25	Pass
2,511.89	1.21	-0.09	-1.00	1.00	0.25	Pass
3,162.28	1.16	-0.04	-1.00	1.00	0.25	Pass
3,981.07	0.78	-0.22	-1.00	1.00	0.25	Pass
5,011.87	0.51	0.01	-1.50	1.50	0.25	Pass
6,309.57	-0.49	-0.39	-2.00	1.50	0.25	Pass
7,943.28	-1.22	-0.12	-2.50	1.50	0.25	Pass
10,000.00	-2.42	0.08	-3.00	2.00	0.25	Pass
12,589.25	-4.38	-0.08	-5.00	2.00	0.25	Pass
15,848.93	-6.87	-0.27	-16.00	2.50	0.25	Pass
19,952.62	-10.15	-0.85	-inf	3.00	0.25	Pass

-- End of measurement results--

C-weight Filter Response

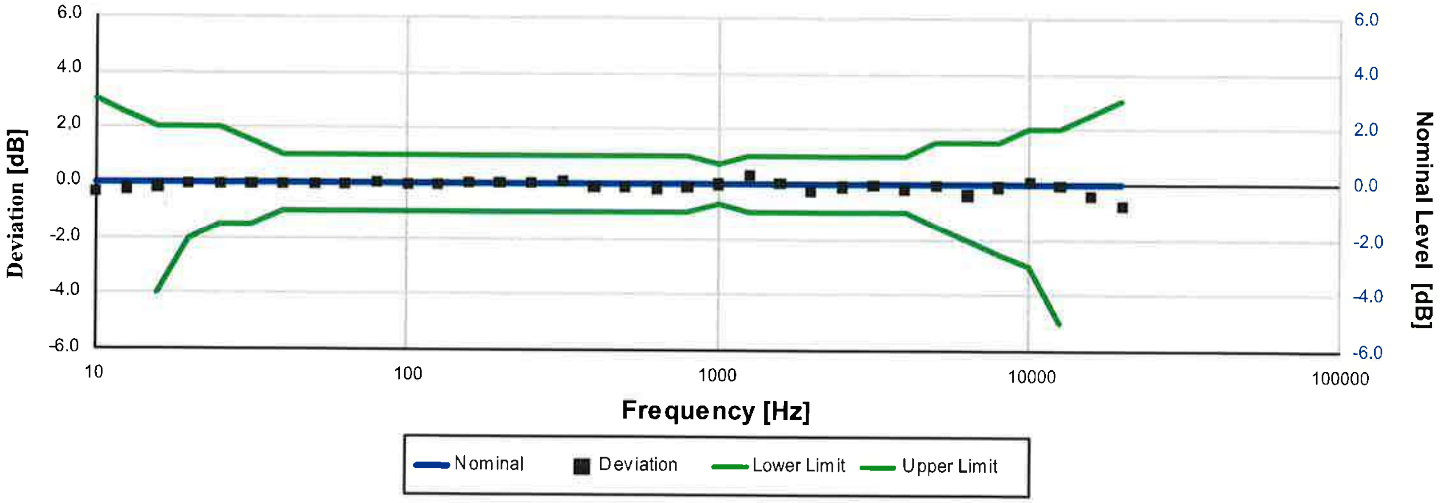


Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
10.00	-14.52	-0.21	-inf	3.00	0.25	Pass
12.59	-11.34	-0.14	-inf	2.50	0.25	Pass
15.85	-8.59	-0.09	-4.00	2.00	0.25	Pass
19.95	-6.22	-0.02	-2.00	2.00	0.25	Pass
25.12	-4.40	0.00	-1.50	2.00	0.25	Pass
31.62	-2.99	0.01	-1.50	1.50	0.25	Pass
39.81	-1.99	0.01	-1.00	1.00	0.25	Pass
50.12	-1.24	0.06	-1.00	1.00	0.25	Pass
63.10	-0.83	-0.03	-1.00	1.00	0.25	Pass
79.43	-0.48	0.02	-1.00	1.00	0.25	Pass
100.00	-0.31	-0.01	-1.00	1.00	0.25	Pass
125.89	-0.23	-0.02	-1.00	1.00	0.25	Pass
158.49	-0.06	0.04	-1.00	1.00	0.25	Pass
199.53	-0.03	-0.03	-1.00	1.00	0.25	Pass
251.19	0.03	0.03	-1.00	1.00	0.25	Pass
316.23	0.15	0.15	-1.00	1.00	0.25	Pass
398.11	-0.08	-0.08	-1.00	1.00	0.25	Pass
501.19	-0.08	-0.08	-1.00	1.00	0.25	Pass
630.96	-0.13	-0.13	-1.00	1.00	0.25	Pass
794.33	-0.11	-0.11	-1.00	1.00	0.25	Pass
1,000.00	0.00	0.00	-0.70	0.70	0.25	Pass
1,258.93	0.31	0.31	-1.00	1.00	0.25	Pass
1,584.89	-0.06	0.04	-1.00	1.00	0.25	Pass
1,995.26	-0.42	-0.22	-1.00	1.00	0.25	Pass
2,511.89	-0.36	-0.06	-1.00	1.00	0.25	Pass
3,162.28	-0.54	-0.04	-1.00	1.00	0.25	Pass
3,981.07	-1.01	-0.21	-1.00	1.00	0.25	Pass
5,011.87	-1.34	-0.04	-1.50	1.50	0.25	Pass
6,309.57	-2.37	-0.37	-2.00	1.50	0.25	Pass
7,943.28	-3.11	-0.11	-2.50	1.50	0.25	Pass
10,000.00	-4.34	0.06	-3.00	2.00	0.25	Pass
12,589.25	-6.30	-0.10	-5.00	2.00	0.25	Pass
15,848.93	-8.80	-0.30	-16.00	2.50	0.25	Pass
19,952.62	-12.08	-0.88	-inf	3.00	0.25	Pass

-- End of measurement results--

Z-weight Filter Response



Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
10.00	-0.31	-0.31	-inf	3.00	0.25	Pass
12.59	-0.23	-0.22	-inf	2.50	0.25	Pass
15.85	-0.14	-0.14	-4.00	2.00	0.25	Pass
19.95	-0.05	-0.05	-2.00	2.00	0.25	Pass
25.12	-0.05	-0.05	-1.50	2.00	0.25	Pass
31.62	-0.02	-0.02	-1.50	1.50	0.25	Pass
39.81	-0.03	-0.03	-1.00	1.00	0.25	Pass
50.12	-0.07	-0.07	-1.00	1.00	0.25	Pass
63.10	-0.02	-0.02	-1.00	1.00	0.25	Pass
79.43	0.02	0.02	-1.00	1.00	0.25	Pass
100.00	-0.03	-0.03	-1.00	1.00	0.25	Pass
125.89	-0.06	-0.06	-1.00	1.00	0.25	Pass
158.49	0.03	0.03	-1.00	1.00	0.25	Pass
199.53	0.01	0.01	-1.00	1.00	0.25	Pass
251.19	0.02	0.02	-1.00	1.00	0.25	Pass
316.23	0.13	0.13	-1.00	1.00	0.25	Pass
398.11	-0.10	-0.10	-1.00	1.00	0.25	Pass
501.19	-0.11	-0.10	-1.00	1.00	0.25	Pass
630.96	-0.16	-0.15	-1.00	1.00	0.25	Pass
794.33	-0.13	-0.13	-1.00	1.00	0.25	Pass
1,000.00	0.00	0.00	-0.70	0.70	0.25	Pass
1,258.93	0.34	0.34	-1.00	1.00	0.25	Pass
1,584.89	0.02	0.02	-1.00	1.00	0.25	Pass
1,995.26	-0.26	-0.26	-1.00	1.00	0.25	Pass
2,511.89	-0.07	-0.07	-1.00	1.00	0.25	Pass
3,162.28	-0.05	-0.05	-1.00	1.00	0.25	Pass
3,981.07	-0.21	-0.21	-1.00	1.00	0.25	Pass
5,011.87	-0.06	-0.06	-1.50	1.50	0.25	Pass
6,309.57	-0.37	-0.37	-2.00	1.50	0.25	Pass
7,943.28	-0.08	-0.08	-2.50	1.50	0.25	Pass
10,000.00	0.13	0.13	-3.00	2.00	0.25	Pass
12,589.25	-0.06	-0.06	-5.00	2.00	0.25	Pass
15,848.93	-0.40	-0.40	-16.00	2.50	0.25	Pass
19,952.62	-0.75	-0.75	-inf	3.00	0.25	Pass

-- End of measurement results--

High Level Stability

Electrical signal test of high level stability performed according to IEC 61672-3:2013 21 and ANSI S1.4-2014 Part 3: 21 for compliance to IEC 61672-1:2013 5.15 and ANSI S1.4-2014 Part 1: 5.15

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
High Level Stability	0.00	-0.10	0.10	0.01 ‡	Pass

-- End of measurement results--

Long-Term Stability

Electrical signal test of long term stability performed according to IEC 61672-3:2013 15 and ANSI S1.4-2014 Part 3: 15 for compliance to ISC 61672-1:2013 5.14 and ANSI S1.4-2014 Part 1: 5.14

Test Duration [min]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
32	0.00	-0.10	0.10	0.07 ‡	Pass

-- End of measurement results--

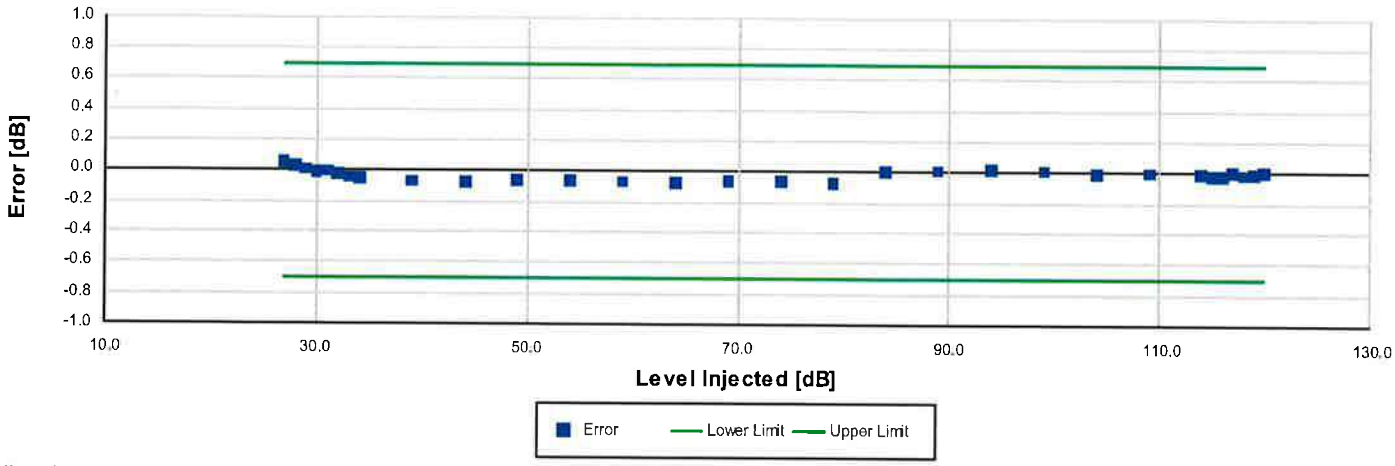
1 kHz Reference Levels

Frequency weightings and time weightings at 1 kHz (reference is A weighted Fast) performed according to IEC 61672-3:2013 14 and ANSI S1.4-2014 Part 3: 14 for compliance to IEC 61672-1:2013 5.5.9 and 5.8.3 and ANSI S1.4-2014 Part 1: 5.5.9 and 5.8.3

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
C weight	95.84	95.64	96.04	0.15	Pass
Z weight	95.83	95.64	96.04	0.15	Pass
Slow	95.84	95.74	95.94	0.15	Pass
Impulse	95.84	95.74	95.94	0.15	Pass

-- End of measurement results--

A-weighted Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6, IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
27.00	0.06	-0.70	0.70	0.16	Pass
28.00	0.03	-0.70	0.70	0.17	Pass
29.00	0.01	-0.70	0.70	0.16	Pass
30.00	-0.01	-0.70	0.70	0.35	Pass
31.00	0.00	-0.70	0.70	0.16	Pass
32.00	-0.02	-0.70	0.70	0.16	Pass
33.00	-0.04	-0.70	0.70	0.16	Pass
34.00	-0.04	-0.70	0.70	0.16	Pass
39.00	-0.07	-0.70	0.70	0.16	Pass
44.00	-0.07	-0.70	0.70	0.16	Pass
49.00	-0.06	-0.70	0.70	0.16	Pass
54.00	-0.06	-0.70	0.70	0.16	Pass
59.00	-0.07	-0.70	0.70	0.16	Pass
64.00	-0.07	-0.70	0.70	0.16	Pass
69.00	-0.06	-0.70	0.70	0.16	Pass
74.00	-0.06	-0.70	0.70	0.16	Pass
79.00	-0.07	-0.70	0.70	0.16	Pass
84.00	0.01	-0.70	0.70	0.16	Pass
89.00	0.01	-0.70	0.70	0.16	Pass
94.00	0.02	-0.70	0.70	0.16	Pass
99.00	0.01	-0.70	0.70	0.16	Pass
104.00	-0.01	-0.70	0.70	0.15	Pass
109.00	0.00	-0.70	0.70	0.15	Pass
114.00	0.00	-0.70	0.70	0.15	Pass
115.00	-0.03	-0.70	0.70	0.15	Pass
116.00	-0.02	-0.70	0.70	0.15	Pass
117.00	0.00	-0.70	0.70	0.15	Pass
118.00	-0.01	-0.70	0.70	0.15	Pass
119.00	-0.01	-0.70	0.70	0.15	Pass
120.00	0.00	-0.70	0.70	0.15	Pass

-- End of measurement results--

Slow Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	200	-7.53	-7.92	-6.92	0.15	Pass
	2	-27.15	-29.99	-25.99	0.15	Pass

-- End of measurement results--

Fast Detector

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	200.00	-1.06	-1.48	-0.48	0.26	Pass
	2.00	-18.28	-19.49	-16.99	0.15	Pass
	0.25	-27.48	-29.99	-25.99	0.15	Pass

-- End of measurement results--

Sound Exposure Level

Toneburst response performed according to IEC 61672-3:2013 18 and ANSI S1.4-2014 Part 3: 18 for compliance to IEC 61672-1:2013 5.9, IEC 60651:2001 9.4.2, ANSI S1.4:1983 (R2006) 8.4.2 and ANSI S1.4-2014 Part 1: 5.9

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
113.15	200.00	-7.02	-7.49	-6.49	0.15	Pass
	2.00	-27.04	-28.49	-25.99	0.15	Pass
	0.25	-36.15	-39.02	-35.02	0.15	Pass

-- End of measurement results--

Peak C-weight

C-weighted peak sound level performed according to IEC 61672-3:2013 19 and ANSI S1.4-2014 Part 3: 19 for compliance to IEC 61672-1:2013 5.13 and ANSI S1.4-2014 Part 1: 5.13

Level [dB]	Frequency [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
111.15	31.50	114.40	111.65	115.65	0.15	Pass
111.15	500.00	114.74	113.65	115.65	0.15	Pass
111.15	8,000.00	113.89	112.55	116.55	0.15	Pass
111.15, Negative	500.00	113.33	112.55	114.55	0.15	Pass
111.15, Positive	500.00	113.27	112.55	114.55	0.15	Pass

-- End of measurement results--

Peak Z-weight

Z-weighted peak sound level performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration[µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
112.15	100	Negative Pulse	114.31	112.03	116.03	0.15	Pass
	100	Positive Pulse	114.34	112.00	116.00	0.15	Pass
102.15	100	Negative Pulse	104.26	102.00	106.00	0.15	Pass
	100	Positive Pulse	104.35	102.00	106.00	0.15	Pass
92.15	100	Negative Pulse	94.36	92.02	96.02	0.15	Pass
	100	Positive Pulse	94.24	92.00	96.00	0.15	Pass
82.15	100	Negative Pulse	84.33	82.02	86.02	0.15	Pass
	100	Positive Pulse	84.32	82.01	86.01	0.15	Pass

– End of measurement results–

Overload Detector

Overload indication performed according to IEC 61672-3:2013 20 and ANSI S1.4-2014 Part 3: 20 for compliance to IEC 61672-1:2013 5.11, IEC 60804:2000 9.3.5, IEC 61252:2002 11, ANSI S1.4 (R2006) 5.8, and ANSI S1.4-2014 Part 1: 5.11, ANSI S1.25 (R2007) 7.6, ANSI S1.43 (R2007) 7

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
Positive	120.80	119.85	121.85	0.15	Pass
Negative	120.70	119.85	121.85	0.15	Pass
Difference	0.10	-1.50	1.50	0.15	Pass

-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Amplitude [dB]	Duration [µs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
116.15	40	Negative Pulse	117.54	116.07	118.07	0.15	Pass
		Positive Pulse	117.46	115.99	117.99	0.15	Pass
	30	Negative Pulse	116.59	116.07	118.07	0.15	Pass
		Positive Pulse	116.52	115.99	117.99	0.15	Pass

– End of measurement results–

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
104.15	3	-0.17	± 0.50	0.15 ‡	Pass
	5	-0.18	± 1.00	0.16 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
94.15	3	-0.14	± 0.50	0.15 ‡	Pass
	5	-0.14	± 1.00	0.15 ‡	Pass
	10	-0.11	± 1.50	0.15 ‡	Pass
84.15	3	-0.14	± 0.50	0.15 ‡	Pass
	5	-0.12	± 1.00	0.15 ‡	Pass
	10	-0.25	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.15 ‡	Pass
	5	OVLD	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
104.15	3	-0.15	± 0.50	0.15 ‡	Pass
	5	-0.11	± 1.00	0.15 ‡	Pass
	10	OVLD	± 1.50	0.15 ‡	Pass
94.15	3	-0.15	± 0.50	0.15 ‡	Pass
	5	-0.14	± 1.00	0.15 ‡	Pass
	10	-0.07	± 1.50	0.15 ‡	Pass
84.15	3	-0.12	± 0.50	0.15 ‡	Pass
	5	-0.14	± 1.00	0.15 ‡	Pass
	10	-0.21	± 1.50	0.15 ‡	Pass

-- End of measurement results--

Tone Burst

2kHz tone burst tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Tone burst response measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
114.15	3	OVLD	± 0.50	0.15	Pass
	5	OVLD	± 1.00	0.15	Pass
104.15	3	-0.08	± 0.50	0.15	Pass
	5	-0.02	± 1.00	0.15	Pass
94.15	3	-0.07	± 0.50	0.15	Pass
	5	-0.01	± 1.00	0.15	Pass
84.15	3	-0.08	± 0.50	0.15	Pass
	5	-0.06	± 1.00	0.15	Pass

-- End of measurement results--

Impulse Detector - Repeat

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

Amplitude [dB]	Repitition Rate [Hz]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
116.15	100.00	-2.87	-3.71	-1.71	0.15	Pass
	20.00	-7.74	-9.57	-5.57	0.20	Pass
	2.00	-8.95	-10.76	-6.76	0.15	Pass
Step	2.00	4.96	4.00	6.00	0.15	Pass

-- End of measurement results--

Impulse Detector - Single

Impulse Detector measured according to IEC 60651:2001 9.4.3 and ANSI S1.4:1983 (R2006) 8.4.3

Amplitude [dB]	Duration [ms]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
116.15	20.00	-3.74	-5.11	-2.11	0.15	Pass
	5.00	-8.94	-10.76	-6.76	0.16	Pass
	2.00	-12.81	-14.55	-10.55	0.16	Pass
Step	2.00	10.00	9.00	11.00	0.16	Pass

-- End of measurement results--

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	84.01	83.90	84.10	0.15	Pass
0 dB Gain, Linearity	21.14	20.30	21.70	0.16	Pass
OBA Low Range	84.00	83.90	84.10	0.15	Pass
OBA Normal Range	84.00	83.20	84.80	0.15	Pass

-- End of measurement results--

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	7.02	16.00	Pass
C-weight Noise Floor	11.64	18.00	Pass
Z-weight Noise Floor	19.95	25.00	Pass

-- End of measurement results--

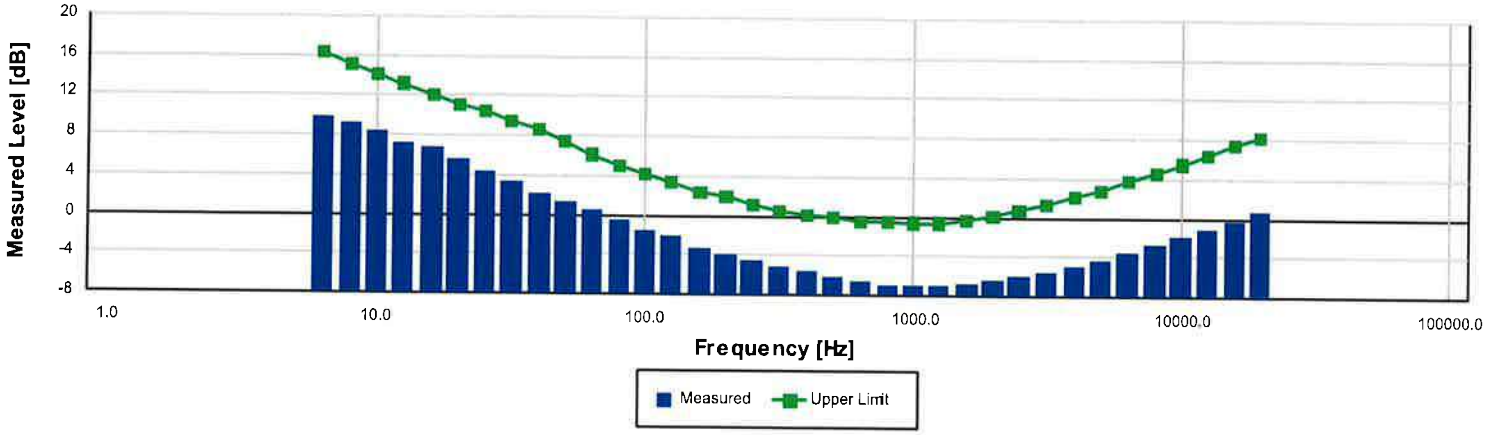
Total Harmonic Distortion

Measured using 1/3-Octave filters

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
10 Hz Signal	113.20	112.35	113.95	0.15	Pass
THD	-53.19		-50.00	0.01 ‡	Pass
THD+N	-52.12		-50.00	0.01 ‡	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



The SLM is set to low range.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Result
6.30	9.89	16.30	Pass
8.00	9.19	15.20	Pass
10.00	8.42	14.20	Pass
12.50	7.17	13.20	Pass
16.00	6.88	12.10	Pass
20.00	5.54	11.10	Pass
25.00	4.40	10.40	Pass
31.50	3.38	9.40	Pass
40.00	2.17	8.60	Pass
50.00	1.36	7.40	Pass
63.00	0.47	6.10	Pass
80.00	-0.46	5.00	Pass
100.00	-1.56	4.20	Pass
125.00	-2.12	3.30	Pass
160.00	-3.23	2.40	Pass
200.00	-3.92	1.90	Pass
250.00	-4.58	1.20	Pass
315.00	-5.08	0.60	Pass
400.00	-5.64	0.20	Pass
500.00	-6.17	-0.10	Pass
630.00	-6.57	-0.50	Pass
800.00	-6.89	-0.50	Pass
1,000.00	-6.93	-0.60	Pass
1,250.00	-6.95	-0.60	Pass
1,600.00	-6.74	-0.20	Pass
2,000.00	-6.43	0.20	Pass
2,500.00	-6.04	0.70	Pass
3,150.00	-5.50	1.40	Pass
4,000.00	-4.96	2.10	Pass
5,000.00	-4.27	2.80	Pass
6,300.00	-3.52	3.70	Pass
8,000.00	-2.74	4.60	Pass
10,000.00	-1.90	5.50	Pass
12,500.00	-1.06	6.40	Pass
16,000.00	-0.18	7.40	Pass
20,000.00	0.71	8.30	Pass

-- End of measurement results--

– End of Report--

Signatory: *Eric Olson*

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Provo, UT 84601, United States
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Calibration Certificate

Certificate Number 2021014335
Customer:
Vanasse Hangen Brustlin
101 Walnut Street
Watertown,MA 02472,United States

Model Number	PRMLxT1L	***Procedure Number***	D0001.8383		
Serial Number	028010	***Technician***	Eric Olson		
Test Results	**Pass**	***Calibration Date***	9 Nov 2021		
Initial Condition	AS RECEIVED same as shipped	***Calibration Due***	9 Nov 2022		
		Temperature	23.54 °C		± 0.01 °C
Description	Larson Davis 1/2" Preamplifier for LxT Class 1 -1 dB	***Humidity***	51.5 %RH		± 0.5 %RH
		Static Pressure	86.46 kPa		± 0.03 kPa

Evaluation Method Tested electrically using a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0 mV/Pa.

Compliance Standards Compliant to Manufacturer Specifications

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level. Tests are considered to pass when the measured value is within the acceptance limits, which are derived from industry standards.

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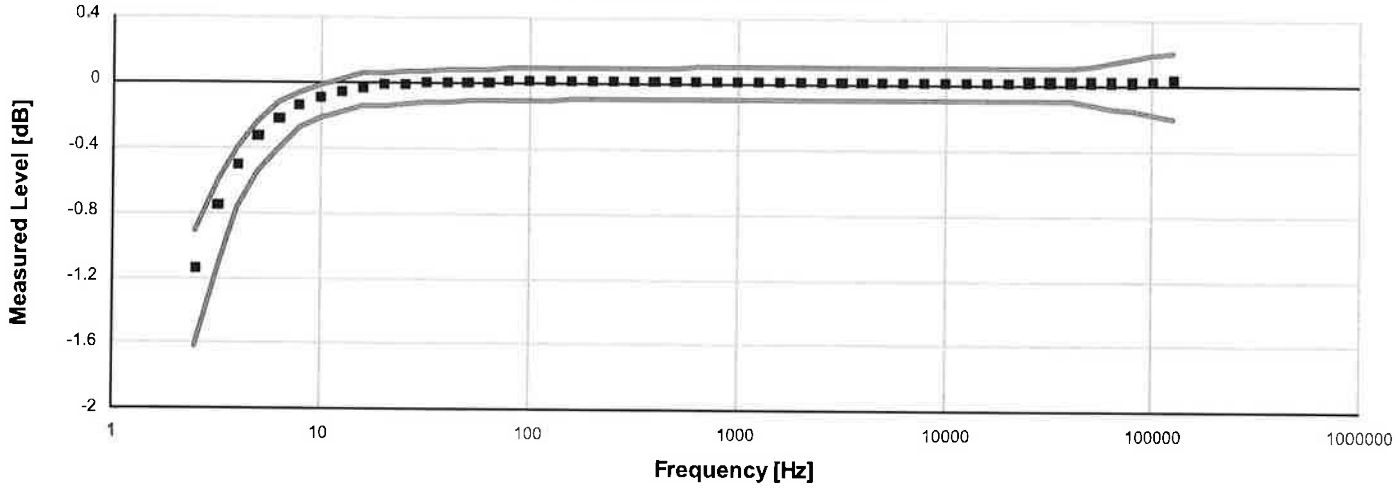
Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	01/20/2021	01/20/2022	001188
Hart Scientific 2626-H Temperature Probe	02/04/2021	08/04/2022	006767
Agilent 34401A DMM	05/12/2021	05/12/2022	007115
SRS DS360 Ultra Low Distortion Generator	05/05/2021	05/05/2022	007117

Frequency Response



Frequency response electrically tested at 120.0 dB re 1 µV

Frequency [Hz]	Test Result [dB re 1 kHz]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
2.50	-1.14	-1.62	-0.91	0.12	Pass
3.20	-0.75	-1.14	-0.60	0.12	Pass
4.00	-0.50	-0.77	-0.40	0.12	Pass
5.00	-0.33	-0.54	-0.24	0.12	Pass
6.30	-0.22	-0.40	-0.12	0.08	Pass
7.90	-0.14	-0.28	-0.06	0.07	Pass
10.00	-0.09	-0.22	-0.01	0.07	Pass
12.60	-0.06	-0.18	0.02	0.05	Pass
15.80	-0.03	-0.15	0.05	0.05	Pass
20.00	-0.01	-0.14	0.06	0.05	Pass
25.10	-0.01	-0.13	0.07	0.05	Pass
31.60	0.00	-0.12	0.07	0.05	Pass
39.80	0.00	-0.12	0.08	0.05	Pass
50.10	0.00	-0.11	0.08	0.05	Pass
63.10	0.00	-0.11	0.08	0.05	Pass
79.40	0.01	-0.11	0.09	0.05	Pass
100.00	0.01	-0.11	0.09	0.05	Pass
125.90	0.01	-0.11	0.09	0.05	Pass
158.50	0.01	-0.10	0.09	0.05	Pass
199.50	0.01	-0.10	0.09	0.05	Pass
251.20	0.01	-0.10	0.09	0.05	Pass
316.20	0.01	-0.10	0.09	0.05	Pass
398.10	0.01	-0.10	0.09	0.05	Pass
501.20	0.01	-0.10	0.09	0.05	Pass
631.00	0.01	-0.10	0.10	0.05	Pass
794.30	0.01	-0.10	0.10	0.05	Pass
1,000.00	0.01	-0.10	0.10	0.05	Pass
1,258.90	0.01	-0.10	0.10	0.05	Pass
1,584.90	0.01	-0.10	0.10	0.05	Pass
1,995.30	0.01	-0.10	0.10	0.05	Pass
2,511.90	0.01	-0.10	0.10	0.05	Pass
3,162.30	0.01	-0.10	0.10	0.05	Pass

Frequency [Hz]	Test Result [dB re 1 kHz]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
3,981.10	0.01	-0.10	0.10	0.05	Pass
5,011.90	0.01	-0.10	0.10	0.05	Pass
6,309.60	0.01	-0.10	0.10	0.05	Pass
7,943.30	0.01	-0.10	0.10	0.05	Pass
10,000.00	0.01	-0.10	0.10	0.05	Pass
12,589.30	0.01	-0.10	0.10	0.05	Pass
15,848.90	0.01	-0.10	0.10	0.05	Pass
19,952.60	0.01	-0.10	0.10	0.05	Pass
25,118.90	0.02	-0.10	0.10	0.05	Pass
31,622.80	0.02	-0.10	0.10	0.05	Pass
39,810.70	0.02	-0.10	0.10	0.05	Pass
50,118.70	0.02	-0.12	0.12	0.09	Pass
63,095.70	0.02	-0.14	0.14	0.09	Pass
79,432.80	0.02	-0.16	0.16	0.09	Pass
100,000.00	0.03	-0.18	0.18	0.09	Pass
125,892.50	0.04	-0.20	0.20	0.47	Pass

Gain Measurement

Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
Output Gain @ 1 kHz	-1.78	-2.60	-1.00	0.05	Pass

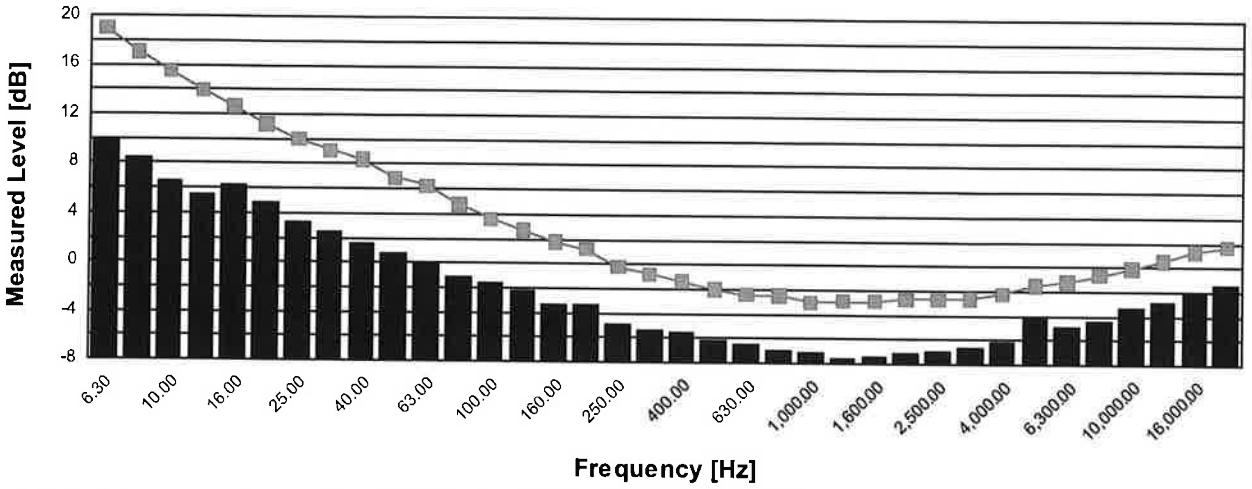
-- End of measurement results--

DC Bias Measurement

Measurement	Test Result [V]	Lower limit [V]	Upper limit [V]	Expanded Uncertainty [V]	Result
DC Voltage	3.61	2.90	3.80	0.01	Pass

-- End of measurement results--

1/3-Octave Self-Generated Noise



Frequency [Hz]	Test Result [dB re 1 µV]	Upper limit [dB re 1 µV]	Result
6.30	9.90	19.00	Pass
8.00	8.60	17.00	Pass
10.00	6.70	15.50	Pass
12.50	5.60	14.00	Pass
16.00	6.40	12.60	Pass
20.00	4.90	11.20	Pass
25.00	3.40	10.00	Pass
31.50	2.50	9.10	Pass
40.00	1.70	8.40	Pass
50.00	0.90	6.90	Pass
63.00	0.00	6.30	Pass
80.00	-1.00	4.80	Pass
100.00	-1.50	3.60	Pass
125.00	-2.10	2.70	Pass
160.00	-3.30	1.80	Pass
200.00	-3.20	1.20	Pass
250.00	-4.80	-0.20	Pass
315.00	-5.30	-0.80	Pass
400.00	-5.40	-1.40	Pass
500.00	-6.10	-2.00	Pass
630.00	-6.40	-2.40	Pass
800.00	-6.80	-2.50	Pass
1,000.00	-7.10	-3.00	Pass
1,250.00	-7.50	-2.90	Pass
1,600.00	-7.30	-2.90	Pass
2,000.00	-7.10	-2.70	Pass
2,500.00	-6.80	-2.70	Pass
3,150.00	-6.50	-2.60	Pass
4,000.00	-6.10	-2.20	Pass
5,000.00	-4.10	-1.50	Pass
6,300.00	-4.90	-1.20	Pass
8,000.00	-4.30	-0.70	Pass
10,000.00	-3.20	-0.10	Pass
12,500.00	-2.80	0.50	Pass
16,000.00	-2.00	1.30	Pass
20,000.00	-1.30	1.70	Pass

-- End of measurement results--

Self-generated Noise

Bandwidth	Test Result [µV]	Test Result [dB re 1 µV]	Upper limit [dB re 1 µV]	Result
A-weighted (1 Hz - 20 kHz)	2.07	6.30	8.00	Pass
Broadband (1 Hz - 20 kHz)	4.17	12.40	14.00	Pass

-- End of measurement results--

Signatory: *Eric Olson*

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Provo,UT 84601,United States
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Calibration Certificate

Certificate Number 2021014058

Customer:

Model Number	377C20		***Procedure Number***	D0001.8387	
Serial Number	170295		***Technician***	Abraham Ortega	
Test Results	**Pass**		***Calibration Date***	3 Nov 2021	
Initial Condition	AS RECEIVED same as shipped		***Calibration Due***	3 Nov 2022	
Description	1/2 inch Microphone - RI - 0V		***Temperature***	24.6 °C	± 0.01 °C
			Humidity	32.3 %RH	± 0.5 %RH
			Static Pressure	101.40 kPa	± 0.03 kPa

Evaluation Method Tested electrically using an electrostatic actuator.

Compliance Standards Compliant to Manufacturer Specifications.

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	07/01/2021	07/01/2022	001230
Microphone Calibration System	08/24/2021	08/24/2022	001233
1/2" Preamplifier	12/18/2020	12/18/2021	001274
Agilent 34401A DMM	12/08/2020	12/08/2021	001329
Larson Davis CAL250 Acoustic Calibrator	08/31/2021	08/31/2022	003030
1/2" Preamplifier	03/25/2021	03/25/2022	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	07/13/2021	07/13/2022	006507
1/2 inch Microphone - RI - 200V	09/18/2021	09/18/2022	006510
1/2 inch Microphone - RI - 200V	07/20/2021	07/20/2022	006519
Larson Davis 1/2" Preamplifier 7-pin LEMO	07/13/2021	07/13/2022	006530
Larson Davis 1/2" Preamplifier 7-pin LEMO	07/26/2021	07/26/2022	006531
Hart Scientific 2626-H Temperature Probe	02/04/2021	08/04/2022	006767

Sensitivity

Measurement	Test Result [mV/Pa]	Lower limit [mV/Pa]	Upper limit [mV/Pa]	Expanded Uncertainty [mV/Pa]	Result
Open Circuit Sensitivity	47.82	42.17	59.57	1.11	Pass

-- End of measurement results--

Capacitance

Measurement	Test Result [pF]				
Capacitance	13.00				‡

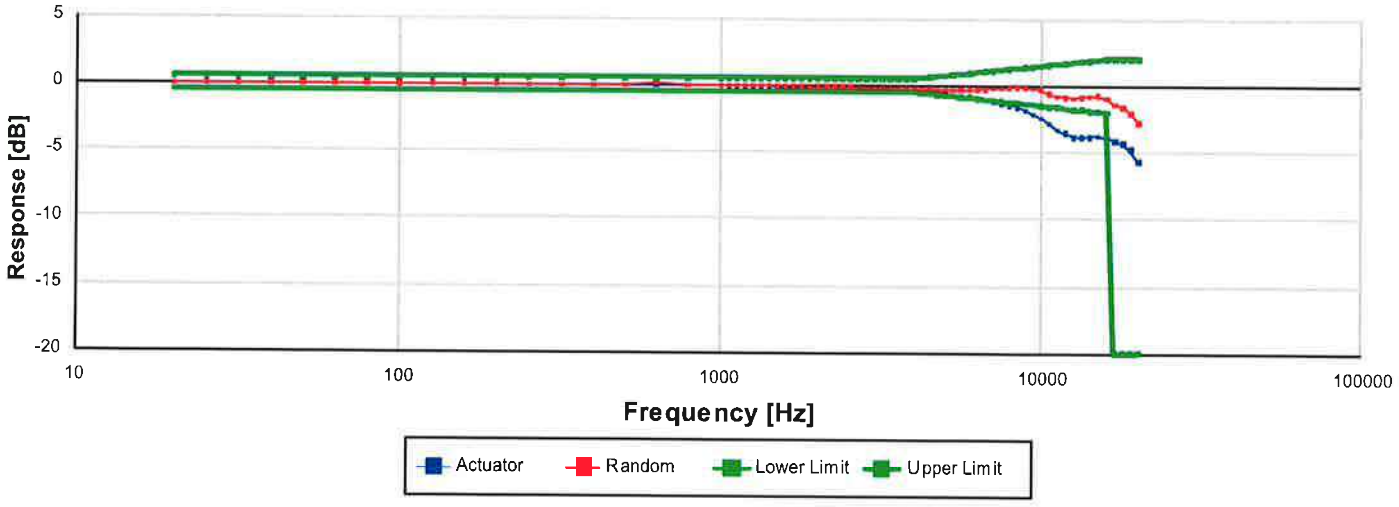
-- End of measurement results--

Lower Limiting Frequency

Measurement	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Result
-3 dB Frequency	1.48	1.00	2.40	Pass ‡

-- End of measurement results--

Frequency Response



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Data is normalized for 0 dB @ 251.19 Hz.

Frequency [Hz]	Actuator [dB]	Random [dB]	Lower limit [dB]	Upper limit [dB]	Result
19.95	0.00	0.00	-0.50	0.50	Pass ‡
25.12	0.03	0.03	-0.50	0.50	Pass ‡
31.62	0.04	0.04	-0.50	0.50	Pass ‡
39.81	0.04	0.04	-0.50	0.50	Pass ‡
50.12	0.04	0.04	-0.50	0.50	Pass ‡
63.10	0.04	0.04	-0.50	0.50	Pass ‡
79.43	0.03	0.03	-0.50	0.50	Pass ‡
100.00	0.03	0.03	-0.50	0.50	Pass ‡
125.89	0.02	0.02	-0.50	0.50	Pass ‡
158.49	0.01	0.01	-0.50	0.50	Pass ‡
199.53	0.01	0.01	-0.50	0.50	Pass ‡
251.19	0.00	0.00	-0.50	0.50	Pass ‡
316.23	-0.01	0.00	-0.50	0.50	Pass ‡
398.11	-0.02	-0.01	-0.50	0.50	Pass ‡
501.19	-0.02	-0.01	-0.50	0.50	Pass ‡
630.96	-0.03	0.15	-0.50	0.50	Pass ‡
794.33	-0.04	-0.02	-0.50	0.50	Pass ‡
1,000.00	-0.06	-0.03	-0.50	0.50	Pass ‡
1,059.25	-0.07	-0.04	-0.50	0.50	Pass ‡
1,122.02	-0.07	-0.04	-0.50	0.50	Pass ‡
1,188.50	-0.07	-0.04	-0.50	0.50	Pass ‡
1,258.93	-0.08	-0.05	-0.50	0.50	Pass ‡
1,333.52	-0.10	-0.06	-0.50	0.50	Pass ‡
1,412.54	-0.10	-0.06	-0.50	0.50	Pass ‡
1,496.24	-0.11	-0.07	-0.50	0.50	Pass ‡
1,584.89	-0.12	-0.08	-0.50	0.50	Pass ‡
1,678.80	-0.13	-0.09	-0.50	0.50	Pass ‡
1,778.28	-0.14	-0.10	-0.50	0.50	Pass ‡
1,883.65	-0.16	-0.11	-0.50	0.50	Pass ‡
1,995.26	-0.16	-0.11	-0.50	0.50	Pass ‡
2,113.49	-0.18	-0.13	-0.50	0.50	Pass ‡
2,238.72	-0.18	-0.13	-0.50	0.50	Pass ‡
2,371.37	-0.20	-0.14	-0.50	0.50	Pass ‡
2,511.89	-0.22	-0.15	-0.50	0.50	Pass ‡
2,660.73	-0.24	-0.17	-0.50	0.50	Pass ‡
2,818.38	-0.27	-0.19	-0.50	0.50	Pass ‡
2,985.38	-0.30	-0.21	-0.50	0.50	Pass ‡
3,162.28	-0.33	-0.22	-0.50	0.50	Pass ‡
3,349.65	-0.35	-0.23	-0.50	0.50	Pass ‡
3,548.13	-0.41	-0.27	-0.50	0.50	Pass ‡
3,758.37	-0.44	-0.28	-0.50	0.50	Pass ‡
3,981.07	-0.48	-0.29	-0.50	0.50	Pass ‡
4,216.97	-0.53	-0.30	-0.63	0.56	Pass ‡
4,466.84	-0.58	-0.30	-0.60	0.63	Pass ‡
4,731.51	-0.64	-0.31	-0.70	0.69	Pass ‡
5,011.87	-0.71	-0.32	-0.80	0.75	Pass ‡
5,308.84	-0.77	-0.31	-0.80	0.81	Pass ‡
5,623.41	-0.84	-0.30	-0.90	0.88	Pass ‡
5,956.62	-0.92	-0.29	-0.90	0.94	Pass ‡
6,309.57	-1.00	-0.26	-1.00	1.00	Pass ‡
6,683.44	-1.10	-0.24	-1.10	1.06	Pass ‡

Frequency [Hz]	Actuator [dB]	Random [dB]	Lower limit [dB]	Upper limit [dB]	Result
7,079.46	-1.20	-0.20	-1.10	1.13	Pass ‡
7,498.94	-1.33	-0.17	-1.20	1.19	Pass ‡
7,943.28	-1.46	-0.13	-1.30	1.25	Pass ‡
8,413.95	-1.61	-0.09	-1.30	1.31	Pass ‡
8,912.51	-1.84	-0.12	-1.40	1.38	Pass ‡
9,440.61	-2.12	-0.20	-1.40	1.43	Pass ‡
10,000.00	-2.42	-0.28	-1.50	1.50	Pass ‡
10,592.54	-2.92	-0.57	-1.60	1.56	Pass ‡
11,220.19	-3.32	-0.76	-1.60	1.63	Pass ‡
11,885.02	-3.57	-0.83	-1.70	1.68	Pass ‡
12,589.25	-3.84	-0.94	-1.80	1.75	Pass ‡
13,335.21	-3.87	-0.86	-1.80	1.81	Pass ‡
14,125.38	-3.85	-0.78	-1.90	1.87	Pass ‡
14,962.36	-3.81	-0.74	-1.93	1.93	Pass ‡
15,848.93	-3.94	-0.93	-2.00	2.00	Pass ‡
16,788.04	-4.16	-1.38		2.00	Pass ‡
17,782.80	-4.36	-1.58		2.00	Pass ‡
18,836.49	-4.78	-2.05		2.00	Pass ‡
19,952.62	-5.69	-2.79		2.00	Pass ‡

– End of measurement results--

Signatory: *Abraham Ortega*

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Calibration Certificate

Certificate Number 2021014272
Customer:

Model Number	LxT SE		***Procedure Number***	D0001.8384	
Serial Number	0003707		***Technician***	Eric Olson	
Test Results	**Pass**		***Calibration Date***	8 Nov 2021	
Initial Condition	AS RECEIVED same as shipped		***Calibration Due***	8 Nov 2022	
Description	Sound Expert LxT Class 1 Sound Level Meter Firmware Revision: 2.404		***Temperature***	23.39 °C	± 0.25 °C
			Humidity	51.1 %RH	± 2.0 %RH
			Static Pressure	86.36 kPa	± 0.13 kPa

Evaluation Method ***Tested with:*** ***Data reported in dB re 20 µPa.***

Larson Davis CAL291. S/N 0108
Larson Davis CAL200. S/N 9079
Larson Davis PRMLxT1L. S/N 028010
PCB 377C20. S/N 170295

Compliance Standards Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Correction data from Larson Davis LxT Manual for SoundTrack LxT & SoundExpert Lxt, I770.01 Rev J Supporting Firmware Version 2.301, 2015-04-30

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For 1/4" microphones, the Larson Davis ADP024 1/4" to 1/2" adaptor is used with the calibrators and the Larson Davis ADP043 1/4" to 1/2" adaptor is used with the preamplifier.

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa

Periodic tests were performed in accordance with precedures from IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part3.

No Pattern approval for IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 available.

The sound level meter submitted for testing successfully completed the periodic tests of IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part 3, for the environmental conditions under which the tests were performed. However, no general statement or conclusion can be made about conformance of the sound level meter to the full specifications of IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 because (a) evidence was not publicly available, from an independent testing organization responsible for pattern approvals, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1 or correction data for acoustical test of frequency weighting were not provided in the Instruction Manual and (b) because the periodic tests of IEC 61672-3:2013 / ANSI/ASA S1.4-2014/Part 3 cover only a limited subset of the specifications in IEC 61672-1:2013 / ANSI/ASA S1.4-2014/Part 1.

Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis CAL291 Residual Intensity Calibrator	2021-09-10	2022-09-10	001250
Hart Scientific 2626-H Temperature Probe	2021-02-04	2022-08-04	006767
Larson Davis CAL200 Acoustic Calibrator	2021-07-21	2022-07-21	007027
Larson Davis Model 831	2021-03-02	2022-03-02	007182
PCB 377A13 1/2 inch Prepolarized Pressure Microphone	2021-03-03	2022-03-03	007185
SRS DS360 Ultra Low Distortion Generator	2021-04-13	2022-04-13	007635
Larson Davis 1/2" Preamplifier for Model 831 Type 1	2021-09-28	2022-09-28	PCB0004783

Acoustic Calibration

Measured according to IEC 61672-3:2013 10 and ANSI S1.4-2014 Part 3: 10

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
1000 Hz	114.00	113.80	114.20	0.14	Pass

Adjusted Level: 114.00
As Received Level: 114.00

-- End of measurement results--

Loaded Circuit Sensitivity

Measurement	Test Result [dB re 1 V / Pa]	Lower Limit [dB re 1 V / Pa]	Upper Limit [dB re 1 V / Pa]	Expanded Uncertainty [dB]	Result
1000 Hz	-28.26	-30.00	-26.63	0.14	Pass

-- End of measurement results--

Acoustic Signal Tests, C-weighting

Measured according to IEC 61672-3:2013 12 and ANSI S1.4-2014 Part 3: 12 using a comparison coupler with Unit Under Test (UUT) and reference SLM using slow time-weighted sound level for compliance to IEC 61672-1:2013 5.5; ANSI S1.4-2014 Part 1: 5.5

Frequency [Hz]	Test Result [dB]	Expected [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
125	-0.12	-0.20	-1.20	0.80	0.23	Pass
1000	0.03	0.00	-0.70	0.70	0.23	Pass
8000	-3.91	-3.00	-5.50	-1.50	0.32	Pass

-- End of measurement results--

Self-generated Noise

Measured according to IEC 61672-3:2013 11.1 and ANSI S1.4-2014 Part 3: 11.1

Measurement	Test Result [dB]
A-weighted	40.39

-- End of measurement results--

-- End of Report--

Signatory: *Eric Olson*

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Calibration Certificate

Certificate Number 2021014130

Model Number	CAL200	***Procedure Number***	D0001.8386		
Serial Number	8569	***Technician***	Scott Montgomery		
Test Results	**Pass**	***Calibration Date***	4 Nov 2021		
Initial Condition	Adjusted	***Calibration Due***	4 Nov 2022		
		Temperature	24	°C	± 0.3 °C
Description	Larson Davis CAL200 Acoustic Calibrator	***Humidity***	28	%RH	± 3 %RH
		Static Pressure	101.2	kPa	± 1 kPa

Evaluation Method The data is aquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2017 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	04/01/2021	04/01/2022	001051
Agilent 34401A DMM	03/02/2021	03/02/2022	002588
Microphone Calibration System	02/24/2021	02/24/2022	005446
1/2" Preamplifier	08/26/2021	08/26/2022	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/09/2021	08/09/2022	006507
1/2 inch Microphone - RI - 200V	09/23/2021	09/23/2022	006511
Hart Scientific 2626-H Temperature Probe	02/04/2021	08/04/2022	006767
Pressure Transducer	06/28/2021	06/28/2022	007310

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Output Level

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
114	101.2	113.99	113.80	114.20	0.14	Pass
94	101.2	94.00	93.80	94.20	0.15	Pass

-- End of measurement results--

Frequency

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
114	101.2	1,000.05	993.00	1,007.00	0.20	Pass
94	101.2	1,000.06	993.00	1,007.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N)

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
114	101.2	0.48	0.00	2.00	0.25 ‡	Pass
94	101.2	0.47	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Level Change Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
108.0	107.9	-0.03	-0.25	0.25	0.04 ‡	Pass
101.3	101.2	0.00	-0.25	0.25	0.04 ‡	Pass
92.0	92.0	0.03	-0.25	0.25	0.04 ‡	Pass
83.0	83.1	0.03	-0.25	0.25	0.04 ‡	Pass
74.0	74.0	-0.01	-0.25	0.25	0.04 ‡	Pass
65.0	65.1	-0.12	-0.25	0.25	0.04 ‡	Pass

-- End of measurement results--

Frequency Change Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
108.0	107.9	0.00	-7.00	7.00	0.20 ‡	Pass
101.3	101.2	0.00	-7.00	7.00	0.20 ‡	Pass
92.0	92.0	-0.01	-7.00	7.00	0.20 ‡	Pass
83.0	83.1	-0.01	-7.00	7.00	0.20 ‡	Pass
74.0	74.0	-0.01	-7.00	7.00	0.20 ‡	Pass
65.0	65.1	-0.02	-7.00	7.00	0.20 ‡	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N) Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
108.0	107.9	0.48	0.00	2.00	0.25 ‡	Pass
101.3	101.2	0.48	0.00	2.00	0.25 ‡	Pass
92.0	92.0	0.49	0.00	2.00	0.25 ‡	Pass
83.0	83.1	0.51	0.00	2.00	0.25 ‡	Pass
74.0	74.0	0.53	0.00	2.00	0.25 ‡	Pass
65.0	65.1	0.56	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Signatory: *Scott Montgomery*

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Initial Assessment

Certificate Number 2021014129

Customer:

Model Number	CAL200	***Procedure Number***	D0001.8386
Serial Number	8569	***Technician***	Scott Montgomery
Test Results	**Pass**	***Calibration Date***	4 Nov 2021
Initial Condition	As Received	***Calibration Due***	4 Nov 2022
Description	Larson Davis CAL200 Acoustic Calibrator	***Temperature***	24 °C ± 0.3 °C
		Humidity	28 %RH ± 3 %RH
		Static Pressure	101.2 kPa ± 1 kPa

Evaluation Method The data is aquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2017 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2017.
Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2015.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Larson Davis Model 2900 Real Time Analyzer	04/01/2021	04/01/2022	001051
Agilent 34401A DMM	03/02/2021	03/02/2022	002588
Microphone Calibration System	02/24/2021	02/24/2022	005446
1/2" Preamplifier	08/26/2021	08/26/2022	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/09/2021	08/09/2022	006507
1/2 inch Microphone - RI - 200V	09/23/2021	09/23/2022	006511
Hart Scientific 2626-H Temperature Probe	02/04/2021	08/04/2022	006767
Pressure Transducer	06/28/2021	06/28/2022	007310

Output Level

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
114	101.2	114.05	113.80	114.20	0.14	Pass
94	101.2	94.06	93.80	94.20	0.15	Pass

-- End of measurement results--

Frequency

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
114	101.2	1,000.05	993.00	1,007.00	0.20	Pass
94	101.2	1,000.08	993.00	1,007.00	0.20	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N)

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
114	101.2	0.48	0.00	2.00	0.25 ‡	Pass
94	101.2	0.49	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Level Change Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
108.0	107.9	-0.03	-0.25	0.25	0.04 ‡	Pass
101.3	101.2	0.00	-0.25	0.25	0.04 ‡	Pass
92.0	92.0	0.03	-0.25	0.25	0.04 ‡	Pass
83.0	83.1	0.03	-0.25	0.25	0.04 ‡	Pass
74.0	74.0	-0.01	-0.25	0.25	0.04 ‡	Pass
65.0	65.1	-0.12	-0.25	0.25	0.04 ‡	Pass

-- End of measurement results--

Frequency Change Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
108.0	107.9	0.00	-7.00	7.00	0.20 ‡	Pass
101.3	101.2	0.00	-7.00	7.00	0.20 ‡	Pass
92.0	92.0	-0.01	-7.00	7.00	0.20 ‡	Pass
83.0	83.1	-0.01	-7.00	7.00	0.20 ‡	Pass
74.0	74.0	-0.01	-7.00	7.00	0.20 ‡	Pass
65.0	65.1	-0.02	-7.00	7.00	0.20 ‡	Pass

-- End of measurement results--

Total Harmonic Distortion + Noise (THD+N) Over Pressure

Tested at: 114 dB, 24 °C, 29 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
108.0	107.9	0.48	0.00	2.00	0.25 ‡	Pass
101.3	101.2	0.48	0.00	2.00	0.25 ‡	Pass
92.0	92.0	0.49	0.00	2.00	0.25 ‡	Pass
83.0	83.1	0.51	0.00	2.00	0.25 ‡	Pass
74.0	74.0	0.53	0.00	2.00	0.25 ‡	Pass
65.0	65.1	0.56	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Signatory: *Scott Montgomery*

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Noise Monitoring Data Sheet

Project: 1656 W 10th St Operators: S.W Date: 6/8/2022

Site ID: Amy Address:

Land Use: ❑ Residential ❑ Commercial ❑ Institutional ❑ Mixed ❑ Other

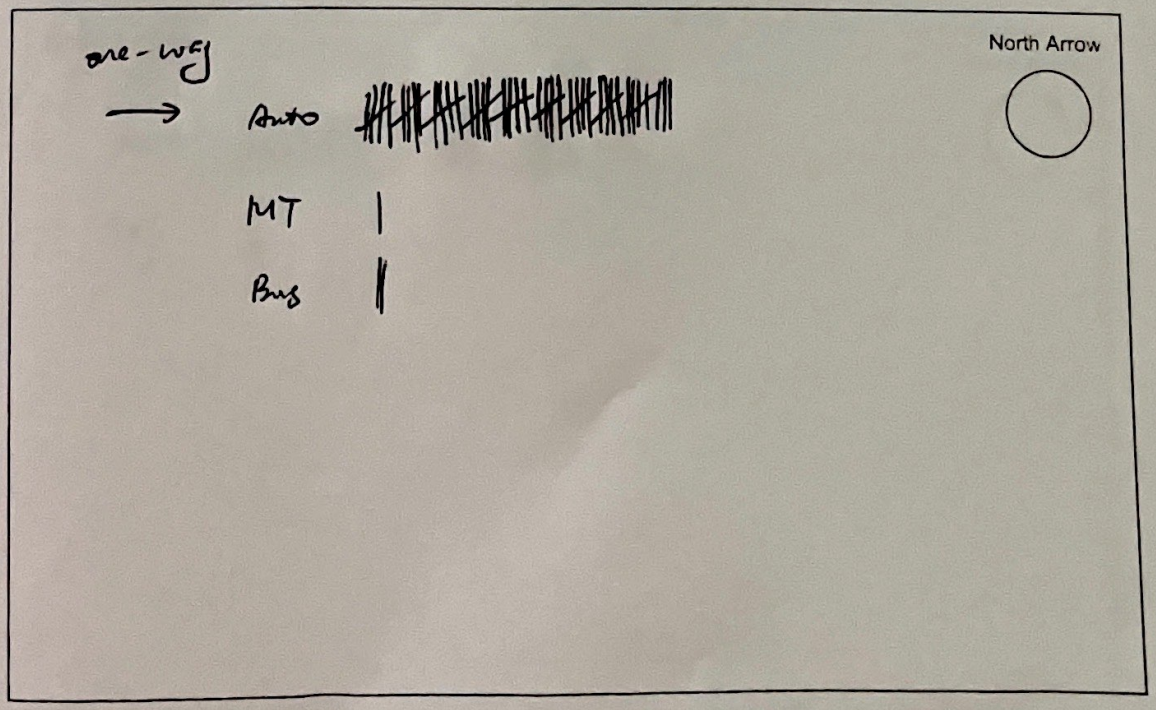
Measurement Data SLM Model: ID # Serial #

Weather: Temp (°F) 73°F Wind 6mph Humidity 75% Cloud Cover Sunny

Time:		Results:				Calibration:	
Start:	8:35 am	Leq05min:	58.6	Lmax:	77.4	Before:	114.09
Stop:	8:55 AM	Leq10min:	58.4	Lmin:	48.3	After:	113.95
Total:	20 mins	Leq15min:	58.6	L10:	63.0	Ref:	~~94.0~~ 114
		Leq20min:	59.4	L90:	51.0	Model:	CEL-200

Notes: cars transport elder to the community facility @ 19'

Site Sketch: 069



Noise Monitoring Data Sheet

Project: 1656 W 10th St. Brooklyn NY Operators: S.W. Date: 6/8/2022

Site ID: MD Address:

Land Use: ❑ Residential ❑ Commercial ❑ Institutional ❑ Mixed ❑ Other

Measurement Data SLM Model: ID # Serial #

Weather: Temp (°F) 80°F Wind W 8mph Humidity 72% Cloud Cover Cloudy.

Time:

Start: 12:22 pm

Stop: 12:42 pm

Total: 20mins

Results:

Leq05min: 56.9

Leq10min: 58.9

Leq15min: 58.7

Leq20min: 59.4

Lmax: 79.2

Lmin: 50.0

L10: 61.9

L90: 51.7

Calibration:

Before: 114.12

After: 113.97

Ref: ~~94.0~~ 114.00

Model: CAL-200

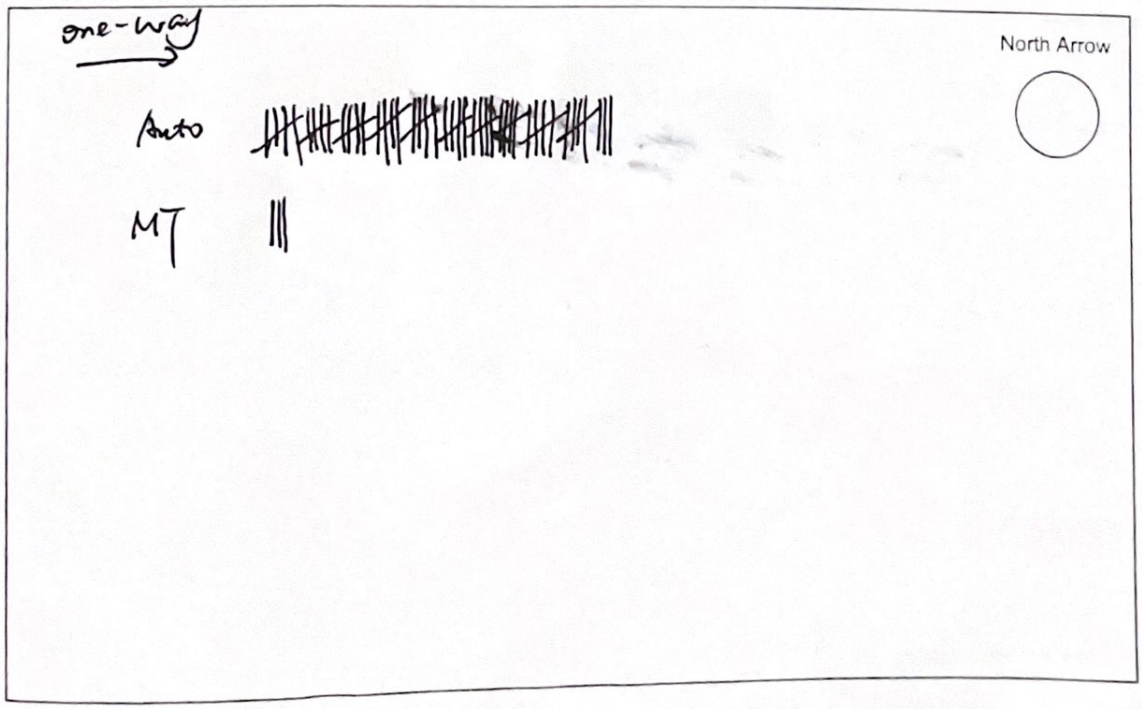
Notes:

a minivan unloading in front of the property.

Someone is blowing the leaves in his front yard. @ 10' about 100 - 150 ft away.

passed for back-up alarm. @ 12:18

Site Sketch:



Noise Monitoring Data Sheet

Project: | Operators: S.W. | Date: 6/8/2021

Site ID: pm | Address: 1656 W 10th St. Brooklyn, NY

Land Use: ☐ Residential ☐ Commercial ☐ Institutional ☐ Mixed ☐ Other

Measurement Data SLM Model: LxT | ID # | Serial #

Weather: Temp (°F) 81°F | Wind 10 mph | Humidity 50% | Cloud Cover Sunny

Time:		Results:				Calibration:	
Start:	1:30 pm	Leq05min:	59.0	Lmax:	88.6	Before:	113.9
Stop:	1:50 pm	Leq10min:	59.5	Lmin:	50.2	After:	113.98
Total:	20 mins	Leq15min:	63.1	L10:	63.1	Ref:	~~94.0~~ 114.00
		Leq20min:	64.0	L90:	51.9	Model:	CEL-20

Notes:

Someone speaks to the microphone directly.

② 13' need to be taken out.

a car horn ③ 19' in front of the property.

Site Sketch:

