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# DECISION DOCUMENT
## E-Designation
## Remedial Action Work Plan Approval

March 1, 2024

Re: 410 Bedford Park Boulevard: 410-416 Bedford Park Boulevard; 2860-2872 Webster Avenue
Bronx Block 3273, Lot 122 [former Lots 122, 128]
Hazardous Materials, Air Quality, Noise E Designation
E-249: Webster Avenue Rezoning - CEQR 10DCP035X - 3/23/2011
E-566: NYBG 2856 Webster Avenue FRESH - CEQR 20DCP095X - 3/16/2020
OER Project Number 21EHAN262X

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan dated November 2023 with Stipulation Letter dated November 2023 and the Remedial Action Plan for Air Quality and Noise dated March 2024 for the above-referenced project.

These Plans were submitted to OER under the E-Designation Program.

The NYS DEC and NYC DOHMH were briefed on the project site on June 1, 2023.

**Project Description**
The proposed development consists of a new 12-story mixed-use residential and commercial building with a partial cellar and a ground-floor open-air parking area. The cellar level will consist of mechanical rooms and storage; the ground floor will be a parking area (majority), residential lobby, and retail space; and the remaining floors above will be apartments (affordable housing). The current zoning designation is C4-5D (commercial district that includes mixed-use commercial and residential developments). The proposed use is consistent with existing zoning for the property.

Prior to redevelopment, the existing site structures will be demolished. The proposed development will consist of an about 12,000-square-foot cellar fronting Webster Avenue. The partial cellar level (covering about 36% of the site) will extend to el 52 (top of slab elevation) and require excavation to el 49 (10 to 12 feet bgs) to accommodate a 3-foot-thick concrete mat slab. The ground floor will encompass the remaining site footprint and house an about 25,300-square-foot parking area, an about 8,000-square-foot retail space, and an about 4,000-square-foot residential lobby. The driveway for the parking area is situated along Webster Avenue. The upper floors (2 through 12) above the cellar area and parking area and will include about 225,000 gross square feet of residential units and amenities.

**Statement of Purpose and Basis**
This document presents the remedial action for the E-Designation Program project known as "410 Bedford Park Boulevard" pursuant to the Zoning Resolution and §43 - 1474 of the Rules of the City of New York.

**Description of Selected Remedy for Hazardous Materials**
The remedial action selected for the 410 Bedford Park Boulevard site is protective of public health and the environment. The elements of the selected remedy are as follows:

The proposed remedial action will consist of:

1. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
2. Establishment of Track 2 Restricted Residential Use SCOs, with a contingency to achieve a cleanup using Track 4 site-specific SCOs.
3. Site mobilization involving site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
4. Collection of additional soil and groundwater samples, including up to six soil samples and one groundwater sample, to complete the scope of the RIWP in the eastern part of the site after building demolition (locations shown on Figure 4) - Investigation is anticipated to be completed during the first and second quarters of 2024. The remedy may need to be altered based on the results of the additional investigation.
5. Completion of a waste characterization study prior to excavation activities - Waste characterization soil samples will be collected at a frequency dictated by disposal facility(s).
6. Excavation and removal of soil/fill exceeding site-specific SCOs – Excavation to about 12 feet bgs (el 49) will be required in the cellar footprint. The cellar's elevator and sump pits will require deeper excavation to about 15.5 feet bgs (el 45.5). Excavation will extend to, or into, the groundwater table for the cellar and elevator pit, and dewatering will be conducted as required. Within the ground-floor area, localized excavation will be required for pile caps (about 4 feet bgs) and the storm water infiltration system (about 8 feet bgs), which will be below the ground-floor open-air parking area. An estimated 10,000 cubic yards of soil/fill will be generated.
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID – Differing types of soil, fill and rock will be appropriately segregated on-site.
8. Management of excavated soil, fill and rock including temporarily stockpiling and segregating in accordance with defined types and to prevent comingling of contaminated and non-contaminated types.
9. Registration and removal of all USTs and reporting of any petroleum spills associated with USTs, if encountered, in accordance with applicable local, state, and federal laws and regulations.
10. Transportation and off-site disposal of all soil/fill at licensed or permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan - Sampling and analysis of excavated media will be completed as required by disposal facilities.
11. Collection and analysis of up to fifteen (15) endpoint samples to determine the performance of the remedy with respect to attainment of SCOs.
12. Import of fill to be used for backfilling and cover in compliance with this plan and in accordance with applicable laws and regulations.
13. Construction of an engineered composite cover consisting of a 30- to 36-inch-thick concrete mat slab in the cellar footprint and a 9- to 12-inch-thick concrete slab in the slab-on-grade portion of the building. Both slabs will be underlain by a three-inch-thick mud slab, gravel subbase, or compacted or undisturbed subgrade – The composite cover is an EC for the remedial action.
14. As part of development, installation of a vapor barrier system consisting of vapor barrier beneath the building slab and outside of sub-grade foundation sidewalls to mitigate soil vapor migration into the building. The vapor barrier will consist of a minimum 20-mil-thick membrane beneath the cellar and foundation slab of the building (excluding the parking garage) and along sub-grade foundation side walls to mitigate potential soil vapor migration into enclosed spaces. The vapor barrier will consist of the following products manufactured by GCP Applied Technologies or approved equal: Preprufe 300R Plus beneath the cellar portion of the building, Florprufe 120 beneath the remaining ground floor areas (excluding the parking garage), and Preprufe 160R Plus, Hydroduct 220, and Bituthene 4000 along the cellar sidewalls to grade. All welds, seams and penetrations will be properly sealed to prevent preferential pathways for vapor migration. The vapor barrier system is an Engineering Control for the remedial action. The remedial engineer will certify in the RAR that the vapor barrier system was designed and properly installed to mitigate soil vapor migration into the building.
15. Performance of all activities required for the remedial action, including acquisition of required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.
16. Dewatering in compliance with city, state, and federal laws and regulations - Extracted groundwater will either be containerized for off-site licensed or permitted disposal or will be treated under a permit

from NYCDEP to meet pretreatment requirements prior to discharge to the sewer system.

17. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
18. Submission of a RAR that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the site boundaries, lists any changes from this RAWP, and describes all ECs and ICs to be implemented at the site.
19. Submission of an approved SMP in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of ECs/ICs and reporting at a specified frequency.
20. The property will continue to be registered with an E-Designation at the NYC Buildings Department. ECs and ICs described in this RAWP must be managed in compliance with an approved SMP. ICs will include prohibition of the following: (1) vegetable gardening and farming in residual site soil; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

**Description of Selected Remedy for Air Quality**

The elements of the remedial action selected for Air Quality for the 410 Bedford Park Boulevard site are as follows:

In order to satisfy the requirements of the E-designation, electric equipment will be utilized at the site for space heating and HVAC systems and natural gas will be used for domestic hot water systems. The following natural gas-fired equipment will be installed for domestic hot water service:

- Four (4) AERCO INN 1350N domestic hot water heaters, rated at 1,350 MBH, located in the mechanical room on the roof, to supply domestic hot water to the building. [Shown on M-110.00]

Remaining systems, including space heating and ventilation, will be powered electrically by the following:

- Three (3) 15.3 MBH heat recovery units (HRUs) manufactured by AAON, Model RQ-002-8-V609-000, for space heating on all floors. [Shown as HRU-R-1 on M-110.00]
- One (1) 108 MBH air cooled condensing unit (ACCU) manufactured by LG, Model ARUM096BTE5, for space heating cubicles, office spaces, the printer room and break room. [Shown as ACCU-1 on M-110.00]
- One (1) 216 MBH ACCU manufactured by LG, Model ARUM192BTE5, for space heating the gym, lobby, mail room, elevator corridor and conference room. [Shown as ACCU-2 on M-110.00]
- One (1) 243 MBH ACCU manufactured by LG, Model ARUM241BTE5, for space heating the electrical room, lockers, super's office, corridor, laundry room and telecom room. [Shown as ACCU-C on M-110.00]
- One (1) 54 MBH ACCU manufactured by LG, Model ARUM048GSS4, for space heating the elevator machine room. [Shown as ACCU-R-1 on M-110.00]
- Eleven (11) 400 CFM electric unit heaters (EUHs) manufactured by Markel, Model F1FUH05003, for space heating the cellar storage accessory space to the retail space, the cellar pump and filter room, the cellar gas room, first floor retail space, first floor storage room, and the roof mechanical room. [Shown as EUH-A and EUH-B on M-101.00, M-102.00 and M-110.00]
- Four (4) 400 CFM cabinet unit heaters (ECUHs) manufactured by Markel, Model 6300 Series 06671402, for space heating the first floor stairs near the mailroom, first floor vestibule near the lobby, and the roof stairs and roof vestibule. [Shown as ECUH-A on M-102.00 and M-110.0]
- Multiple 380 CFM packaged terminal air conditioning heat pump units (PTHPs) manufactured by Iceair, Model RSXC09 and RSXC13, for space heating and cooling in the residential units from the 2nd through 12th floors.
- Space heating via the ACCUs will also be provided by LG Variable Refrigerant Flow (VRF) units including the following units:
    - Model ARNU183TQD4, rated at 21.5 MBH
    - Model ARNU073TRD4, rated at 8.5 MBH
    - Model ARNU123TRD4, rated at 13.6 MBH
    - Model ARNU093TRD4, rated at 10.9 MBH
    - Model ARNU543M3A4, rated at 61.4 MBH
    - Model ARNU363M2A4, rated at 40.6 MBH
    - Model ARNU243M1A4, rated at 27.3 MBH

- Model ARNU183M1A4, rated at 21.5 MBH
- Model ARNU483M3A4, rated at 54.2 MBH

A copy of the stamped gas riser diagram is provided in Appendix E of the Air Quality and Noise RAP. A copy of the stamped Mechanical Equipment Schedule and Specifications referred to in this section are provided in Appendix F of the Air Quality and Noise RAP.

In order to satisfy the requirements of the E Designation, one stack will be located on the roof. The stack will be located 47.4 feet from Bedford Park Boulevard and will vent 145.4 feet above grade.

A copy of the plan showing stack locations and the distances to the lot line facing Bedford Park Boulevard is provided in Appendix G of the Air Quality and Noise RAP.

**Description of Selected Remedy for Noise**

The elements of the remedial action selected for Noise for the 410 Bedford Park Boulevard site are as follows: In order to meet the requirements of the E-Designation, the following window/wall attenuation requirements will be achieved at the locations described below:

1. 28 dBA in the Floor 1 commercial space and Floors 1 and 2 amenity spaces based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the E-Designation. It is understood that this reduction may prevent the project from obtaining a Final Notice of Satisfaction for the Noise E as the site is not protective for all allowable uses (see Section 1.2);
2. 33 dBA on the northern and eastern façades for Floors 2 - 11;
3. 31 dBA on the northern and eastern facades from 101 feet above street level to the top of the building (Floors 11 and 12) based on a reduction of 3 dBA from the projected street-level $L_{10}$ value of 76.8 dBA to 73.8 dBA;
4. 35 dBA on the southern façade;
5. 33 dBA on the northern and eastern facades from 101 above street level to the top of the building (Floors 11 and 12) based on a reduction of 3 dBA from the projected street-level $L_{10}$ value of 79.6 dBA to 76.6 dBA; and
6. 31 dBA on all interior facades of parking lot.

The following windows will be installed:

| **Façade Floor Range** | **OITC Rating** | **OITC Certification** | **Manufacturer and Model** | **Glazing** |
|---|---|---|---|---|
| North and East Façades<br><br>Floor 1<br><br>Retail | 30<br><br>(28 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP<br><br>Intertek Report Number K0253.01-113-11-R0<br><br>Data File No. K0253.01A | YKK AP America Series/Model YES 45 TU "Storefront Mock-up, MK#1" or OER-approved equivalent | 1/4" laminated exterior, 1/2" air space, 1/4" annealed interior |
| North and East Façades<br><br>Floors 2-12<br><br>Residential | 33<br><br>(31 to 33 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP<br><br>Intertek Report Number I6990.01-113-11-R0<br><br>Data File No. | Intus Windows Supera Casement AW Casement Window or OER-approved equivalent | 5/16" annealed exterior, 5/8" argon, 1/4" annealed interior |

| **Façade Floor Range** | **OITC Rating** | **OITC Certification** | **Manufacturer and Model** | **Glazing** |
|---|---|---|---|---|
| | | I6990.01F | | |
| North and East Façades<br><br>Floors 2-12<br><br>Residential | 33<br><br>(31 to 33 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP<br><br>Intertek Report Number I6988.01-113-11-R0<br><br>Data File No. I6988.01K | Intus Windows Supera Fixed CW/AW Fixed Window or OER-approved equivalent | 3/8" annealed exterior, 13/16" argon, 5/16" laminated interior |
| South Façade<br><br>Floors 2-12<br><br>Residential | 35<br><br>Composite OITC 37<br><br>(35 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP and Composite Calculations as shown in Appendix L of the Air Quality and Noise RAP<br><br>Intertek Report Number I6990.01-113-11-R0<br><br>Data File No. I6990.01M | Intus Windows Supera Casement AW Casement Window or OER-approved equivalent | 5/16" laminated exterior, 13/16" argon, 3/8" annealed interior |
| South Façade<br><br>Floors 2-12<br><br>Residential | 36<br><br>Composite OITC 37<br><br>(35 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP and Composite Calculations as shown in Appendix L of the Air Quality and Noise RAP<br><br>Intertek Report Number J8864.01-113-11-R0<br><br>Data File No. J8863.01C | Intus Windows Supera Fixed CW/AW Fixed Window or OER-approved equivalent | 5/16" laminated exterior, 13/16" argon, 1/2" laminated interior |

| Façade<br>Floor Range | OITC<br>Rating | OITC Certification | Manufacturer and Model | Glazing |
|---|---|---|---|---|
| North, South, West, and Partial West Courtyard Facades<br><br>All Floors<br><br>Residential | 31<br><br>(28 to 31 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP<br><br>Intertek Report Number I6990.01-113-11-R0<br><br>Data File No. I6990.01D | Intus Windows Supera Casement AW Casement Window or OER-approved equivalent | 5/32" annealed exterior, 9/16" argon, 3/8" annealed interior |
| North, South, West, and Partial West Courtyard Facades<br><br>All Floors<br><br>Residential | 31<br><br>(28 to 31 dBA required) | ASTM E-90 acoustical test report as shown in Appendix K of the Air Quality and Noise RAP<br><br>Intertek Report Number I6988.01-113-11-R0<br><br>Data File No. I6988.01E | Intus Windows Supera Fixed CW/AW Fixed Window or OER-approved equivalent | 5/32" annealed exterior, 9/16" argon, 3/8" annealed interior |

The acoustical reports described above are representative of the acoustical performance of all proposed windows/doors/curtain walls. Color coded elevations and the labeled window schedule attached in Appendix J of the Air Quality and Noise RAP show the locations of the window/ door types.

The applicant commits to demonstrating that the selected manufacturer's window products achieve the minimum OITC requirement outlined in the table above. If the selected manufacturer does not have ASTM E90 test on file for the specific window assemblies to be installed, a mockup will be laboratory tested as per ASTM E90 to demonstrate compliance with the minimum OITC requirement.

**Alternate Means of Ventilation**

In order to satisfy the requirements of the E-Designation, Alternate Means of Ventilation (AMV) will be installed in order to maintain a closed window condition. AMV for this project will be achieved by:

1. **PTHP Units:** Installing RSXC09 and RSXC13 PTHP units manufactured by Ice Air in all residential units. Fresh air will be provided to all bedrooms and living rooms by the PTHP units. Floor plans showing the locations of PTHP units are included in Appendix M of the Air Quality and Noise RAP. Manufacturer specifications showing the fresh air intake for the PTHP units are included as Appendix M of the Air Quality and Noise RAP. The PTHP units continuously provide outdoor air via an automatic opening, which comes factory installed with manufacturer warranty.
2. **Combination of Dedicated Fresh Air/ HVAC System**. Installing VRF Units ARNU073TRD4, ARNU093TRD4, ARNU183TQD4, ARNU243M1A4, ARNU363M2A4, ARNU483M3A4 and ARNU543M3A4 manufactured by LG in the 9 cubicles, all offices, break room, gym, conference room, lobby, mailroom, locker room, laundry room, and telecom room serving the amenities for heating and cooling. Façade mounted louvers located on the east facades and air handling units and associated ducting will provide fresh air to each amenity space. In all cases, the rate of outside air (cfm) delivered to each amenity space will meet or exceed that specified in the 2014 New York City Mechanical Code table 403.3. These rates will be 5 cfm per person, representing the outdoor ventilation otherwise provided by the operable windows. P.E. certified mechanical drawings depicting the AMV system and how fresh air is delivered into each of the living spaces are provided in Appendix N of the Air Quality and Noise RAP.

A letter from the engineer who designed the dedicated fresh air/ HVAC system describing the system, the equipment involved (stating the manufacturer and model information), and how fresh air is delivered into each of the living spaces is attached as Appendix O of the Air Quality and Noise RAP.

3. **Compliance with Mechanical Code:** Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the 2014 NYC Mechanical Code.

The remedies for Hazardous Materials, Air Quality, Noise E Designation described above conforms to the promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration OER guidance, as appropriate.

03/01/2024

Date

Miranda Fatolitis
Project Manager

03/01/2024

Date

Shaminder Chawla
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