



**OFFICE OF ENVIRONMENTAL REMEDIATION**

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**DECISION DOCUMENT**

**NYC VCP, E-Designation Remedial Action Work Plan Approval**

June 1, 2023

Re: 88 & 90 White Street  
Manhattan Block 195, Lots 24, 26  
Hazardous Materials, Air Quality, Noise E Designation  
E-208: 84 White Street Rezoning - CEQR 08DCP012M - 6/29/2008  
OER Project Number 22EHAN421M / 23CVCP040M

The New York City Office of Environmental Remediation (OER) has completed its review of the Remedial Action Work Plan (RAWP) dated February 23, 2023 with Stipulation Letter dated March 3, 2023 and the Remedial Action Plan for Air Quality and Noise dated May 10, 2023 for the above-referenced project.

These Plans were submitted to OER under the NYC Voluntary Cleanup Program and E-Designation Program.

The RAWP was released for public comment for 30 days as required by program rule. That comment period ended on 03/22/2023. There were no public comments.

**Project Description**

The proposed future use of the Site will consist of a new thirteen-story residential apartment building. The property building will encompass approximately 6,637 square feet of the property and will consist of a partial cellar to a depth of approximately 15.75 feet below grade with footings installed to approximately 17 feet below grade. A small yard area, approximately 529 square feet in size, will be located at the rear of 88 White Street. Since the existing cellars of the buildings encompass the entire lots, the northern portion of the existing cellars will be backfilled from their current depth of 11 feet below sidewalk grade to 2.83 feet below sidewalk grade and will include the future yard area. The partial cellar will consist of mechanical, utility, and storage rooms. The first floor of the building will consist of a parking garage, lobby for the residential tenants, and a mail room. The southern portion of the first floor will be at sidewalk grade with a downward slope towards the northern portion of the first floor, which will be approximately 1.5 feet below sidewalk grade. The second through thirteenth floors of the building will consist of a total of thirty-one (31) residential units. A set-back from the rear of the building will begin on the second floor, where the roof of the first floor will be utilized as a rear yard.

**Statement of Purpose and Basis**

This document presents the remedial action for the NYC Voluntary Cleanup Program and E-Designation Program project known as “88 & 90 White Street” pursuant to Title 43 of the Rules of the City of New York Chapter 14, Subchapter 1 and 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 88 & 90 White Street site is protective of public health and the environment. The elements of the selected remedy are as follows:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Track 4 Site-specific Soil Cleanup Objectives (SCOs).

4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
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 of soil/fill exceeding Track 4 Site Specific SCOs. For development purposes, the southern portion of the Site, consisting of approximately 4,000 square feet, will be excavated to a depth of approximately 15.75 feet below sidewalk grade with additional excavations to approximately 17 feet for footings. The total amount of soil expected to be excavated is approximately 2,150 tons, 1,450 tons of which will be re-used onsite for backfilling the existing cellar in the northern portion of the site.
7. Reuse of onsite soil that meets the Soil Cleanup Objectives (SCOs) established in this plan. For development purposes, the northern portions of the existing cellars at both buildings, consisting of an area approximately 2,200 square feet in size, will be backfilled from the current depth of 11 feet below sidewalk grade to a depth of 2.83' below sidewalk grade. A small area of the existing cellar on the central-western portion of the Site, consisting of an area approximately 965 square feet in size, will be backfilled from its current depth of 11 feet below sidewalk grade to a depth of 10.66' below sidewalk grade. Reuse of onsite soils will be performed in conformance with the Soil/Materials Management Plan. The estimated quantity of soil to be reused on this project is approximately 1,450 tons. One discrete sample will be collected for every 500 cubic yards of reused soil at the Site. The sample will be analyzed for VOCs, SVOCs, PCBs, Pesticides, and TAL Metals.
8. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID.
9. Management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials.
10. Removal of all UST/AST's that are encountered during soil/fill removal actions.
11. Registration of tanks and reporting of any petroleum spills associated with UST's and appropriate closure of these petroleum spills in compliance with applicable local, State and Federal laws and regulations.
12. Transportation and off-Site disposal of all soil/fill material 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 as required by disposal facilities. Appropriate segregation of excavated media on-Site.
13. Collection and analysis of five end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
14. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
15. Construction of an engineered composite cover consisting of a ten to eighteen-inch thick concrete building slab with an 6-inch clean granular sub-base beneath all building areas and in the area that is landscaped, a minimum of 2' of clean fill meeting the Unrestricted Use Soil Cleanup Objectives will be placed above a demarcation layer to prevent human exposure to underlying reused soil meeting the Site Specific Track 4 SCOs.
16. Installation of a vapor barrier system consisting of a 20-mil Vaporblock Plus vapor barrier manufactured by Raven Industries below the slab throughout the full building area and a 20-mil Florprufe® 120 barrier manufactured by GCP Applied Technologies behind all subgrade foundation walls 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.
17. Construction and operation of an at grade-level parking garage with high volume air exchange in conformance with NYC Building Code. The cellar, which will consist of mechanical, utility, and storage rooms, will not be used as a parking garage.
18. Performance of all activities required for the remedial action, including acquisition required permits and attainment of pretreatment requirements, in compliance with applicable laws and regulations.
19. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.

20. 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 Engineering and Institutional Controls to be implemented at the Site.
21. Submission of an approved Site Management Plan (SMP) in the Remedial Action Plan (RAR) for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
22. The property will continue to be registered with an E-Designation at the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this RAWP and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (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 88 & 90 White Street 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, hot water, and HVAC systems.

**Combination of Dedicated Fresh Air/ HVAC System:** Installing Daikin split systems with Model RXYQ168XATJA condensing systems manufactured by Daikin on the roof and Model FXMQ72MFVJU and FXMQ96MFVJU indoor units in the garage serving all residential spaces for heating and cooling. A mechanical penthouse located on the second floor roof and the indoor units and associated ducting will provide fresh air to each bedroom and living room throughout the building. In all cases, the rate of outside air (cfm) delivered to each habitable space (bedrooms and living spaces) will meet or exceed that specified in the 2022 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.

**Additional Mechanical Equipment:**

1. Ventilation exhaust fans will be by Greenheck Corp., various models depending on location and capacity.
2. Cooling and heating systems will be based on Daikin multi-split systems with air handlers’ models ranging from FXSQ09TAVJU to FXSQ54TAVJU located in respective residential units and connected to rooftop condensing units ranging from REYQ96AATJA to REYQ168AATJA. The systems will be heat recovery type and provided with Branch Selector Boxes and Proportional billing system to allow for cooling or heating on demand in each individual apartment.
3. Domestic Hot Water Heating system will be based on air cooled heat pump technology manufactured by Laars Company as follows:
  - a. Outdoor rooftop condensing heat pump units Laars, mod. E-Therm.
  - b. Indoor tanks Laars, mod SHVD148073MHSXXX
  - c. Indoor Electric DHW swing heater Lars EV0300X015
  - d. Indoor tank-less backup heater Larrs, N-series, mod. L-CTEN-036

**Description of Selected Remedy for Noise**

The elements of the remedial action selected for Noise for the 88 & 90 White Street site are as follows:

In order to meet the requirements of the E-Designation, the following windows will be installed:

| <b>Façade Floor Range</b>  | <b>OITC Rating</b>        | <b>OITC Certification</b>  | <b>Manufacturer and Model</b>   | <b>Glazing</b>   |
|--|---------------------------|--|---|--|
| South Façade, and East and West facades within 50 ft of the South façade.<br><br>All Floors<br><br>Residential and Amenity | 30<br><br>28 dBA required | See ASTM E-90 Lab Test Report<br><br>Sound Transmission Loss Test Report No. NGC 2013046 | ZS30 Operable Window in Reliance TCIG Curtain Wall or OER approved equivalent | 1/4-inch heat strengthened, 7/16-inch airspace, 5/16- inch heat strengthened |

|  |                           |   |   |   |
|--|---------------------------|---|---|---|
| South Façade, and East and West facades within 50 ft of the South façade.<br><br>All Floors<br><br>Residential and Amenity | 31<br><br>28 dBA required | See ASTM E-90 Lab Test Report<br><br>Riverbank Acoustical Laboratories RAL-TL20-250 | TerraSwing Access Terrace Door or OER approved equivalent | 6.35mm clear tempered glass, 18.5mm air space, 4.76mm clear tempered glass + 1.52mm PVB + 6.35mm clear tempered glass |
|--|---------------------------|---|---|---|

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. **Combination of Dedicated Fresh Air/ HVAC System.** Installing Model RXYQ168XATJA split systems with condensing systems manufactured by Daikin on the roof and Model FXMQ72MFVJU and FXMQ96MFVJU indoor units in the garage serving all residential spaces. A mechanical penthouse located on the second floor roof and the indoor units and associated ducting will provide fresh air to each bedroom and living room throughout the building. In all cases, the rate of outside air (cfm) delivered to each habitable space (bedrooms and living spaces) will meet or exceed that specified in the 2022 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.
2. **Compliance with Mechanical Code:** Providing outside air to commercial spaces and common areas such as lobbies and corridors in accordance with the 2022 NYC Mechanical Code.

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

June 1, 2023

Date



Adrian Singleton  
Project Manager

June 1, 2023

Date



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