

APPENDIX B – EXCAVATION WORK PLAN



Excavation Work Plan

Prepared for:

**Review Avenue Development Properties
Long Island City, Queens, New York**

**Review Avenue Development I
37-30 Review Avenue
(BCA # 241089)**

and

**Review Avenue Development II
37-80 Review Avenue
(BCA # 241005)**

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1.0 INTRODUCTION

1.1 Overview

This Excavation Work Plan (EWP) is for the Review Avenue Development (RAD) Sites RAD I and RAD II, located on Review Avenue, Long Island City, Queens County, New York (Site).

At least 15 days prior to the start of any excavation/soil disturbance activity on either the RAD I and/or RAD II sites, including grading, trenching and/or drilling, where potential remaining contamination might be encountered, the Site owner or their representative will notify the NYSDEC. The exception to this period of notification is emergency excavation, such as an emergency utility excavation. In the event of an emergency excavation, the Site owner or their representative will notify the NYSDEC as soon as practicable. Currently, this notification will be made to:

Brian Davidson

NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233

This notification should include:

- A detailed description of the work to be performed, including the location and areal extent, plans for site re-grading, intrusive elements or utilities to be installed below the soil cover, estimated volumes of contaminated soil to be excavated and any work that may impact an engineering control (EC),
- A summary of environmental conditions anticipated in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media, and plans for any pre-construction sampling,
- A schedule for the work, detailing the start and completion of all intrusive work,
- A summary of the applicable components of this EWP,
- A statement that the work will be performed in compliance with this EWP and 29 Code of Federal Regulations (CFR) 1910.120,
- A copy of the contractor's health and safety plan (HASP), in electronic format, if it differs from the HASP provided for the Site,
- Identification of disposal facilities for potential waste streams,
- Identification of sources of any anticipated backfill,
- Details regarding the restoration of any disturbed ECs.

1.2 Soil Screening Methods

Visual and instrument-based soil screening (photo-ionization detector and/or flame ionization detector) will be performed by a qualified environmental professional (QEP) during any excavations/soil disturbance activities within known or potentially contaminated material (potential remaining contamination). Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed during remediation, development, or utility installation and repair in or immediately adjacent to the Site, such as excavations for foundations and utility work, after issuance of the Certificate of Completion (COC). Personnel who may be exposed to contaminated soil will be required to have personal protective equipment and the appropriate Hazardous Waste Operations and Emergency Response (HAZWOPER) training under CFR 1910.120.

Soil from drill cuttings, excavation, or grading will be segregated based on previous environmental data and screening results into soil that requires off-site disposal, soil that requires testing and soil that can be returned to the subsurface. Soil Impacted with LNAPL will be characterized and disposed of in accordance with the disposal facility sampling requirements. Absent characterization, soil impacted with LNAPL or from a depth of 15 feet below ground surface (bgs) or greater may be segregated and managed as PCB bulk remediation waste ≥ 50 mg/kg and NYS hazardous waste and disposed off-site at a hazardous waste or Toxic Substance Control Act (TSCA) –permitted landfill.

1.3 Stockpile Methods

Any soil stockpiles will be placed on plastic and fully encircled with erosion and sediment controls, such as a berm and/or silt fence. Hay bales and other erosion and sediment controls will be used as needed near catch basins, surface waters and other discharge points.

Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected and damaged tarp covers will be promptly replaced.

Stockpiles will be inspected at a minimum once each week and after any storm event. The results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by the NYSDEC.

1.4 Materials Excavation and Load Out

A QEP or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material.

The owner of the property and its contractors are solely responsible for safe execution of all invasive and other work performed under this EWP.

The presence of utilities and easements on the Site will be investigated by the QEP. It will be determined whether a risk or impediment to the planned work is posed by utilities or easements on the Site.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated onsite, if needed. If a truck wash is needed, the QEP will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site soil tracking.

The QEP will be responsible for ensuring that all egress points for truck and equipment transport from the Site are clean of soil and other materials derived from the Site during intrusive excavation activities. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition, with respect to soil and other materials derived from the Site.

1.5 Materials Transport Off-Site

All transport of materials, if contaminated, will be performed by licensed haulers in accordance with appropriate local, State, and Federal regulations, including 6 NYCRR Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Soil and other material transported by trucks exiting the Site will be secured with the appropriate covers. If loads contain wet soil and other material capable of producing free liquid, truck liners will be used.

All trucks will be washed, if needed, prior to leaving the Site. Truck wash waters will be collected and disposed of off-site, if needed, in an appropriate manner.

Truck transport routes will be determined once the soil and other excavated material has been classified as to its waste type and the proper disposal facility has been identified. The truck transport routes will be submitted to the NYSDEC for approval prior to any transport, if excavated material classification requires transport route approval by the NYSDEC. If transport route approval is needed, all trucks loaded with site materials will exit the vicinity of the Site using only these approved truck routes. The routes will be the most appropriate route and take into account: (a) limiting transport through residential areas and sensitive sites; (b) the use of city mapped truck routes; (c) prohibiting off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; (f) overall safety in transport, and; (g) community input, when necessary.

Trucks will be prohibited from stopping and idling in the neighborhood outside the Site.

Egress points for truck and equipment transport from the Site will be kept clean of soil and other materials during any development of the Site.

Queuing of trucks will be performed onsite in order to minimize off-site disturbance. Off-site queuing will be prohibited.

1.6 Materials Disposal Off-Site

Soil/fill/solid waste excavated and removed from the Site will be treated as contaminated material and will be sampled characterized and disposed of in accordance with the permit requirements of the disposal facility.

Off-site disposal locations for excavated soil will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate, i.e. hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, C/D recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC in the Periodic Review Report (PRR). This documentation will include: waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soil taken off-site will be handled, at minimum, as a Municipal Solid Waste per 6NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted SCOs is prohibited from being taken to a New York State recycling facility (6NYCRR Part 360-16 Registration Facility).

1.7 Materials Reuse On-Site

Chemical criteria for onsite reuse of soil and other material are based on the soil reuse requirements provided in the RAWP which allows the reuse of soils that meet restricted residential or commercial standards. The QEP will ensure that procedures defined for soil and other material reuse in this SMP are followed and that unacceptable soil and other material does not remain onsite. Contaminated onsite material, including historic fill and contaminated soil, that is acceptable for re-use onsite will be placed below the demarcation layer or impervious surface, and will not be reused within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

1.8 Cover System Restoration

After the completion of soil removal and any other invasive activities of potential remaining contamination, any cover system will be restored. A demarcation layer, consisting of orange snow fencing material or equivalent material, will be placed as a visual reference above the top of the potential remaining contamination zone, the zone that requires adherence to special conditions for disturbance of remaining contaminated soils defined in this SMP. If the type of cover system changes from that which exists prior to the excavation a modification of the cover element above the potential

remaining contamination may be needed. A figure showing the modified surface will be included in the subsequent PRR and in any updates to the Site Management Plan.

1.9 Backfill from Off-Site Sources

All soil and other material proposed for import onto the Site will be approved by the QEP and will be in compliance with provisions in this SMP prior to receipt at the Site.

Soil and other material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the Site.

All imported soil will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Based on an evaluation of the land use, protection of groundwater and protection of ecological resources criteria. Soils that meet 'exempt' fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for the Site, will not be imported onto the Site without prior approval by NYSDEC. Solid waste will not be imported onto the Site.

Trucks entering the Site with imported soil will be securely covered with the appropriate covers. Imported soil will be stockpiled separately from excavated soil and other material and covered to prevent dust releases.

1.9 Stormwater Pollution Prevention

Barriers and hay bale checks will be installed and inspected once a week and after every storm event. The results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill material.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SMP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters

Silt fencing or hay bales will be installed around the entire perimeter of the construction area.

1.10 Contingency Plan

If underground tanks or other previously unidentified contaminant sources are found during development related construction, excavation activities will be suspended until sufficient equipment is mobilized to address the condition.

Sampling will be performed on product, sediment and surrounding soil, etc. as necessary to determine the nature of the material and proper disposal method. Chemical analysis will be performed for TCL volatiles and semi-volatiles since the site history and previous sampling results provide a sufficient justification to limit sampling to these analytes.

Identification of unknown or unexpected contaminated media identified by screening during invasive site work will be promptly communicated by phone to NYSDEC's Project Manager. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. These findings will be also included in the PRR prepared pursuant to Section 7.2 of the SMP.