



August 5, 2024

Ms. Caroline Jalanti
New York State Department of Environmental Conservation
Division of Environmental Remediation, Remedial Bureau C
625 Broadway, 12th Floor, Albany, NY 12233-7014

**Re: X-Ray Fluorescence Meter Work Plan
Warburton Dry Cleaners
305-321 Warburton Ave, 32 Point St, 247-262A Woodworth Ave
Yonkers, New York 10705, Westchester County
BCP Site No. C360227**

Dear Ms. Jalanti:

LaBella Associates (LaBella) has prepared this X-Ray Fluorescence (XRF) Meter Work Plan for the Warburton Dry Cleaners Site (BCP Site No. C360227) located at 305-321 Warburton Ave, 32 Point St, and 247-262A Woodworth Ave in the City of Yonkers, New York, to summarize the procedure for the use of the XRF Meter.

Pursuant to the Remedial Action Work Plan (RAWP) we are excavating soil across the site to 2 to 15 ft bgs across the Site to achieve soil cleanup objectives (RRSCOs). Pursuant to discussions with the New York State Department of Conservation (NYSDEC), we are planning to use the XRF meter to further screen materials in order to facilitate a more efficient remedial excavation process.

XRF FIELD SCREENING PROCEDURE

The X-Ray Fluorescence (XRF) Meter will be utilized as a screening tool in order to assess the approximate levels of lead in soil/fill subsequent to achieving the initial target depths. The XRF will not be utilized in lieu of confirmatory soil samples but rather will be used to evaluate lead concentrations at the initial target depths to minimize the potential for obtaining confirmation samples that fail the soil cleanup objectives (SCOs). This will allow the remedial work to progress more efficiently. The following indicates the procedure to be utilized for field screening with the XRF.

A LaBella Geologist will observe soil/fills for visible impairment, olfactory indications of impairment, and/or indication of detectable VOCs utilizing a PID and for lead utilizing an XRF meter, collectively referred to as “evidence of impairment.” Soil will be screened with the PID by placing soil into a Ziploc® bag and screening the headspace within the bag using the PID. Soils will also be screened either in-place or from the excavation equipment bucket depending on location and the ability to safely access the excavation location. The XRF utilized will be a Thermo Niton handheld XRF meter (or equivalent). For each XRF reading, the sample duration utilized will be for a time that allows the instrument to analyze the chemical composition of the soil sample with the highest degree of accuracy (typically about 30 seconds). The XRF will be used to screen only for total lead concentration, which is the main metal contaminant of concern. For each confirmatory grid area each XRF sampling point will be analyzed a minimum of three times, and an average of these readings will be used for screening purposes. The sample locations will be biased towards any areas with staining or fill materials (if any



are observed). In the event XRF screening samples indicate lead in soil is within 15% of the restricted residential SCO (RRSCO) for lead, the grid area will be excavated an additional foot. Sidewall samples at the site will only be required where remedial excavation will not extend to the boundaries of the property. The confirmatory grid areas and post excavation confirmation and sidewall sampling locations are shown in **Figure 1**.

In the event that no staining or fill materials are present, the readings will be collected from across the bottom and/or sidewalls from evenly spaced locations across the grid. As the XRF data is developed and correlations between XRF readings and visual observations can be made, the XRF use may be limited if warranted (i.e., in the event that elevated readings for lead are limited to areas with observable fill materials).

XRF Meter usage will be utilized with the primary goal of reducing uncertainty on when further excavation may be necessary with the outcome of a clean end point sample that achieves RRSCOs.

If you have any questions, please contact me at (917) 280-6364.

Respectfully submitted,

LaBella Associates, D.P.C.

Richard T. Kampf, PG, LEP
NYC Regional Manager

Attachments

Figure 1 – Post Excavation Confirmation and Sidewall Sampling Locations

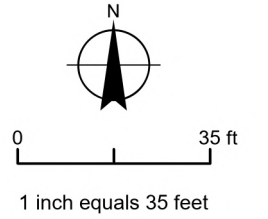


FIGURES

**Warburton Avenue
Apartments, LLC**

Warburton Dry Cleaners Site
City of Yonkers,
Westchester County, NY

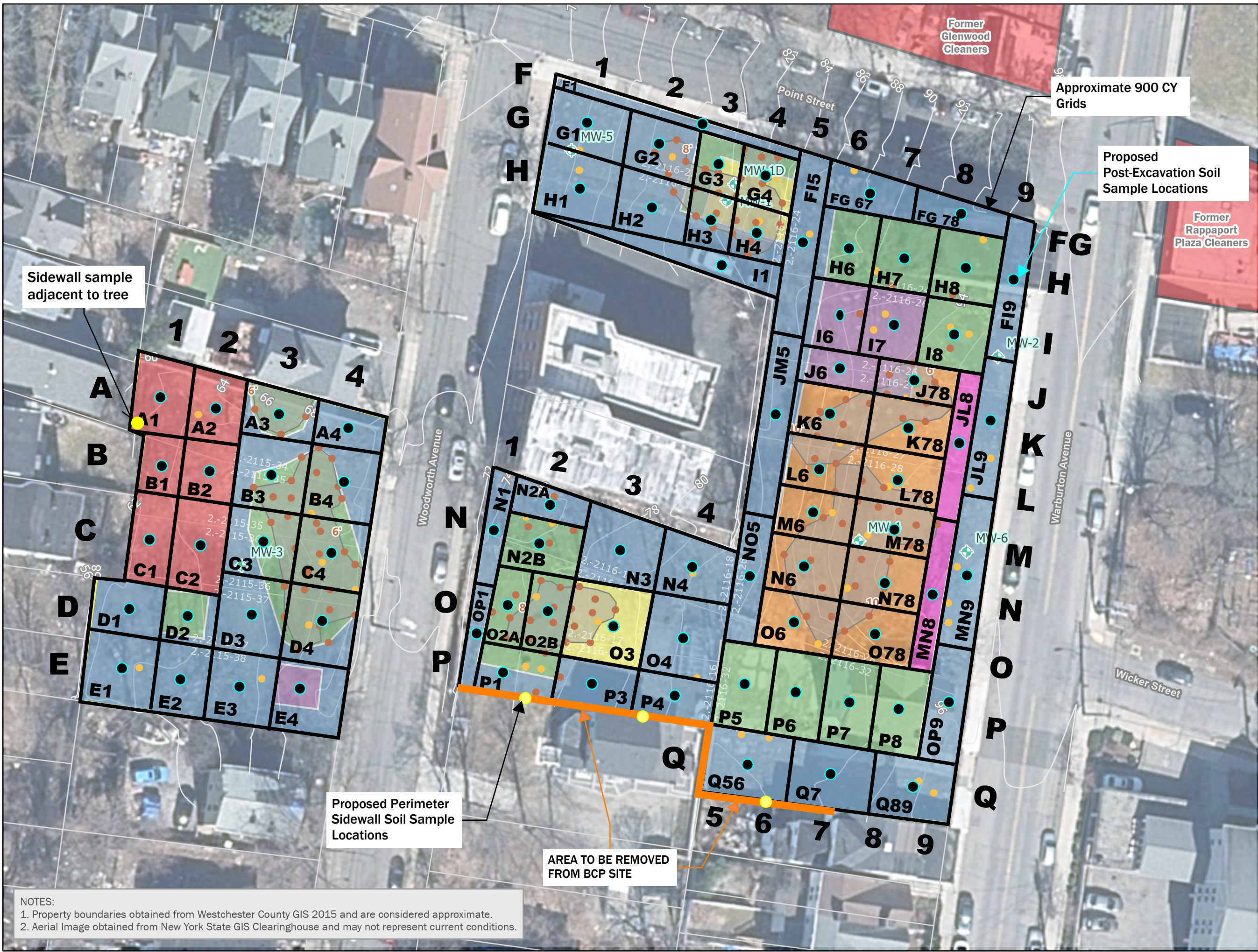
Remedial Action Work Plan



- Site Boundary
- AOC-3: Off-Site
- Former Dry Cleaners / Soil Vapor
- 2 ft bgs to achieve RRSCOs
- 4 ft bgs to achieve RRSCOs
- 6 ft bgs to achieve RRSCOs
- 8 ft bgs to achieve RRSCOs
- 10 ft bgs to achieve RRSCOs
- 12 ft bgs to achieve RRSCOs
- 15 ft bgs to achieve RRSCOs
- Areas to be Removed and Disposed of as Hazardous Waste
- Monitoring Wells
- Soil Boring Location
- High-Concentration Lead Area Delineation Boring Location
- Topographic Elevation Contour Line
- Tax lots
- Area to be removed from BCP site

**Post Excavation
Confirmation and Sidewall
Sampling Locations**

FIGURE 1



NOTES:
1. Property boundaries obtained from Westchester County GIS 2015 and are considered approximate.
2. Aerial Image obtained from New York State GIS Clearinghouse and may not represent current conditions.

Path: B:\GIS\NY Countywide\Westchester\Townwide\Yonkers\SiteData\Warburton Ave Apartments\RFIS\Fig2_ExtentofExcavation.aprx