



OFFICE OF ENVIRONMENTAL REMEDIATION

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DECISION DOCUMENT

E-Designation Remedial Action Work Plan Approval

April 3, 2020

Re: 241 West 28th Street: 241-243 West 28th Street, 240-242 West 29th Street
Manhattan Block 778, Lots 16, 13, 18, 66
Hazardous Materials, Air Quality, and Noise “E” Designation
E-137: Hudson Yards Rezoning - CEQR 03DCP031M - 1/19/2005
E-276: West 28th Street Rezoning - CEQR 10DCP004M - 9/21/2011
OER Project Number 15EHAN257M / 15CVCP080M

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan for Air Quality and Noise dated March 2020 and documents submitted for review regarding the fulfillment of hazardous materials for the above-referenced project. OER has also received the Remedial Work Plan (RWP) for the 241 West 28th Street site dated March 16, 2020 and prepared by Langan on behalf of the 241 West 28th Street Owner LLC. NYSDEC has issued a March 16, 2020 Decision

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

Project Description

The applicant is proposing to construct a new building consisting of two interconnected 22-story residential (affordable and market rate) towers with shared commercial space on the ground floor and a partial cellar. The development is expected to occupy the entire 29,315-square-foot site footprint. The development plans feature a partial cellar beneath the northern tower and central podium to be used for mechanical space and back-of-house storage. The first floor will be used for a residential lobby and retail space, and floors 2 through 22 will contain residential apartments. The proposed use is consistent with existing zoning for the property.

Statement of Purpose and Basis

This document presents the remedial action for the E-Designation Program project known as “241 West 28th Street” pursuant to the Zoning Resolution and §24 - 07 of the Rules of the City of New York.

Description of Selected Remedy for Hazardous Materials

This site (Block 778, Lots 16, 13, 18, 66) is enrolled in the NYSDEC Brownfield Cleanup Program (NYS BCP Site No. C231139). In an effort to satisfy the Hazardous Materials “E” requirements for this project, the applicant submitted all necessary documentation to our office for review/approval. This documentation included the DEC Declaration Statement – Decision Document, dated March 16, 2020.

Description of Selected Remedy for Air Quality

The elements of the remedial action selected for Air Quality for the 241 West 28th Street site are as follows:

To satisfy the requirements of the E-designation, the proposed building will use natural gas for hot water and heating, ventilation, and air conditioning (HVAC) systems. The proposed building will use natural gas for hot water and HVAC systems, thus there are no requirements for the effluent stack locations.

Description of Selected Remedy for Noise

The elements of the remedial action selected for Noise for the 241 West 28th Street site are as follows:

To meet the requirements of the E-Designation, the following window/wall attenuations will be achieved at the locations described below:

1. 28 dBA for street-facing, east, and west facades from 0 to 100 feet above street level;
2. 23 dBA in the commercial space on the first floor based on an allowed reduction of 5 dBA from the attenuation requirement outlined in the modification study;
3. No noise attenuation for windows above 100 feet above street level.

The following window(s) will be installed:

Façade Floor Range	OITC Rating	OITC Certification	Manufacturer and Model	Glazing
All Facades (both towers) 1 st Floor (Commercial)	29 glass- only 24 for storefront assembly	Rating based on glass only with a 5 dB framing loss correction	¼-inch Monolithic glass window manufactured by Viracon	¼" glass
All Facades (both towers) Floor 2 Residential	31 glass- only 26 for window assembly	Rating based on glass only with a 5 dB framing loss correction Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation	1-1/4-inch insulating glass manufactured by Viracon	¼" glass ¾" air space ¼" glass
All Facades (both towers) Floors 3-22 (less than 100' above street level) Residential	30 glass- only 25 for window assembly	Rating based on glass only with a 5 dB framing loss correction Window ASTM E-90 Lab Test Report to be provided to OER prior to purchase and installation	1-inch insulating glass manufactured by Viracon	¼" glass ½" air space ¼" glass

The proposed windows and associated acoustical performance described above are representative of all proposed windows/doors/curtain walls. Terraces begin at floor 16, which is 152 feet above street level; therefore, noise attenuation is not required for the terrace doors.

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.

The glazing-only OITC ratings presented in the table may reduce substantially once noise transmission through the window frames is evaluated. The glazing presented above may need to be reevaluated if the attenuation losses due to framing elements render the window attenuation performance inadequate to satisfy the requirements.

To satisfy the requirements of the E-Designation, Alternate Means of Ventilation (AMV) will be installed to maintain a closed window condition. AMV for this project will be achieved through a central system and compliance with the 2014 NYC Mechanical Code Chapter 4 and the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) 62.1-2010, as described below.

1. **Central System:**

Apartment Units:

Ventilation is provided to the apartments via energy recovery units ERU-23-1N and ER-23-1S, located at mechanical bulkheads at the top of each tower. The units are 100% outside air systems and operate continuously to provide conditioned ventilation air to the apartments. The ventilation air is distributed down the building through duct risers, with supply ventilation take-offs of the risers into each apartment. Within each apartment, the ductwork is distributed to each living room and bedroom where the air is supplied via diffusers and sidewall registers. The air volume supplied to each space is in compliance with 2014 NYC Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

The energy recovery units are outdoor rooftop units with air-cooled DX cooling and gas furnace heating. The units utilize internal enthalpy wheels to capture and transfer energy between apartment exhaust (toilet and kitchen) and the incoming outside air to pre-condition the outside air. The units are provided with MERV 13 efficient filters.

Each apartment toilet room and kitchen is continuously exhausted via central TX and KX fans located at the roof levels of each tower. The fans then deliver the exhaust air to the energy recovery units where energy is transferred to the outside air via enthalpy wheels before being discharged to the outdoors. The air volume exhausted from each space is in compliance with 2014 NYC Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

Air conditioning is provided to the apartments via vertical stack water source heat pump(s) located in each apartment unit. Each heat pump is thermostatically controlled and provides heating and cooling. In cooling mode, heat is rejected, via condenser water medium, to the outdoors through the cooling towers, located on the south tower roof, via the heat pump water loop. In heating mode, heat from the boiler plant, located on the 23rd floor level of the south tower, is injected into the heat pump water loop.

Apartment Floor Corridors:

Each apartment floor corridor is supplied with air from a 100% outside air rooftop unit. The units RTU-23-1N and RTU-23-1S are located at mechanical bulkheads at the top of each tower. The air volume supplied to the corridors is in compliance with 2014 NYC Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

Building Common and Amenity Spaces:

Ground floor and cellar spaces, including lobby, amenity, and back of house spaces, are served via packed water source heat pump units with electric heating coils to preheat outside ventilation air and airside economizer for free cooling to serve these areas. The outside ventilation air for these units comes from the retail louver band at the perimeter of the ground floor. The heat pump units deliver conditioned air to these spaces throughout the year. The air volume supplied to each space is in compliance with 2014 NYC Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

Retail Spaces:

Ground floor retail spaces shall be provided with louver space at a perimeter louver band. The louver areas, sizes, and locations shall be allocated to provide minimum ventilation rates to comply with 2014 NYC Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

In all cases, the rate of outside air (cubic feet per minute [cfm]) delivered to each habitable space (bedrooms and living spaces) will meet or exceed that specified in the 2014 New York City Mechanical Code table 403.3. These rates will be the greater of 0.35 air changes per hour or 15 cfm per person, representing the outdoor ventilation otherwise provided by the operable windows. P.E./R.A. certified mechanical drawings depicting the AMV system and the pathway of fresh air delivery into each of the living spaces (bedrooms and living rooms) are provided in Appendix I. A letter from the mechanical, electrical and plumbing (MEP) engineer who designed the HVAC system that describes 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 J.

2. **Compliance with Mechanical Code:** Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the NYC 2014 Mechanical Code Chapter 4 and ASHRAE 62.1-2010.

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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.

4/3/2020

Date



Anna Brooks
Project Manager

4/3/2020

Date



Maurizio Bertini
Assistant Director

4/3/2020

Date



Shaminder Chawla
Deputy Director

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