ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES

300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET ROCHESTER, NEW YORK 14604

NYSDEC SITE #E828144

USEPA ID #BF-97207900-0

Prepared For: City of Rochester
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1.0 ABCA EXECUTIVE SUMMARY

On behalf of the City of Rochester, New York (City), Day Environmental, Inc. (DAY) prepared this Analysis of Brownfields Cleanup Alternatives (ABCA) for four adjacent parcels with a combined area of approximately 1.49 acres located at 300, 304-308, 320 Andrews Street and 25 Evans Street, City of Rochester, County of Monroe, New York (Site).

The City envisions future planned use of the Site to be for multi-family residential (townhouse) purposes, or mixed use (e.g., commercial first floor with residential above).

The Site has been used for various commercial and industrial uses since the early 1920's including plumbing supply, electrical supply, bakery, printer, commercial bus depot and bus maintenance and repair garage, gasoline station, chemical sales/distribution, dry cleaning equipment distributor, fuel oil contractor, and warehousing.

Various areas of soil/fill have been documented with environmental impact. Analytical laboratory results for soil and fill will be compared to Soil Cleanup Objectives (SCOs) referenced in the New York State Department of Environmental Conservation (NYSDEC) document titled "*6 NYCRR Part 375, Environmental Remediation Programs*" dated December 14, 2006. Specific SCOs the data were compared to include Unrestricted SCOs, Restricted Residential Use SCOs, Restricted Commercial Use SCOs, and Protection of Groundwater SCOs. These areas of environmental impact are further described below.

PCE Source Area: The volatile organic compound (VOC) tetrachloroethylene (i.e., perchloroethylene or PCE) is the predominant contaminant detected in soil and groundwater at the Site. There appears to be two near surface "hot spots" of PCE in soil that are relatively close to each other. The PCE source area appears to coincide with a portion of the 304-308 Andrews Street parcel that is believed to have been the former location of a dry cleaning equipment distributor. A nearby sewer system may be acting as a preferential migration pathway for the PCE. It is estimated that approximately 703 cubic yards (1,160 tons) of PCE-contaminated soil is located in the source area at concentrations above the Protection of Groundwater SCO of 1.3 milligrams/kilogram (mg/kg).

UST Area: Two closed in-place underground storage tanks (USTs) are identified as a potential source area for petroleum contamination. The USTs were associated with the former bus repair and maintenance garage on the 25 Evans Street parcel. To benefit redevelopment of the Site, the USTs will be removed from the Site, and it is estimated that approximately 24 cubic yards (40 tons) or less of petroleum contaminated soil requiring remediation is present in this area.

PCB-Impacted Area: A small area of polychlorinated biphenyl (PCB)-impacted soil above NYSDEC SCOs was documented at the Site. This area is located on the 320 Evans Street parcel and the Evans Street right-of-way. It is estimated that approximately 33 cubic yards (55 tons) or less of PCB-contaminated soil above 1 mg/kg is located in this area.

Trench Drain Area: Historic discharges to a former trench drain system appear to have impacted underlying soil with polycyclic aromatic hydrocarbon (PAH) semi-volatile organic compounds (SVOCs) and metals at concentrations exceeding SCOs. The former trench drain was associated with the former bus repair and maintenance garage on the 25 Evans Street parcel. It is estimated that approximately 77 cubic yards (125 tons) of SVOC and/or metal-contaminated soil above SCOs is located in proximity to the trench drain.

Piping Area: Solid contents in buried piping on the 320 Andrews Street parcel contained 0.58 mg/kg of PCE. The buried piping is associated with the former bus terminal building on this parcel. It is estimated that approximately 68 cubic yards (113 tons) or less of PCE-contaminated piping contents and surrounding soils could be present in this this area, and that contents of this piping or surrounding soils may contain concentrations of PCE greater than its Protection of Groundwater SCO of 1.3 mg/kg.

Historical Fill Material: Heterogeneous historic urban fill material (generally consisting of reworked soils, with lesser amounts of coal, cinders, glass, brick, gravel, rock, concrete and asphalt) is present across most of the Site, and some samples of this material contained concentrations of PAH SVOCs and/or Metals that exceeded SCOs. It is estimated that approximately 6,900 cubic yards (11,400 tons) of fill material and/or adjoining site soils containing PAH SVOCs and/or Metals exceeding SCOs are present at the Site.

Miscellaneous Areas with VOCs: Low levels of PCE (in relation to that detected in the PCE source area described above) and other VOCs, such as acetone, benzene, trimethylbenzenes, trichloroethene, etc., were detected in soil/fill samples on portions of the Site. The detected levels are below NYSDEC SCOs; however, engineering controls may be warranted during redevelopment in these areas to preclude vapor intrusion into new structures.

Groundwater on a portion of the Site has been documented with environmental impact. The impacts are further discussed below.

PCE Plume: PCE is present in groundwater at concentrations as high as 70,000 micrograms/liter (ug/l). Based on the environmental studies performed to date, the PCE groundwater plume likely encompasses between a 0.5 acre and 0.75 acre area, and is predominantly present in the overburden. It appears that deeper dense till layers have resulted in only limited vertical migration of the PCE, mostly in proximity to the buried sewer within the Evans Street right-of-way.

Groundwater samples from each overburden and bedrock well contained one or more metal exceeding groundwater standards and guidance values (i.e., antimony, chromium, iron, magnesium, selenium, sodium). Past operations at the Site may have contributed to the presence of some of the metals (e.g., chromium) in groundwater; however, metals exceeding SCOs in soil or fill samples do not correlate with metals exceeding groundwater standards and guidance values, which suggests the presence of these metals (e.g., antimony, iron, magnesium, sodium) detected in the groundwater is likely naturally occurring.

Potentially Exposed Population and Exposure Routes

The Site is currently vacant land, does not contain any buildings, and is controlled by chain link fencing and locked gates. Contamination is generally in the subsurface soil, fill material and groundwater that is currently covered by asphalt pavement, concrete floor slab or an approximate 1-foot thick or more layer of crushed stone that placed on the Site during building demolition. Groundwater is not used as a source of potable or non-potable water at the Site. Under these current conditions, no complete exposure pathways are identified on-site; thus, it is unlikely that the general public has a potential to be exposed to contaminants on the Site. However, if corrective actions are not implemented, the following complete exposure pathways for receptor populations may exist on-site during or after redevelopment of the Site:

- Construction workers and the surrounding community may have the potential to be exposed to Site contaminants via inhalation, direct dermal contact and ingestion of site contaminants during activities that involve disturbance of contaminated media (soil, fill or groundwater); and
- On-site occupants and the community may have the potential to be exposed to Site contaminants via inhalation from soil vapor intrusion (SVI) into future buildings, and ingestion should groundwater at or in proximity to the Site be used as a potable water supply.

Evaluation and Selection of Recommended Remedial Alternative

Remedial goals, objectives, consideration factors were developed in order to prepare remedial alternatives for consideration. Evaluation criteria were then developed in order to compare the remedial alternatives. The alternatives considered for this Site are directed at addressing contamination in soil, fill and groundwater, and these alternatives are presented below. The alternatives consider that the Site will to be used for multi-family residential (townhouse) purposes, or mixed use (e.g., commercial first floor with residential above).

1. No Action: A no action alternative is a NYSDEC Environmental Restoration Program (ERP) procedural requirement, and provides a baseline to evaluate other alternatives. Under this alternative, remedial and monitoring activities as well as placement of institutional controls or engineering controls at the Site are not implemented. Environmental conditions at the Site would essentially remain as they are, and future use of the Site would not be limited.

2. IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring: Remediation would consist of an Interim Remedial Measure (IRM) involving the removal and off-site disposal of areas of highest impacted soil above soil cleanup criteria for the Site. This IRM includes removal of contaminated soil above the groundwater table in the PCE source area. It is anticipated that some PCE contaminated soil would remain in-place subsequent to the IRM. In addition, a section of buried public sewer that appears to be acting as a preferential migration pathway, some remaining impacted on-site piping and trench drain structure, and two previously closed in-place USTs would be removed and disposed off-site as part of the IRM. In-situ groundwater remediation would be conducted to assist in remediation

of residual VOC groundwater contamination above cleanup criteria in the overburden. The remaining contaminants in soil, fill and groundwater (e.g., SVOCs, metals, residual VOCs) would be addressed via institutional controls (e.g., Environmental Easement and Site Management Plan) and engineering controls (e.g., soil vapor mitigation system, cover system). A groundwater monitoring program would be implemented to evaluate the effectiveness of the remedy. This alternative is considered a Track 4 cleanup to allow for restricted residential and restricted commercial use of the Site.

3. Full Removal of Impacted Fill Material, Soil and USTs, Groundwater Remediation; and Groundwater Monitoring: Excavation and off-site disposal would be implemented to completely remediate soil contamination and fill material that exceeds NYSDEC Track 1 SCOs and allows for unrestricted use of the Site. A section of buried public sewer that appears to be acting as a preferential migration pathway, some remaining impacted on-site piping and trench drain structure, and two previously closed in-place USTs would be removed and disposed off-site. Contaminated groundwater that exceeds Track 1 SCOs would be addressed by dewatering excavations, pre-treating the removed water if necessary, and discharging the water to a publicly owned treatment works (POTW); and/or contaminated areas in overburden and also bedrock that are not affected by the excavation dewatering would be addressed by in-situ remediation. Groundwater monitoring would be implemented to evaluate the effectiveness of the remedy. This alternative is considered a Track 1 cleanup to allow for unrestricted use of the Site.

The proposed recommended remedial alternative is based on the results of the Remedial Investigation (RI) and the evaluation of alternatives presented herein. A detailed evaluation of the three remedial alternatives was performed, and implementation of Alternative #2 (IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring) is recommended for the Site. Alternative #2 would achieve the remediation goals for the Site by: removing contaminated soil/fill; removing two closed in-placed petroleum USTs; removing impacted sewer piping; treating contaminated groundwater; controlling exposure to residual contamination through the use of institutional controls and engineering controls; creating conditions that restore groundwater quality to the extent practicable; and monitoring of groundwater to evaluate the effectiveness of the remedy. Alternative #2 satisfies the threshold criteria and provides the best balance of the primary balancing criteria identified later identified in this ABCA. Alternative #2 is an acceptable alternative, can be implemented easily in relation to future use of the Site, and costs less than Alternative #3.

2.0 INTRODUCTION AND BACKGROUND

In 2008, the City entered into a State Assistance Contract (SAC) with the NYSDEC to perform investigative and remedial work at the Site under the NYSDEC ERP, and the Site was assigned NYSDEC Site #E828144. Under the SAC, the NYSDEC is providing funds for investigation; however, it has identified that there are no NYSDEC funds for remediation. In 2010, the City submitted a Brownfield Cleanup Grant Proposal to the United States Environmental Protection Agency (USEPA), and was subsequently awarded a Brownfield Cleanup Grant to assist in funding remediation of the Site.

2.1 Site Location and Description

The Site is located in a commercial-use urban area in downtown Rochester, Monroe County, New York and is within the Center City District (CCD) zoning district. The Site is bounded to the north by the New York State Department of Transportation (NYSDOT) Inner Loop highway, to the east by Franklin Square followed by a City-owned park, to the south by Andrews Street with commercial properties beyond, and to the west by Bristol Street with commercial properties beyond.

Demolition of the on-site structures was completed by the City between the fall of 2010 and the spring of 2011. During at-grade and sub-grade phases of the demolition, DAY provided environmental monitoring, sampling and analysis, and documentation services. Prior to demolition, the Site was improved with four buildings with associated paved parking lots and city streets. A narrow city street known as Evans Street separates the 320 Andrews Street parcel from the other three parcels that are contiguous with each other. Evans Street is closed to vehicle traffic, but it does contain underground utilities (e.g., sewer, etc.). Bristol Street, Franklin Square, Andrews Street, and the Inner Loop also contain underground utilities. A project locus map and a site plan are provided as Figures 1 and 2, respectively. The former buildings had a total floor area of approximately 38,349 square feet and consisted of one-story and two-story brick or concrete block buildings with partial basements and/or slab-on-grade construction, constructed between 1925 and 1965. Specific information regarding the former on-site structures is provided below:

- 300 Andrews Street (Tax ID# 106.72-01-86) – one approximate 4,224 square-foot one and two-story brick building with a partial basement reportedly constructed in 1925.

- 304-308 Andrews Street (Tax ID# 106-72-01-85) – one approximate 15,425 square-foot one and two-story brick building with a partial basement reportedly constructed in 1920 with an addition in 1961.

- 320 Andrews Street (Tax ID# 106.72-01-84) – one approximate 8,000 square-foot one-story block building with a partial basement reportedly constructed in 1965.

- 25 Evans Street (Tax ID# 106.72-01-87) – one approximate 10,700 square-foot one-story slab-on-grade block building reportedly constructed in 1950.

The buildings discussed above were the most recent buildings on the Site. Other older buildings were also constructed and demolished in the past prior to the City's acquisition of the Site.

2.2 Site History

The Site has been used for various commercial and industrial uses since the early 1920's including plumbing supply, electrical supply, bakery, printer, commercial bus depot and bus garage, gasoline station, chemical sales/distribution, dry cleaning equipment distributor, fuel oil contractor, and warehousing.

- The 300 Andrews Street parcel was acquired by the City in 1997. Prior to acquisition, the former building on the parcel had been occupied by a commercial printer on the first floor, and two residential apartments on the second floor. Between the late 1990's and 2007, the City's Department of Environmental Services Main Street Activity Team occupied the former building on this parcel. The Main Street Activity Team maintained sidewalks, seasonal decorations, benches, shelters, and plantings in the central business district.

- The 304-308 Andrews Street parcel was acquired by the City in 1991. Prior to acquisition, a portion of the former building on the parcel was occupied by a commercial printer and a water treatment company that specialized in chemical treatment regimens to mitigate deterioration of building furnace boilers, pipes and radiator components. The commercial printer continued to occupy its space until 1993. The water treatment company continued to occupy its space until 2001. Records (city directory and deed search) also indicate that a dry cleaning equipment distributor was in the 308 Andrews Street portion of the building between 1978 and 1988. Prior to between 1995 and 2007, the building was also occupied by one or more of the following: a community based mortgage lender; the Urban League of Rochester Economic Development Corporation; Youth Build of New York; Downstairs Cabaret Theater, and City storage of surplus office furniture and equipment.

- The 320 Andrews Street parcel was acquired by the City in 1990. Prior to acquisition, the former building on the parcel had been occupied by a bus terminal. Between 1990 and 2004, the City used the former building for storage of various supplies and surplus furniture. The exterior of the parcel was also used by the City for parking and storage of landscaping materials (e.g., mulch, topsoil, etc.).

- The 25 Evans street parcel was acquired by the City on 1990. Prior to acquisition, the former building on this parcel was occupied by a bus garage. In the mid-1990's the City used the former building for the storage of residential garbage totes, Police evidence, vehicles, sidewalk scrubbers and sweepers, lawnmowers, scissor lifts, utility trucks, pressure washers and water tanks.

2.3 Site Environmental Concerns and Contamination

Previous environmental assessments and studies completed at the site are summarized below.

2.3.1 Phase I Environmental Site Assessments (Phase I ESAs)

In June 2006, Phase I ESAs were performed for each of the four parcels that comprise the Site. In addition to the 2006 Phase I ESA, environmental assessments, a Phase I ESA, and asbestos surveys were performed on portions of the Andrews Street site between 1990 and 2005. Recognized environmental conditions (RECs) identified in the 2006 Phase I ESAs for each parcel include:

300 Andrews Street

- Former operations and suspected materials storage or use, including painting, plumbing supply, boiler additives supply, cleaning supply and ink use;
- The presence of containers of oil, anti-freeze and paint in the building, and minor floor stains;
- The building area used ASTs to store fuel oil in the basement; and
- A few off-site concerns on adjoining properties, including those identified for the other parcels that comprise the Site.

304-308 Andrews Street

- Two out-of-service 275-gallon ASTs in the basement of the building;
- A floor drain inside the garage area of 308 Andrews St.;
- Chemical containers in vacant portions of the building;
- The historic operations and use of the building by a dry cleaning supply company, a chemical distributor, and a printer, including reports of spills and improper disposal practices; and
- A few off-site concerns on adjoining properties, including those identified for the other parcels that comprise the Site.

320 Andrews Street

- The historic operations and use of the property by a retail gasoline station and by a commercial bus company; and
- A few off-site concerns on adjoining properties, including those identified for the other parcels that comprise the Site.

25 Evans Street

- Former vehicle and equipment operations and materials use, including minor floor spills;
- Two closed in place 5,000-gallon USTs and one out-of-service approximate 3,000-gallon aboveground storage tank (AST) located inside the building;
- A floor trench drain system inside the building;

- A former below grade service pit in the concrete floor inside the building that had been filled with crushed stone; and
- A few off-site concerns on adjoining properties, including those identified for the other parcels that comprise the Site.

2.3.2 Phase II Environmental Site Assessment (Phase II ESA)

A Phase II ESA of the Site was performed in 2006 by Leader. The Phase II ESA consisted of the advancement of test borings, the installation of three overburden monitoring wells, the preliminary evaluation of selected floor drains and their discharge points, and the collection and analysis of selected soil and groundwater samples. Figure 3 shows these Phase II ESA test locations in relation to buildings that were present on the Site at that time. The Phase II ESA documented the presence of selected VOCs including tetrachloroethene (also referred to as perchloroethylene or PCE), which exceeded the following soil and groundwater regulatory criteria:

1. Recommended Soil Cleanup Objectives (RSCOs) referenced in the NYSDEC document titled "*Technical and Administrative Guidance Memorandum (TAGM) 4046, Determination of Soil Cleanup Objectives and Cleanup Levels*" dated January 24, 1994 and/or Guidance Values referenced in the NYSDEC document titled "*Spill Technology and Remediation Series (STARS) Memo #1, Petroleum-Contaminated Soil Guidance Policy"* dated August 1992; and
2. Groundwater standards and guidance values referenced in the NYSDEC document titled "*Division of Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*" (TOGS 1..1.1) dated June 1998 as amended by April 2000 and June 2004 Addendums.

Analytical laboratory results summary tables associated with the Phase II ESA are included in Appendix A. Suspect petroleum fuel related VOCs were also detected at the Site. The findings of the Phase II ESA are summarized below:

- Chlorinated VOCs, predominately consisting of PCE, were detected in most soil samples collected across the Site. Peak PCE concentrations detected in soil samples from test locations are shown on Figure 3, and PCE detected in some soil samples exceeded its RSCO of 1.3 mg/kg or parts per million (ppm).
- PCBs were not detected in four soil samples that were analyzed.
- Some petroleum-related VOCs including p-isopropyltoluene, naphthalene, 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were detected primarily in soil samples collected from the 25 Evans Street parcel, and some petroleum-related VOCs detected in some of the soil samples exceeded their respective RSCOs .
- Chlorinated VOCs, predominantly consisting of PCE, were detected in groundwater samples from monitoring wells MW-01, MW-02 and MW-03. PCE concentrations ranged between 420 ug/L or parts per billion (ppb) and 70,000 ppb. Detected chlorinated VOCs, including PCE, that were detected in the three groundwater samples exceeded their respective groundwater standards.

- Evidence of light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) was not detected at test boring or monitoring well locations.

2.3.3 At-Grade and Sub-Grade Demolition Phase Study

Demolition of the Site structures was initiated in the fall of 2010 and completed in the spring of 2011. Figure 2 and also Figure 3 provide an orthophoto that generally shows the structures (buildings, pavement, etc.) that were demolished. During at-grade and sub-grade demolition work, twenty-one soil/fill samples were submitted for analytical laboratory testing of target compound list (TCL) VOCs, TCL SVOCs, target analyte list (TAL) Metals, Cyanide, PCBs and Pesticides (refer to Figure 4). The City of Rochester funded the demolition work and also the concurrent environmental monitoring, sampling, analysis and documentation work that was completed by DAY in accordance with a NYSDEC-approved work plan. The analytical laboratory analysis included Category B deliverables, quality assurance/quality control sampling and analysis, and also third party date validation. In order to preclude disturbance of the PCE source area and the closed in-place UST area, slabs and foundations overlying, or in proximity to, these areas were not removed during the demolition. Figure 4 also depicts soil sample locations that exceeded one or more type of SCO for one or more type of contaminant. Analytical laboratory summary results tables associated with the At Grade and Sub-Grade Demolition Phase study are included in Appendix B, are summarized below:

- Two soil samples tested contained TCL VOCs (S-1 contained PCE, and S-26 contained Benzene) exceeding one or more SCOs.
- Soil samples S-7, S-9, S-24, S-26, S-28 and S-34 collected from a generally black fill material observed on the 300, 304-308 and 25 Evans Street properties, and impacted soil/fill associated with the 25 Evans Street trench drain, contained SVOCs at concentrations exceeding one or more Restricted Residential Use SCO and/or Protection of Groundwater SCO.
- Soil Samples S-9, S-24, S-26, and S-28 collected from a generally black fill material observed on the 300 Andrews Street and 25 Evans Street properties, and impacted soil/fill associated with the 25 Evans Street trench drain contained one or more TAL metals at concentrations exceeding one or more Restricted Residential Use SCO and/or Protection of Groundwater SCO.
- PCBs were only detected at a concentration above its Restricted Residential Use SCO in sample S-48 collected beneath the former concrete paved area in the west side of the 320 Andrews Street parcel.
- Pesticides were tested for, but not detected at concentrations exceeding Restricted Residential SCOs or Protection of Groundwater SCOs. Only one sample with detections [Sample 045/S-31(0.5')] exceeded the Unrestricted Use SCO and Protection of Ecological Resources SCO for 4,4-DDT.
- Cyanide was tested for, but not detected at concentrations exceeding SCOs.
- A water sample collected from the eastern portion of the 304-308 Andrews Street basement excavation contained a PCE concentration of 4.08 ug/l or ppb.

The Site was backfilled with imported NYSDOT CR-2 and #3 washed stone from an off-site NYSDEC-approved source, and the backfill was compacted and graded in accordance with the City's specifications, to the extent practicable.

2.3.4 Preliminary Remedial Investigation Findings

In 2011, under the NYSDEC ERP, the majority of RI field work and analytical laboratory testing was completed. The work was completed in accordance with a NYSDEC-approved Remedial Investigation/Remedial Alternatives Analysis Work Plan dated August 2011. The work completed to date included the following scope or work:

- Performance of a geophysical survey across the Site to identify magnetic anomalies that may represent potential presence of buried tanks and other metallic objects;
- Performance of a utility assessment, including research, mapping and videotaping underground utilities on and around the Site. During this assessment work, a sample of tar-like material from inside a sewer located in the area with highest PCE concentrations was collected and submitted for analytical laboratory testing. In addition, some cracks were observed in this same section of sewer pipe during the videotaping.
- Excavation of seven test pits to evaluate magnetic anomalies, buried structures, and/or subsurface conditions of interest.
- Photoionization detector (PID), halogen specific detector (XSD) and conductivity down-hole testing at twenty-six direct-push test borings using Membrane Interface Probe (MIP) technology.
- Collection of soil samples for analytical laboratory testing at seventeen test borings advanced with direct-push drilling equipment, and three deep test borings and five shallow test borings advanced with rotary drilling equipment.
- Advancement, collection of soil samples, and installation of monitoring wells at twenty rotary-drilled locations. Eleven of these wells were installed in the overburden, and nine of these wells were installed as open-hole bedrock wells cored approximately ten feet through permanent casings seated into the top two feet of bedrock to preclude communication with the overburden.
- Collection and analysis of one round of groundwater samples from three existing overburden monitoring wells, eleven new overburden monitoring wells, and nine new bedrock monitoring wells.

The locations of test pits, borings, and monitoring wells advanced as part of the RI are shown on Figure 5. The majority of soil samples submitted for testing were analyzed for TCL VOCs, TCL SVOCs, TAL Metals and PCBs. The round one groundwater samples were analyzed by the laboratory for TCL VOCs, TCL SVOCs, TAL Metals, PCBs, pesticides, and cyanide.

Analytical laboratory summary results tables associated with the Remedial Investigation are included in Appendix C. Soil sample tables and groundwater samples tables include a comparison to select NYSDEC SCOs and NYSDEC TOGS 1.1.1 groundwater standards and guidance values, respectively. Tables for the tar-like material collected from inside the sewer, a sediment sample collected from a concrete pit associated with a former hydraulic

truck lift, and two rock core samples are also included in Appendix C. The MIP screening results and the analytical laboratory results for the samples collected during the RI work are summarized below:

MIP Results

- MIP equipment refusal at depths ranging between approximately 8 feet and 18 feet below the ground surface (bgs) occurred as a result of a till layer at the Site, which prohibited the MIP probe from being advanced to the top of bedrock that is approximately 30 feet bgs. However, the MIP provided continuous monitoring for halogens and total VOCs within the depth interval it was able to achieve at each point, and the MIP data were useful for interpreting PCE source areas when used in combination with soil analytical laboratory data.
- Conductivity readings from the MIP were useful in interpreting changes in subsurface materials, such as the urban historic fill material that is present from the ground surface to varying depths across most of the Site.
- The highest PID and XSD readings correspond to the PCE source area that is located on the north-central portion of the Site. The MIP was useful in assisting to define the extent of PCE contamination in the overburden above the till layer, including just above the buried sewer line located in the right-of-way of Evans Street.

Soil Sample Analytical Laboratory Results

- TCL VOCs, predominantly consisting of PCE, were detected in 41 of 58 soil samples that were tested. Only the PCE concentrations detected in six of these samples exceeded one or more SCO.
- SVOCs, predominated by PAHs, were detected in 13 of 49 soil samples that were tested. Only the benzo(a)pyrene concentration detected in one of these samples exceeded one or more SCO.
- Various TAL metals were detected in each of the 45 soil samples that were tested. Only four samples contained concentrations of one or more TAL metal (i.e., arsenic, lead, mercury and/or zinc) that exceeded one or more SCO.
- PCBs were detected in 7 of the 54 soil samples that were tested, and the detected concentrations did not exceed SCOs.

Groundwater Sample Analytical Laboratory Results

- TCL VOCs, predominantly consisting of PCE, were detected in 13 of 23 groundwater samples that were tested. Detected concentrations of one or more chlorinated VOC in eight of these samples exceeded groundwater standards or guidance values.
- Various TAL metals were detected in each of the 23 groundwater samples that were tested. Each of these samples contained one or more metal that exceeded groundwater standards or guidance values.
- Cyanide was detected in 5 of the 23 groundwater samples that were tested, and the detected concentrations did not exceed groundwater standards or guidance values.
- TCL SVOCs, PCBs and Pesticides were not detected in the 23 groundwater samples that were tested.

Rock Core Sample Analytical Laboratory Results

- VOCs were not detected in the two rock core samples.

Tar-Like Sample Analytical Laboratory Results

- VOCs, predominantly consisting of PCE, were detected in the tar-like sample collected from the sewer on the Site contained. The highest concentration of PCE detected at the Site (51,000 mg/kg or ppm) was detected in this sample.
- SVOCs and PCBs were not detected in the tar-like sample.

Sediment Sample Analytical Laboratory Results

- VOCs, predominantly consisting of PCE, were detected in the sediment sample collected from concrete pit associated with a former truck hydraulic lift. The PCE concentration detected in this sample was 1.5 mg/kg or ppm.
- PAH SVOCs and numerous TAL metals were detected in the sediment sample.
- PCBs were not detected in the sediment sample.

2.3.5 Nature and Extent of Contamination

Various areas of soil/fill have been documented with environmental impact. These areas are further described below.

PCE Source Area

PCE is the predominant contaminant detected in soil and groundwater at the Site. The source of the PCE may be associated with the former dry cleaning equipment and supply company that historic records indicate was located on the 304-308 Andrews Street parcel between 1984 and 1988. Based on the work completed to date, there appears to be two near surface "hot spots" of the PCE that are relatively close to each other (one outside the former building in proximity to a garage bay door, and one inside the former building in proximity to a floor drain). The contaminants from these two areas then appear to have impacted the sewer (pipe and bedding material) that is located in the adjoining right-of-way of Evans Street as evidenced by the 51,000 mg/kg of PCE detected in the tar-like sample collected from the inside of the sewer piping in this area. The buried sewer system appears to have acted as a preferential migration pathway for the PCE. The highest concentrations of PCE in soil were detected at locations B-17(1'), B-17A(1') and TB-MIP-10(11') at concentrations of 3,560 mg/kg, 270 mg/kg and 450 mg/kg, respectively Refer to Figure 3 and Figure 5 for test locations). The highest concentration of PCE detected in an overburden well during the January 2012 Round 1 groundwater sampling event was at well MW-1 (48,000 ug/l) located north of the PCE source area and in close proximity to the Evans Street Right-of-way and the northern property boundary of the Site. The highest concentration of PCE detected in a bedrock well during the January 2012 Round 1 groundwater sampling event was at well MW-4R (46 ug/l) located northwest of the PCE source area. Well locations are shown on Figure 6. Soil PCE data and MIP XSD data were used with Geographic Information System (GIS) Spatial Analyst

to three-dimensionally model the extent of PCE in soil at concentrations greater than 1.3 mg/kg, which is the Protection of Groundwater SCO for PCE. The results of this modeling are shown on Figure 7 and Figure 7A. Based on this modeling, it is estimated that approximately 703 cubic yards (1,160 tons) of PCE-contaminated soil above 1.3 mg/kg is located in the approximate 3,500 square-foot source area. Figure 8 shows the location of the PCE source area.

UST Area

The two abandoned USTs, presumed to have stored gasoline and diesel oil, on the eastern portion of the 25 Evans Street parcel have been identified as a potential source area for petroleum contamination. In 1984, the tanks were pumped and filled with K-Crete as a method of closing them in-place. Some petroleum-type VOCs were detected in nearby soil samples during the 2006 Phase II ESA. As part of this project to benefit redevelopment of the Site since the 26 Evans Street building has been demolished, the two closed in-place USTs will be removed in accordance with applicable regulations. Based on findings at test locations in proximity to the two USTs, it is estimated that approximately 24 cubic yards (40 tons) or less of petroleum contaminated soil requiring remediation will be encountered during the UST removal work. The UST area is shown on Figure 8.

PCB-Impacted Area

One small area (i.e., 225 square feet or less) of PCB impacted soil above SCOs was documented in the area of demolition phase test location S-48 (PCB = 1.8 mg/kg). Analytical laboratory testing of soil samples from RI borings SB-01 through SB-05 show that the extent of PCB impact is limited (i.e., 15' x 15' x 4' deep or less), and it is estimated that approximately 33 cubic yards (55 tons) or less of PCB-contaminated soil above 1 mg/kg is located in this area. The location of the PCB-Impacted area is shown on Figure 8.

Trench Drain Area

An approximately 130 foot long by 1-foot wide trench drain was located on the 25 Evans Street parcel. The majority of the trench drain structure was removed and disposed during the demolition phase work. Impacts were documented in underlying soil in proximity to the trench drain. Contaminants exceeding SCOs included various PAH SVOCs and Metals. Based on a projected 130' long x 4' wide x 4' deep excavation, it is estimated that approximately 77 cubic yards (125 tons) of SVOC and/or metal-contaminated soil above SCOs is located in proximity to the trench drain. The location of the trench drain area is shown on Figure 8.

Piping Area

An area of buried piping is located on the 320 Andrews Street Parcel. A section of this piping was encountered during excavation of test pit TP-07. A sample of the solid contents from inside this piping contained 0.58 mg/kg of PCE. A soil sample collected

from test pit TP-07 in proximity to the piping only contained 0.012 mg/kg of PCE. Based on the EM-61 geophysical survey on this area of the Site, it is estimated that approximately 220 linear feet of piping exists in this area, and that the piping may have similar solid contents containing PCE. Based on a projected 205' long x 3' wide x 3' deep excavation, it is estimated that approximately 68 cubic yards (113 tons) or less of PCE-contaminated piping contents and surrounding soils could be present in this this area, and it is possible that contents of some sections of this piping or surrounding soils may contain concentrations of PCE greater than its Protection of Groundwater SCO of 1.3 mg/kg. The location of the piping network area is shown on Figure 8.

Historical Fill Material

Heterogeneous historic urban fill material is present across most of the Site. The fill material generally consists of reworked soils, with lesser amounts of coal, cinders, glass, brick, gravel, rock, concrete and asphalt. Samples of the fill material, and also some samples of soil, contain concentrations of PAH SVOCs and/or Metals that exceed SCOs. Based on an average fill thickness of 3.12 feet x the area of the Site (65,340 square feet) less the area of former basements backfilled with select clean geotechnical fill (5,776 square feet), it is conservatively estimated that approximately 6,900 cubic yards (11,400 tons) of fill material and/or adjoining site soils containing PAH SVOCs and/or Metals exceeding SCOs are present at the Site.

Miscellaneous Areas with VOCs

Low levels of PCE (in relation to that detected in the PCE source area described above) and other VOCs (acetone, benzene, trimethylbenzenes, trichloroethene, etc.) were detected in soil/fill samples on portions of the 25 Evans Street parcel, the 320 Andrews Street parcel, and the Franklin Square right-of-way. The samples were collected from depths ranging between 1.5 feet and 4.0 feet bgs, and the presence of PCE in these areas appears associated with its use in these areas and/or transfer within fill material across the Site that contained these VOCs. Concentrations of PCE detected in these soil/fill samples ranged between 0.0532 mg/kg and 1.12 mg/kg. The detected levels of VOCs are below NYSDEC SCOs; however, engineering controls appear to be warranted during redevelopment in these areas to preclude vapor intrusion into new structures.

Groundwater on a portion of the Site has been documented with environmental impact. The impacts are further discussed below.

PCE Plume

PCE has been detected in groundwater at the Site. The PCE in groundwater is present in the PCE source area described above that originated from the 304-308 Andrews Street parcel. The highest detected PCE concentrations detected in groundwater samples has been from overburden well MW-1 located north of the source area (as high as 70,000 ug/l) and overburden well MW-2 located immediately east of the source area (as high as 18,000 ug/l). Well MW-1 is located in close proximity to the buried sewer line in the Evans Street right-of-way, and the high concentrations of PCE at this well located away

from the PCE source area supports the theory that the sewer system is acting as a preferential migration pathway for the PCE. PCE has been detected at off-site overburden well MW-11 (20 ug/l), which is located on an on-ramp of the NYSDOT Inner Loop, is approximately 40 feet north of well MW-1, and is also in proximity to the buried sewer system. PCE has also been detected in some bedrock wells, but at much lower concentrations (e.g., 46 ug/l or less) when compared to overburden wells in proximity to the PCE source area. Water-bearing sand units have been documented at depths varying between approximately 10 and 25 feet bgs. Based on PID readings from continuously collected soil samples from well locations, VOCs are present in these water bearing sand units. Some of these sand units are likely in contact with the bedding material associated with the buried sewer in the Evans Street right-of-way. Based on the environmental studies performed to date, the PCE plume likely encompasses between a 0.5 acre and 0.75 acre area, and is predominantly present in the overburden (refer to Figure 9). It appears that deeper dense till layers have resulted in only limited vertical migration of the PCE, mostly in proximity to the buried sewer within the Evans Street right-of-way.

Groundwater samples from each overburden and bedrock well contained one or metal exceeding groundwater standards and guidance values. Past operations at the Site may have contributed to the presence of some of the metals (e.g., chromium) detected at elevated concentrations in the groundwater. However, metals exceeding SCOs in soil or fill samples do not correlate with metals exceeding groundwater standards and guidance values, which suggests the presence of certain elevated metal concentrations (e.g., antimony, iron, magnesium, sodium) detected in the groundwater is likely naturally occurring.

2.3.6 Potentially Exposed Population and Exposure Routes

The Site is currently vacant, and is controlled by chain link fencing and locked gates. Contamination is generally in the subsurface soil, fill material and groundwater. A portion of the Site where highest concentrations of chlorinated VOCs are present is covered with asphalt pavement or concrete floor slab that were left in-place during the demolition work to minimize contact and disturbance with underlying contaminated media. The rest of the Site is covered with an approximate 1-foot thick or more layer of crushed stone or Crusher Rum #3 (CR2). Groundwater is not used as a source of potable or non-potable water at the Site. Under these current conditions, no complete exposure pathways are identified on-site; thus, it is unlikely that the general public has a potential to be exposed to contaminants on the Site. However, a dissolved phase plume of PCE-related VOCs has migrated off-site via groundwater into the Inner Loop right-of-way located north of the Site. The City is serviced by public water supply, and groundwater in the City is not used as a potable source of water; thus ingestion is not an off-site route of exposure. There is some potential that off-site migration of contaminants could impact receptor populations should contaminants enter the combined sewer system located in the Inner Loop that ultimately discharges to MCPW's Van Lare Wastewater Treatment facility, or if contaminants entered the overflow system that appears to discharge to the Genesee River. Under this scenario, the most likely exposure pathway would be inhalation of vapors in the sewer system during servicing as a result of soil vapor intrusion.

If corrective actions are not implemented, the following complete exposure pathways for receptor populations may exist on-site during or after redevelopment of the Site:

- Construction workers and the surrounding community may have the potential to be exposed to Site contaminants via inhalation, direct dermal contact and ingestion of site contaminants during activities that involve disturbance of contaminated media (soil, fill or groundwater); and
- On-site occupants and the community may have the potential to be exposed to Site contaminants via inhalation from soil vapor intrusion into future buildings, and via ingestion if groundwater at or in proximity to the Site is used as a potable water supply.

2.3.7 Proposed Future Use of Site

The Site is located in the Rochester CCD. According to the City's Neighborhood and Business Development Department, future redevelopment of the Site is anticipated to consist of multi-family residential (townhouse), or mixed use (e.g., commercial first floor with residential above).

2.3.8 ABCA Objective

The objective of the ABCA is to identify, evaluate and select a remedy to address the contamination at the Site.

3.0 REMEDIAL GOALS, OBJECTIVES, CONSIDERATION FACTORS, AND EVALUATION CRITERIA

Remedial Goals, objectives and other factors to consider are provided in this section of the ABCA.

3.1 Cleanup Goals

Standards, Criteria and Guidance (SCG) values to allow for a mixed residential and commercial use are considered in this ABCA. The SCGs assist in defining the extent of contamination requiring remediation, and also are used to evaluate the effectiveness of the remedy. The SCGs for soil, groundwater and soil vapor intrusion to be used for this project are provided below.

- Analytical laboratory results for groundwater will be compared to groundwater standards and guidance values referenced in the NYSDEC document titled "*Division of Technical and Operational Guidance Series, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*" (TOGS 1..1.1) dated June 1998 as amended by April 2000 and June 2004 Addendums.
- Analytical laboratory results for soil and fill will be compared to SCOs referenced in the NYSDEC document titled "*6 NYCRR Part 375, Environmental Remediation Programs*" dated December 14, 2006. Specific SCOs to be considered will include Unrestricted SCOs, Restricted Residential Use SCOs, Restricted Commercial Use SCOs, and Protection of Groundwater SCOs.
- Analytical laboratory results for soil vapor intrusion samples will be compared to various criteria (e.g., air guidance values, soil vapor/indoor air decision matrices, background concentrations of VOCs in indoor air) referenced in the New York State Department of Health (NYSDOH) document titled "*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*" dated October 2006.

3.2 Remedial Action Objectives

Remedial Action Objectives (RAOs) are medium-specific objectives for the protection of human health and the environment. RAOs for this project are as follows:

Groundwater

<u>RAOs for Public Health Protection</u>

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

<u>RAOs for Environmental Protection</u>

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of groundwater contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure from, contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

3.3 Other Factors for Consideration

For this project, the following additional considerations were evaluated during the development of remedial alternatives:

- Eliminate or mitigate threats to public health and the environment.
- Address source areas of contamination using the following hierarchy in order of preference:
  - Removal and/or treatment;
  - Containment;
  - Elimination of exposure; and
  - Treatment of source at point of exposure.
- Give preference to permanent closure of abandoned underground storage tanks via removal over closure of tanks in-place. This preference is intended to maximize redevelopment options at the Site, and also result in a higher level of confidence that associated contamination or tank contents are properly addressed as part of the remedy.
- Protect groundwater considering the following:
  - Source removal, treatment or control;
  - Restoration of groundwater quality to meet applicable SCGs to the extent practicable; and
  - Plume containment/stabilization.

- Prevent soil vapor intrusion into structures:
  - Implement a monitoring plan to evaluate the potential for exposure relative to soil vapor intrusion;
  - Conduct supplemental remedial actions to address soil or groundwater volatile contamination that has the potential to partition to soil vapor; and
  - Implement engineering controls to address soil vapor intrusion (e.g., sub-slab depressurization system, etc.).

3.4 Contaminants of Interest

Based on studies performed to date, the contaminants of interest are primarily comprised of:

- Chlorinated VOCs (predominantly PCE) in soil, soil vapor, groundwater, and sewer sediments that may be attributable to the apparent former dry cleaning supply and equipment operations;
- Petroleum-related VOCs and SVOCs in soil in proximity to closed-in-place USTs and a trench drain,
- PAH SVOCs and some Metals in historic urban fill and site soils; and
- PCBs primarily in one small near-surface area of soil, but also detected at lower concentrations in a couple soil samples collected from a depth interval of 20-22' at two test boring locations.

3.5 Development of Remediation Criteria

In order to evaluate the effectiveness of remedial alternatives for this Site, the following general and site-specific remediation criteria (i.e., threshold criteria) were developed in accordance with the provisions set forth in DER-10. The first two evaluation criteria listed below are threshold criteria and must be satisfied in order for an alternative to be considered for selection. The subsequent evaluation criteria are primary balancing criteria which are used to compare the positive and negative aspects of each remedial alternative that first meets the threshold criteria:

- Protection of Human Health and the Environment: This criterion is an evaluation of the remedy's ability to protect public health and the environment, and assesses how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, engineering controls or institutional controls. The remedy's ability to achieve each of the RAOs is evaluated.
- Compliance with Standards, Criteria and Guidance Values: Compliance with SCG values addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- Long-Term Effectiveness and Permanence: This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated:
  - Whether residual contamination will pose significant threats, exposure pathways, or risks to the community and environment;
  - The adequacy of the engineering and institutional controls intended to limit the risk;

- The reliability of these controls; and,
- The ability of the remedy to continue to meet RAOs in the future.

- Reduction of Toxicity, Mobility and Volume: The remedy's ability to reduce the toxicity, mobility or volume of site contamination is evaluated. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the Site.
- Short-Term Impacts and Effectiveness: The potential short-term adverse impacts and risks of the remedy upon the community, the workers and the environment during its construction and/or its implementation are evaluated. This includes identification of short-term adverse impacts and health risks, the effectiveness of any engineering controls, and the length of time needed to achieve the remedial objectives.
- Implementability: The technical and administrative feasibility of implementing the remedy is evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. Administrative feasibility includes the availability of the necessary personnel and material, the evaluation of potential difficulties in obtaining specific operating approvals, access for construction, etc.
- Land Use: This criterion is intended to evaluate the remedial alternatives in relation to the planned future use of the Site.
- Cost: Capital, operation, maintenance and monitoring costs are estimated for the remedy and presented on a present worth basis.
- Community Acceptance. This criterion is intended to select a remedial alternative that is acceptable to the community. The public's comments, concerns and overall perception of the remedy are later addressed through the Citizen Participation Plan (CPP) that was developed under the NYSDEC ERP. The CPP provides a mechanism for the public to review and comment on project documents as the project progresses. As such, community acceptance is not discussed in this report.

3.6 General Response Actions

Estimates of the areas and volumes of contaminated media to be addressed were identified in Section 2.3.5 (Nature and extent of Contamination). These estimated areas and volumes are summarized below.

PCE Source Area and Plume: PCE-impacted soil, fill and groundwater are present on the Site, and limited PCE-impacted soil and groundwater are also present off-site to the north. It is estimated that approximately 703 cubic yards (1,160 tons) of PCE-contaminated soil above the 1.3 mg/kg SCO for Protection of Groundwater is located above the uppermost groundwater table or capillary fringe in the on-site source area (refer to Figure 8). The PCE plume in groundwater above water criteria likely encompasses between a 0.5 acre and 0.75 acre area, and is predominantly present in the overburden (refer to Figure 9). Low concentrations of PCE are also present in groundwater within the bedrock (refer to Figure 10).

UST Area: Two abandoned USTs and an estimated 24 cubic yards (40 tons) or less of petroleum contaminated soil are identified on the east side of the 25 Evans Street parcel (refer to Figure 8).

PCB-Impacted Area: An estimated 33 cubic yards (55 tons) or less of PCB-contaminated soil above the 1 mg/kg Restricted residential Use SCO is located in one small area of the Site (refer to Figure 8).

Trench Drain Area: An estimated 77 cubic yards (125 tons) of SVOC and/or metal-contaminated soil above SCOs is located in proximity to a former trench drain on the 25 Evans Street parcel (refer to Figure 8).

Piping Area: An estimated 68 cubic yards (113 tons) or less of PCE-contaminated piping contents and surrounding soils could be present in an area of shallow buried piping on the 320 Andrews Street parcel (refer to Figure 8). It is possible that contents of some sections of this piping or surrounding soils may contain concentrations of PCE greater than its 1.3 mg/kg SCO for Protection of Groundwater.

Historical Fill Material: An estimated 6,900 cubic yards (11,400 tons) or less of fill material and/or adjoining site soils potentially containing PAH SVOCs and/or Metals exceeding SCOs are present at the Site.

General response actions to address the identified contamination in soil or fill can include one or more of the following:

- treatment,
- containment,
- excavation,
- extraction,
- disposal,
- environmental engineering controls, and
- institutional controls.

The response actions are evaluated for application in addressing soil or fill contamination that exceeds applicable NYSDEC SCOs.

General response actions to address the identified contamination in groundwater can include one or more of the following:

- treatment,
- containment,
- extraction,
- disposal,
- environmental engineering controls,
- institutional controls, and
- monitored natural attenuation.

The response actions are primarily evaluated for application in addressing groundwater contamination that exceeds NYSDEC TOGS 1.1.1 groundwater standards or guidance values.

3.7 Development of Alternatives

The alternatives considered for this Site are directed at addressing contamination in soil, fill and groundwater, and these alternatives are presented below. The alternatives consider that the Site will be used for mixed restricted residential and restricted commercial purposes.

1. No Action: A no action alternative is a NYSDEC ERP procedural requirement and provides a baseline to evaluate other alternatives. Under this alternative, remedial and monitoring activities as well as placement of institutional controls or engineering controls at the Site are not implemented. Environmental conditions at the Site would essentially remain as they are, and future use of the Site would not be limited.

2. IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring: Remediation will consist of an IRM involving the removal and off-site disposal of areas of highest impacted soil above soil cleanup criteria for the Site. This IRM includes removal of contaminated soil above the groundwater table in the PCE source area. It is anticipated that some PCE contaminated soil would remain in-place subsequent to the IRM. In addition, a section of buried public sewer that appears to be acting as a preferential migration pathway, some remaining impacted on-site piping and trench drain structure, and two previously closed in-place USTs would be removed and disposed off-site as part of the IRM. In-situ groundwater remediation (e.g., chemical oxidation, bioremediation, zero valent iron, thermal treatment) would be conducted to assist in remediation of residual VOC groundwater contamination above cleanup criteria in the overburden. The remaining contaminants in soil, fill and groundwater (e.g., SVOCs, metals, residual VOCs) would be addressed via institutional controls (e.g., Environmental Easement and Site Management Plan) and engineering controls (e.g., soil vapor mitigation system, cover system). A groundwater monitoring program would be implemented to evaluate the effectiveness of the remedy. This alternative is considered a Track 4 cleanup to allow for restricted residential and restricted commercial use of the Site.

3. Full Removal of Impacted Fill Material, Soil and USTs, Groundwater Remediation; and Groundwater Monitoring: Excavation and off-site disposal would be implemented to completely remediate soil contamination and fill material that exceeds NYSDEC Track 1 SCOs and allows for unrestricted use of the Site. A section of buried public sewer that appears to be acting as a preferential migration pathway, some remaining impacted on-site piping and trench drain structure, and two previously closed in-place USTs would be removed and disposed off-site. Contaminated groundwater that exceeds Track 1 SCOs would be addressed by dewatering excavations, pre-treating the removed water if necessary, and discharging the water to a POTW; and/or contaminated areas in overburden and also bedrock that are not affected by the excavation dewatering would be addressed by in-situ remediation. Groundwater monitoring would be implemented to evaluate the effectiveness of the remedy. This alternative is considered a Track 1 cleanup to allow for unrestricted use of the Site.

4.0 DETAILED EVALUATION OF ALTERNATIVES

The selected alternatives for addressing Site contamination are further evaluated in this section. These alternatives are evaluated relative to the criteria presented in Section 3.0, including the future mixed restricted residential and commercial use of the Site. Table A included in Appendix D compares the assessments of each alternative in relation to the remediation goals, and compares the opinion of costs to implement each alternative.

4.1 Individual Evaluation of Alternatives

Each of the alternatives identified in Section 3.7 are further evaluated in detail in this section of the report. Remedial Alternatives #2 and #3 will include the development and implementation of a Remedial Work Plan and a Health and Safety Plan (HASP).

4.1.1 Alternative #1 - No Action

Under Alternative #1, the environmental conditions at the Site would essentially remain unaltered, and future Site use and development would not be limited via institutional controls or engineering controls. This alternative contains no substantive technical permit requirements. In addition, remedial and monitoring activities as well as placement of institutional controls at the Site are not implemented. Inclusion of this "No Action" alternative is a requirement of the NYSDEC ERP.

4.1.1.1 Alternative #1 Assessment

Protection of Human Health and the Environment: This alternative may not be protective of human health and the environment. Risks associated with potential human health exposure pathways would not be eliminated, reduced or controlled. RAOs for public health protection and environmental protection are not adequately addressed by this alternative.

Compliance with SCG Values: Alternative #1 does not provide adequate monitoring to evaluate compliance with chemical-specific SCG values. Location-specific SCG values are not met since the Site is located within an urban area and could adversely impact human health. Action-specific SCG values are not applicable under the no action alternative.

Long-Term Effectiveness and Permanence: Long-term effectiveness and permanence would not be adequately monitored. Potential exposure pathways identified as part of this project could occur under the No Action alternative.

Reduction of Toxicity, Mobility and Volume: It is likely that natural attenuation and other factors such as advection, dispersion, sorption, diffusion, etc. are occurring at this Site that would result in reduction of contaminant toxicity, mobility or volume over long periods of time (e.g., decades). This alternative would likely require a longer period of time than the more aggressive alternatives being evaluated.

Short-Term Impacts and Effectiveness: There would be no increased short-term impacts or risks associated with Alternative #1 since remedial activities are not implemented.

Implementability: Of the alternatives being considered, Alternative #1 is easiest to technically and administratively implement since remedial, institutional, monitoring, etc. activities are not required. In addition, there are no labor, material, permitting or accessibility requirements for this alternative.

Planned Future Use of the Site: The Site is currently vacant urban land that the City envisions being redeveloped for Restricted Residential Use and/or Restricted Commercial Use. It is anticipated that this alternative would not be acceptable in relation to the planned future use of the Site.

Cost: There are no capitol/initial costs or Operation, Maintenance, and Monitoring (OM&M)/Annual/Closeout costs associated with the No Action alternative. The costs for this alternative are summarized below and in Table B included in Appendix D.

Capital/Initial Cost	$ 0
OM&M/Annual/Closeout Present Worth Cost	$ 0
Total Present Worth Cost	**$ 0**

4.1.2 Alternative #2 - IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring

Alternative #2 consists of various technical and administrative actions that are intended to perform remediation of the highest concentrations of contamination at the Site, reduce exposure to Site contaminants, and provide long-term monitoring of groundwater to document the effectiveness of the remediation completed and to ensure that the contamination is not migrating. Approximate areas to be actively remediated under Alternative #2 are shown on Figure 8 and Figure 9. This alternative is considered a Track 4 cleanup for Restricted Residential Use and Restricted Commercial Use. Further details are provided below.

IRM Removals

Interim Remedial Measure (IRM) removal work would be completed at the Site. The locations of the IRM removal work are shown on Figure 8, and the IRM removals are summarized below.

1. PCE Source Area: The source area of PCE-contaminated soil above the uppermost groundwater table or capillary fringe would be removed and disposed off-site. Using the modeled extent of soil exceeding 1.3 ppm of PCE as a guide, it is estimated that 703 cubic yards (1,160 tons) of PCE contaminated soil would be removed. Based on the modeling, it is estimated that 673 cubic yards (1110 tons) of clean re-usable soil would need to be excavated and staged on-site in order to remove the extent of PCE-contaminated soil projected for off-site disposal. The clean soil would later be re-used to partially backfill the excavation. It is assumed that dewatering would be required to advance the excavation to the required depth. Thirteen post-excavation field samples and quality assurance/quality control (QA/QC) samples would be collected and analyzed for VOCs using United States Environmental Protection Agency (USEPA) Method 8260.

2. Buried Sewer System in Evans Street Right-Of-Way: An approximately 96-foot long length of sewer system piping and associated manholes that is located within and north of the PCE source areas would be removed and disposed off-site. It is anticipated that approximately 61 cubic yards (101 tons) of PCE contaminated soil within a 2' deep by 8' wide area around this length of buried sewer line would also be removed and disposed off-site. Eight post-excavation field samples and QA/QC samples would be collected and analyzed for VOCs using USEPA Method 8260.

3. UST Area: The two abandoned USTs and an estimated 24 cubic yards (40 tons) or less of petroleum contaminated soil would be removed and disposed off-site. Six post-excavation field samples and QA/QC samples would be collected and analyzed for VOCs using USEPA Method 8260, and SVOCs using USEPA Method 8270.

4. PCB Impacted Area: The area of PCB-contaminated soil above the 1 mg/kg restricted residential Use SCO with an estimated volume of 33 cubic yards (55 tons) or less would be removed and disposed off-site. Five post-excavation field samples and QA/QC samples would be collected and analyzed for PCBs using USEPA Method 8082.

5. Trench Drain Area: The SVOC and/or metal-contaminated soil above SCOs located in proximity to a former trench drain on the 25 Evans Street parcel with an estimated volume of 77 cubic yards (125 tons) would be removed and disposed off-site. Ten post-excavation field samples and QA/QC samples would be collected and analyzed for VOCs using USEPA Method 8260, SVOCs using USEPA Method 8270, and TAL metals using USEPA Methods 6010 and 7471.

6. Piping Area: The area of shallow-buried PCE-contaminated piping, its contents and surrounding soils on the 320 Andrews Street parcel with an estimated volume of 68 cubic yards (113 tons) or less would be removed and disposed off-site. Eight post-excavation field samples and QA/QC samples would be collected and analyzed for VOCs using USEPA Method 8260.

For estimating purposes, it is assumed that infiltrating and storm water would be pumped into two frac tanks and that up to 40,000 gallons of water would be collected and disposed of off-site. It is anticipated that excavation dewatering would only be required during removals associated with the PCE Source Area and the buried sewer system in the Evans Street right-of-way. The water would be discharged to a publicly owned treatment works (POTW) under a sewer use permit, and it would be pre-treated if deemed necessary.

The post-excavation soil samples would be collected and analyzed to establish baseline conditions. Guidance in NYSDEC DER-10 and input from the NYSDEC Project Manager would be used to determine the actual locations and numbers of post-excavation samples to be collected and analyzed from each IRM removal area.

It is assumed that components of a post-removal remediation system (e.g., delivery system constructed of porous backfill, perforated horizontal or vertical subsurface piping connected to vertical solid riser piping; zero valent iron treatment zone or reactive barrier; etc.) would be installed in the PCE source area IRM excavation, and also the Evans Street right-of-way sewer system IRM excavation, prior to backfilling to assist in future remediation of residual impact within groundwater.

Subsequent to the IRM removal work, excavations would be backfilled with site soils deemed re-usable, and also with clean imported select geotechnical fill (e.g., crushed stone, Bank Run, etc.) that meets NYSDEC requirements set forth in DER-10.

Well Decommissioning and Subsequent Replacement

To the extent possible and practicable, monitoring wells in proximity to IRM removal areas would be protected from damage for later re-use. However, it is anticipated that some groundwater monitoring wells (e.g., MW-1, MW-1R, MW-2, MW-2R MW-4 and MW-4R may need to be decommissioned prior to, or during, the IRM removal work. The wells would be decommissioned in accordance with protocols outlined in the NYSDEC document titled "CP-43: Groundwater Monitoring Well Decommissioning Policy" dated November 3, 2009.

The remaining existing wells would be maintained until such time that their decommissioning is formally requested, and only after the NYSDEC formally concurs that they can be decommissioned. In order to maintain these wells, many of their finished elevations would be adjusted to accommodate final Site grading (e.g., extend riser pipes, re-set or replace flush-mounted curb boxes).

It is anticipated that new monitoring wells would be installed after the IRM removal and backfilling work was completed, and that some of these new wells might be replacement wells for some of the previously decommissioned wells as deemed necessary.

In-Situ Groundwater Remediation

In-situ groundwater remediation at the Site would be conducted to target residual PCE in groundwater, aquifer material, or DNAPL (if present) within the overburden. Figure 9 depicts the approximate plume area currently targeted for in-situ groundwater treatment. It is anticipated that the in-situ remediation would consist of one or more technology, possibly including chemical oxidation products, bioremediation products, zero-valent iron reactive zone/barrier technology and/or thermal treatment. It is presumed that in-situ remediation could include zero valent iron treatment zones/reactive barriers, one or more injection through a delivery system that is installed in the former PCE source area excavation and the former Evans Street right-of-way sewer excavation and also at vertical injection points as deemed necessary, etc. Depending upon the remedial technology selected, it is anticipated that the in-situ groundwater remediation would be completed within a one to three year timeframe (e.g., one year for chemical oxidation, three years for bioremediation). Bench-scale treatability tests, a pilot scale study, baseline monitoring, process monitoring and performance monitoring would likely be completed as part of this remedial component.

Institutional Control

As part of Alternative #2, it is anticipated that institutional controls would include the following elements:

- Institutional control in the form of an environmental easement accompanied by a survey map meeting NYSDEC requirements, would be imposed that would:
  - Limit the use and development of the property to restricted-residential and commercial use, which would also permit industrial use;

- Restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH;
- Require evaluation of the potential of vapor intrusion into any new structures, and installing and operating a vapor mitigation system if deemed necessary; and
- Require the property owner to complete and submit to the NYSDEC a periodic certification of the institutional controls.

The periodic certification of institutional controls would be prepared and submitted by a professional engineer or such other expert acceptable to the NYSDEC, until the NYSDEC notifies the property owner in writing that this certification is no longer needed. This submittal would: contain certification that the institutional controls put in place are still in place and are either unchanged from the previous certification or are compliant with NYSDEC-approved modifications; allow the NYSDEC access to the site; and state that nothing has occurred that would impair the ability of the control to protect public health or the environment.

- Development and implementation of a Site Management Plan (SMP) to require evaluating the potential for vapor intrusion into any future buildings to be constructed on the Site, including requirements to mitigate such potential vapor intrusions through use of environmental engineering controls [e.g., sub-slab depressurization system (SSDS) or sub-membrane depressurization system (SMDS), etc.], or through other means associated with construction of the buildings in a manner that preclude SVI exposure. The SMP would identify use restrictions for the Site (e.g., property development and groundwater use restrictions, etc.), would include a HASP to assist in reducing potential exposures to Site contaminants, and would include an OM&M Plan associated with groundwater monitoring and engineering controls (as required). The SMP would also include an Excavation Work Plan to manage the handling, characterization, disposal and re-use of potentially impacted Site media.

Engineering Control

As an engineering control, areas of the Site that have not already been covered with greater than two feet of clean select geotechnical fill (e.g., former basements and IRM excavations backfilled with crushed stone) would require a cover system in accordance with DER-10, 5.4(e). The primary purpose of the cover system is to preclude potential exposure to contaminants in the near surface urban fill materials that will remain on-site under this alternative. The cover system would generally consist of earthen cover or impervious surfaces such as new buildings, asphalt or concrete pavement. If an earthen cover system is to be used on a portion of the Site to support vegetative growth, it would consist of a minimum two-foot thick layer of soil underlain by a demarcation layer (e.g., plastic construction fencing), where the top six inches of soil consists of topsoil.

This alternative assumes that new buildings to be constructed on the Site would require a SVI mitigation system consisting of SSDS or SMDS. For the purposes of developing an opinion of probable cost, it is assumed that the total footprint of buildings to be constructed on the site will amount to 50,000 square feet (i.e., about 77% of the Site's area).

Groundwater Monitoring

Subsequent to the IRM removals and in-situ groundwater remediation, a groundwater monitoring program would be implemented to evaluate the effectiveness of the remedy. For each monitoring event, static water level measurements would be collected from monitoring wells, and one or more potentiometric groundwater contour maps would be prepared. This alternative presumes that groundwater monitoring would be performed on a quarterly basis for a period of two years, and on an annual basis for up to three additional years. However, the actual groundwater monitoring plan would be identified in a subsequent Remedial Work Plan, and would be dependent upon post-IRM conditions and the specific in-situ groundwater remediation technology that is implemented (e.g. more aggressive remediation will likely require shorter duration of monitoring). During each monitoring event, it is anticipated that groundwater samples would be collected from at least eight monitoring wells. Samples would be monitored for water quality parameters (e.g., dissolved oxygen, oxidation-reduction potential, conductivity, temperature, turbidity and pH), and also undergo analytical laboratory testing for TCL VOCs using USEPA Method 8260 and other parameters as necessary to monitor the effectiveness of the remedy based on the remedial technology selected.

With approval from regulatory agencies, the duration and frequency of the groundwater monitoring, as well as the parameters to be tested, may be adjusted based on the test results of samples collected during the first year of the monitoring program.

Goals of this alternative include: remediating the VOC, PCB and petroleum contamination in soil to achieve Restricted Residential Use SCOs and Protection of Groundwater SCOs; remediating the residual VOC contamination in groundwater to achieve standards and guidance values as defined in NYSDEC TOGS 1.1.1 to the extent practicable, and controlling exposure to residual contaminants that may be present in historic fill material and soil at the Site.

4.1.2.1 Alternative #2 Assessment

Protection of Human Health and the Environment: It is anticipated that Alternative #2 would be protective of human health and the environment under current site conditions, and future restricted residential and/or restricted commercial use of the Site. Risks associated with potential human health exposure pathways would be eliminated or adequately controlled/mitigated. With the exception of restoring the groundwater aquifer to pre-disposal/pre-release conditions, RAOs for soil and groundwater would be adequately addressed by this alternative in relation to protection of on-site public health and the environment. The tasks associated with addressing the RAOs could readily be completed.

Compliance with SCG Values: Alternative #2 would meet SCG values for Restricted Residential Use and Protection of Groundwater for soil contaminated with VOCs. Some soil or fill material containing other types of constituents (e.g. SVOCs, metals) at concentrations exceeding Restricted Residential Use SCOs or Protection of Groundwater Use SCOs would remain on-site, but would be managed in accordance with institutional controls (ICs) and engineering controls (ECs). Alternative #2 provides adequate monitoring to evaluate compliance trends in relation to chemical-specific SCG values for soil and groundwater.

This alternative would meet location-specific SCG values for protection of on-site human health and the environment. Action-specific SCG values would also be adequately addressed for this alternative.

Long-Term Effectiveness and Permanence: The long-term risk associated with the contamination would be effectively reduced by: 1) the IRM removals; 2) in-situ remediation of overburden groundwater; and 2) the cover system over the Site. It is anticipated that the components of this alternative would prove to be reliable, and would have the ability to continue to meet RAOs in the future. The remedial components of this alternative are effective in the long term, and permanently remove or destroy the VOCs in the soil and groundwater at the Site that require remediation, and control other contaminants present at the Site. The long-term effectiveness and permanence of this alternative in relation to residual contaminants would be monitored.

Reduction of Toxicity, Mobility and Volume: The IRM removals, in-situ groundwater remediation, natural attenuation, and other factors such as advection, dispersion, sorption, diffusion, etc. would result in reduction of contaminant toxicity, mobility or volume.

Short-Term Impacts and Effectiveness: This alternative would likely result in a slight risk in regard to short-term impacts. It is anticipated that Site workers and the community would have increased risk at exposure to site contamination (i.e., nuisance odors, inhalation and contact with site contaminants, etc.). However, implementation of a HASP and Community Air Monitoring Plan (CAMP) that include dust and fume control contingencies, and also a SMP, would protect site workers and the nearby community from these short-term risks. In addition, it is anticipated that there would be short-term impacts to the community associated with increased noise and possible traffic congestion during various phases of the remediation field work. It is anticipated that active on-site remediation activities could take a total of three to five months to implement. The IRM removals would result in significant reduction of potential impacts to workers during subsequent redevelopment activities. Physical hazard risks would also likely increase during excavation and backfill activities (e.g., excavation wall stability issues, dewatering issues, etc.).

Implementability: This alternative can be implemented easily in relation to the anticipated future use of the Site for Restricted Residential Use and/or Restricted Commercial Use. Spatial requirements can be accommodated on this vacant urban Site, and would not impede completion of this alternative.

Planned Future Use of the Site: The Site is currently vacant urban land that the City envisions being redeveloped for Restricted Residential Use and/or Restricted Commercial Use. This alternative would be acceptable in relation to the planned future use of the Site.

Cost: Alternative #2 costs are less than Alternative #3 costs. The costs for this alternative are summarized below and detailed in Table C included in Appendix D.

Capital/Initial Cost	$	1,408,800
OM&M/Annual/Closeout Present Worth Cost	$	115,589
Total Present Worth Cost	**$**	**1,524,389**

4.1.3 Alternative #3 - Full Removal of Impacted Fill Material, Soil and USTs; Groundwater Remediation; and Groundwater Monitoring

Alternative #3 consists of various technical actions that are intended to perform extensive remediation of Site contaminants, and provide monitoring of groundwater to evaluate the effectiveness of the remedy. Inclusion of this Track 1 alternative is a program requirement (i.e., restore the Site to "pre-disposal conditions"), and would allow Unrestricted Use of the Site.

Soil/Fill Removal

In order to develop the scope of this remedial alternative, the test results for soil and historic fill samples were compared to NYSDEC Track 1 SCOs for Unrestricted Use. The volume soil/fill to be excavated, transported off-site, disposed of at a regulated landfill, and replaced with imported fill meeting NYSDEC requirements outlined in DER-10 is estimated to total approximately 8,420 cubic yards (i.e., 13,895 tons). [Note: The removal includes the IRM removal areas identified in Alternative # 2 (refer to Figure 8), as well as historic fill and other soil exceeding Unrestricted Use SCOs. This alternative also includes removal of the buried sewer system located in the portion of the Evans Street right-of-way that bounds the Site.] Areas of select clean geotechnical fill (e.g., crushed stone) meeting DER-10 requirements that were imported subsequent to the demolition work would remain on site and not be temporarily excavated if underlain by indigenous soil that meets Unrestricted Use SCOs.

It is assumed that components of a delivery system (e.g., porous backfill, perforated horizontal or vertical subsurface piping connected to vertical solid riser piping) would be installed within the excavation at the PCE source area and along the Evan Street right-of-way sewer system prior to backfilling to assist in future remediation of residual impact within groundwater.

Well Decommissioning

As part of this alternative, 18 existing on-site groundwater monitoring wells would be decommissioned in accordance with protocols outlined in the NYSDEC document titled "CP-43: Groundwater Monitoring Well Decommissioning Policy" dated November 3, 2009. The wells would be decommissioned prior to or during the removal of soil/fill described above.

Groundwater Dewatering and Treatment

During the soil/fill removal work, it is assumed that infiltrating water would be pumped into four frac tanks, and that the water would be discharged to a POTW under a sewer use permit, and it would be pre-treated if deemed necessary, as the removal work progressed (i.e., discharge from one or more tank at varying intervals of the project. It is anticipated that up to 100,000 gallons of water would be collected and disposed of off-site.

Post-Excavation Soil Sampling, Backfilling, and Restoration

Post-excavation confirmatory soil samples would be collected and analyzed for appropriate parameters. Guidance in NYSDEC DER-10 and input from the NYSDEC Project Manager would be used to determine location and number of post-excavation samples to be collected and analyzed from each IRM removal area. Considering the site is approximately 1.49 acres (i.e., 64,904.4 square feet) in size, and that fill material and other contaminate soil to be removed generally exists across the entire site, it is anticipated that up to 72 discrete soil samples (i.e., approximately one sample per 900 square feet of area) and QA/QC samples would be collected from the bottom of the removal areas. In addition, it is anticipated that up to 34 discrete soil samples (i.e., approximately one sample per 900 square feet of area), and QA/QC samples would be collected from the sidewalls of the removal areas. These samples and the QA/QC samples would be tested for TCL VOCs, TCL SVOCs, and TAL Metals using USEPA Methods 8260, 8270, 6010 and 7471. In addition, up to eight of these samples and a QA/QC sample would also be tested for PCBs using USEPA Method 8082. If confirmatory soil sample results exceed applicable SCG values (i.e., Unrestricted Use SCOs), then further removal and off-site disposal would be performed to the extent deemed necessary by the NYSDEC, and additional confirmatory soil samples would be collected and analyzed. Once confirmatory soil sample test results indicate that no further soil needs to be removed, imported soil (e.g., topsoil, bank run, crusher run, etc.) that does not contain constituents at concentrations above Unrestricted Use SCOs (i.e., Track 1 cleanup), and also meets other criteria outlined in DER-10, would be used to backfill the excavation areas and be re-seeded/improved to the extent deemed appropriate for the redevelopment plans for the Site.

Installation of New Monitoring Wells

Subsequent to the soil/fill removal, dewatering and backfilling activities at the Site, 10 new monitoring wells (presumed to consist of five overburden monitoring wells and five bedrock monitoring wells) would be installed within and around the area that would undergo in-situ groundwater remediation described below. These wells would be used for baseline groundwater monitoring, performance monitoring, and also the post-treatment groundwater monitoring described below.

In-Situ Groundwater Remediation

To supplement the excavation dewatering groundwater remediation discussed above, in-situ groundwater remediation at the Site would be conducted to target residual site contaminants (e.g., PCE) in groundwater, sorbed to aquifer materials, or DNAPL (if present) within the overburden and bedrock that have the potential to cause exceedances of groundwater SCGs (i.e., TOGS 1.1.1 groundwater standards and guidance values). If necessary, other types of constituents (e.g., metals) would also be remediated to the extent required by the NYSDEC. Figure 9 and Figure 10 depict the approximate areas currently targeted for in-situ groundwater treatment. It is anticipated that the in-situ remediation would consist of one or more technology, including chemical oxidation products, zero valent iron treatment

zones/reactive barriers designed to remediate contaminants that would otherwise have the potential to migrate off-site to the north, bioremediation products and/or thermal treatment. It is presumed that in-situ remediation could include zero valent iron treatment zones/reactive barriers, one or more injection through a delivery system that is installed in the former PCE source area excavation and the former Evans Street right-of-way sewer excavation and also at vertical injection points as deemed necessary, etc. It is anticipated that the in-situ groundwater remediation would be completed within a one to three year timeframe. Bench-scale treatability tests, a pilot scale study, baseline monitoring, process monitoring and performance monitoring would likely be completed as part of this remedial component.

Groundwater Monitoring

As part of Alternative #3, a groundwater monitoring program would be implemented. For each monitoring event, static water level measurements would be collected from the ten monitoring wells, and potentiometric groundwater contour map(s) would be prepared. Groundwater monitoring would be performed on a quarterly basis for a period of up to two years, and on an annual basis for up to three additional years. During each monitoring event, samples would be collected from the ten groundwater monitoring wells, the samples would be monitored for water quality parameters (e.g., dissolved oxygen, oxidation-reduction potential, conductivity, temperature, turbidity and pH), and analytical laboratory samples would be tested for TCL VOCs and possibly also TAL Metals using USEPA Methods 8260, 6010 and 7470, and other parameters as necessary to monitor the effectiveness of the remedy based on the remedial technology selected.

With approval from regulatory agencies, the duration and frequency of the groundwater monitoring, as well as the parameters to be tested, may be adjusted based on the test results of samples collected during the first year of the monitoring program.

4.1.3.1 Alternative #3 Assessment

Protection of Human Health and the Environment: It is anticipated that Alternative #3 would be protective of human health and the environment. Risks associated with potential human health exposure pathways would be eliminated or adequately controlled. RAOs for soil and groundwater are adequately addressed by this alternative in relation to protection of public health and the environment. The tasks associated with addressing the RAOs would be difficult to complete.

Compliance with SCG Values: Alternative #3 is anticipated to meet chemical-specific SCG values and location-specific SCG values. Action-specific SCG values can be adequately addressed for this alternative. Although not anticipated, any residual contamination could be addressed with natural attenuation.

Long-Term Effectiveness and Permanence: This alternative would be effective in the long term and result in a permanent remedy. The long-term risk associated with the contamination would be eliminated. It is anticipated that this alternative would prove to be reliable, and would meet RAOs in the future.

Reduction of Toxicity, Mobility and Volume: Under Alternative #3, the toxicity, mobility and volume of the contamination is reduced for the Site. The effects of removing this contamination from the Site and the effects of remediating residual contamination would be irreversible.

Short-Term Impacts and Effectiveness: This alternative would likely result in the greatest increased risk to short-term impacts to human health and the environment. Site workers and the community would have greater risk at exposure to site contamination (i.e., nuisance odors, inhalation and contact with site contaminants, etc.). However, implementation of a HASP and CAMP that include dust and fume control contingencies would protect site workers and the nearby community from these short-term risks. It is anticipated that there would be short-term impacts to the community associated with increased noise and possible traffic congestion during various phases of the remediation field work. This alternative includes the most disruption to the Site and would take the longest time on-site to implement. The removal of the contamination would result in significant reduction of potential impacts to workers during subsequent development operations. Physical hazard risks would also likely increase during excavation and backfill activities (e.g., excavation wall stability issues, dewatering issues, etc.).

Implementability: Alternative #3 can be implemented; however, its implementation would pose a variety of challenges. Remediation of contaminants in the bedrock could pose a significant challenge. Precipitation events could result in significant dewatering and stabilization requirements associated with excavations that need to remain open for long periods of time. The current perimeter fence and gate system would need to be dismantled and installed in the adjoining right-of-ways that would require closing of one or more of these right-of-ways from being used by the public during the project. Public infrastructure and buried utilities in the adjoining right-of-ways may require protection involving additional excavation and/or use of engineering controls.

Planned Future Use of the Site: The Site is currently vacant urban land that the City envisions being redeveloped for Restricted Residential Use and/or Restricted Commercial Use. This alternative would be acceptable in relation to the planned future use of the Site.

Cost: Costs for implementing Alternative #3 would be excessive in relation to the benefits gained. The costs for this alternative are summarized below and detailed in Table D included in Appendix D.

Capital/Initial Cost	$	3,307,800
OM&M/Annual Closeout Present Worth Cost	$	169,138
Total Present Worth Cost	**$**	**3,476,938**

4.2 Comparative Evaluation and Recommended Alternative

This section of the report compares the remedial alternatives proposed for this Site. For reference, the alternatives are reiterated as follows:

Alternative #1 No Action

Alternative #2 IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring

Alternative #3 Full Removal of Impacted Fill Material, Soil and USTs; Groundwater Remediation; and Groundwater Monitoring

As previously indicated, Table A included in Appendix D compares the assessments of each alternative in relation to the remediation goals, and compares the opinion of costs to implement each alternative. A breakdown of estimated costs for each alternative is found in Tables B - D included in Appendix D. The costs provided are for comparative purposes only and actual costs will likely vary.

The proposed remedy is based on the results of the 2006 Phase II ESA, the 2010/2011 At-Grade and Sub-Grade Demolition Phase Study, the RI, and the evaluation of alternatives presented herein. A detailed evaluation of the three remedial alternatives was performed, and implementation of Alternative #2 (IRM Removals; In-Situ Groundwater Remediation; Institutional Controls; Engineering Controls; and Groundwater Monitoring) is recommended for the Site. Alternative #2 would achieve the remediation goals for the Site by: removing contaminated soil/fill; removing two closed in-placed petroleum USTs; removing impacted sewer piping; treating contaminated groundwater; controlling exposure to residual contamination through the use of institutional controls and engineering controls; creating conditions that restore groundwater quality to the extent practicable; and monitoring of groundwater to evaluate the effectiveness of the remedy.

Comparative Analysis of Alternatives

- Alternative #2 satisfies the threshold criteria (protection of human health and the environment; and compliance SCG values) and provides the best balance of the primary balancing criteria described that are identified in Section 3.5. Alternative #1 does not satisfy the threshold criteria and is not considered viable alternative; thus is not further discussed in this comparison. Alternative #3 satisfies the threshold criteria, but does not provide the best balance of the primary balancing criteria.
- The long term effectiveness and permanence of Alternative #2 is adequate as a Track 4 cleanup with use restrictions. The adequacy and reliability of engineering controls and institutional controls will have the ability to continue to meet RAOs and keep residual contamination from posing significant threats, exposure pathways or risks to the community or environment. The long term effectiveness and permanence of Alternative #3 is adequate as a Track 1 cleanup for unrestricted use and does not require engineering controls or institutional controls since residual contamination would not be left at the Site.
- Alternative #3 would have a greater reduction in toxicity, mobility and volume of contamination at the Site than Alternative #2; however, Alternative #2 would still result in a significant reduction of toxicity, mobility and volume of contamination at the Site.
- Alternative #3 would likely result in a faster cleanup than Alternative #2; however, Alternative #3 would likely have a higher potential for short-term adverse impacts and risk to the community and workers during implementation of the remedy. For either alternative, implementation of a HASP and CAMP would protect site workers and the nearby community from these short-term risks.

- Alternative #2 can easily be implemented at the Site. Alternative #3 would be difficult to implement, especially given the amount of soil/fill that would require removal and the need to remediate contaminants (especially chlorinated VOCs) in bedrock groundwater.
- Alternative #2 and #3 would be acceptable for the planned future use of the Site.
- Alternative #2 costs are anticipated to be more than two times lower than Alternative #3 costs. Alternative #3 costs are excessive in relation to benefits gained over Alternative #2.

In summary, Alternative #2 is a cost effective alternative that is being recommended for implementation at the Site.

It is anticipated that the NYSDEC would allow redevelopment once the following components of Alternative #2 are completed/approved by the NYSDEC:

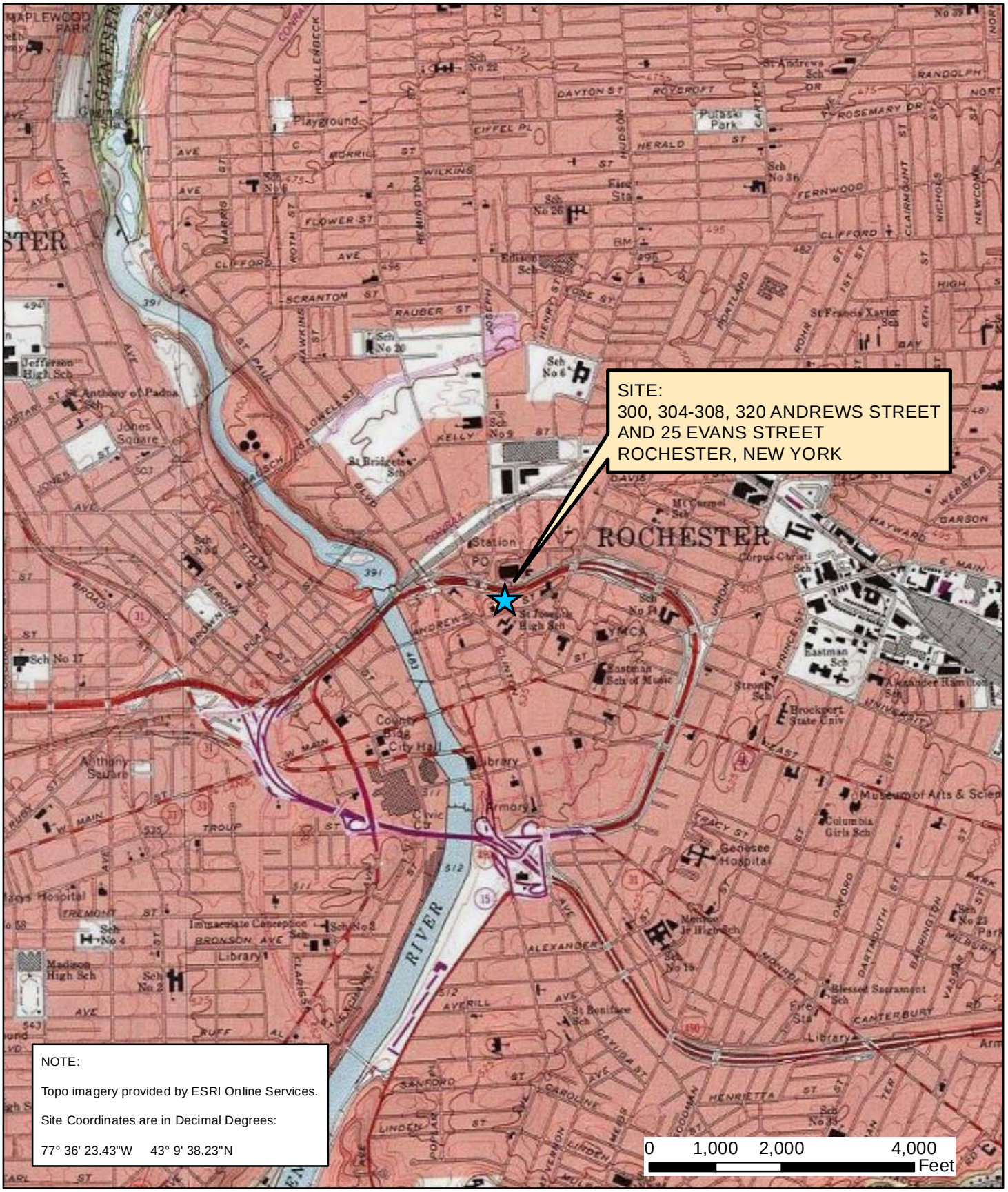
- IRM removals;
- Groundwater remediation;
- Two years of quarterly groundwater monitoring followed by three years of annual groundwater monitoring, which can be modified at NYSDEC's discretion;
- Preparation of a SMP;
- Preparation and recording of the environmental easement, including the required survey map and other supporting documentation as deemed necessary;
- Evaluation of the potential of soil vapor intrusion into new structures, and implementation of a soil vapor mitigation system if deemed required.
- Addressing cover system requirements as part of the redevelopment plan; and
- Preparation of a Final Engineering Report (FER).

5.0 ACRONYMS

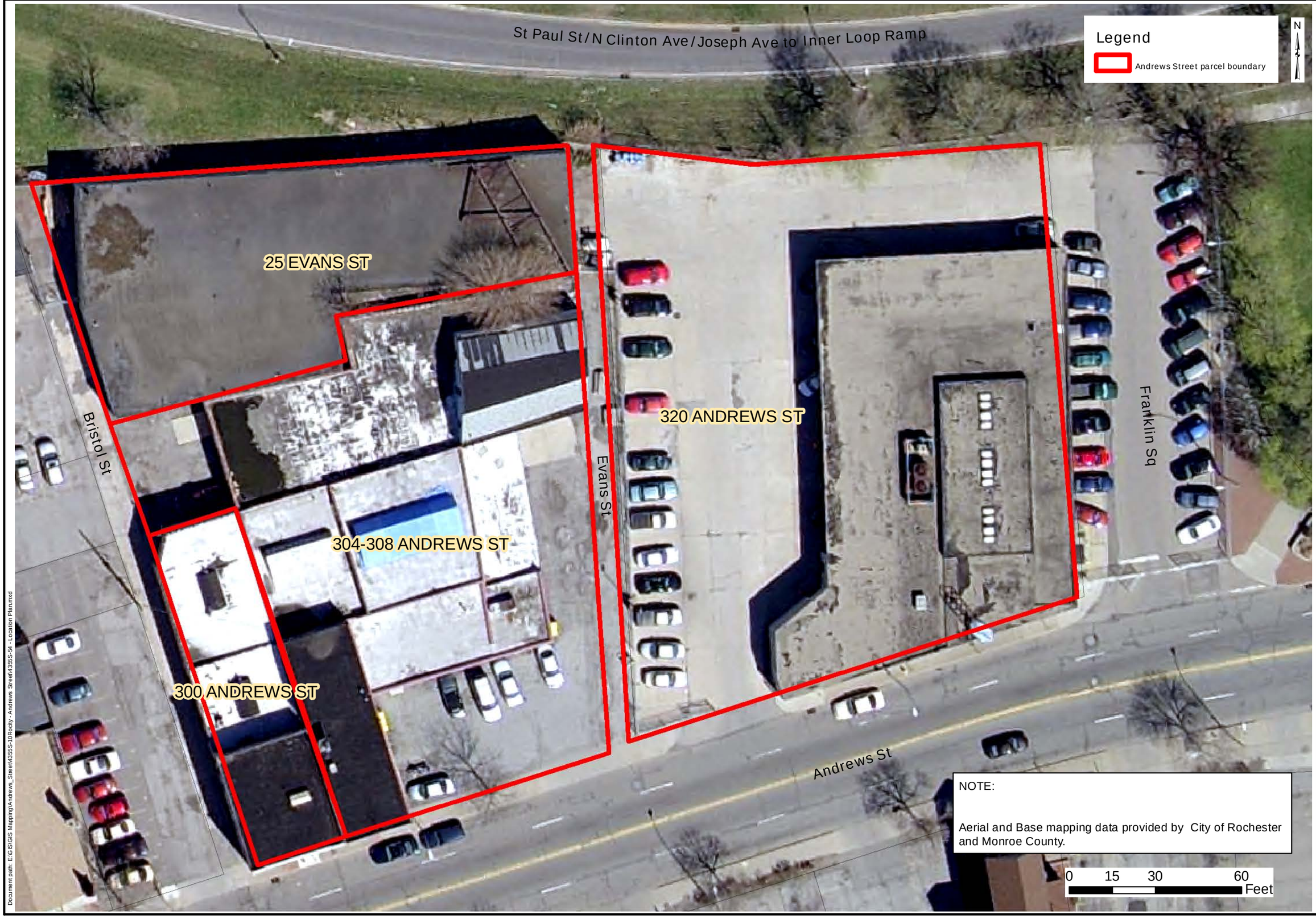
ABCA	Analysis of Brownfields Cleanup Alternatives
AST	Aboveground Storage Tank
Bgs	Below the Ground Surface
CAMP	Community Air Monitoring Plan
CCD	Center City District
City	City of Rochester
CPP	Citizen Participation Plan
CR2	Crusher Run #2
DAY	Day Environmental, Inc.
DNAPL	Dense Non-Aqueous Phase Liquid
EC	Engineering Control
ERP	Environmental Restoration Program
FER	Final Engineering Report
GIS	Geographic Information System
HASP	Health And Safety Plan
IC	Institutional Control
IRM	Interim Remedial Measure
MIP	Membrane Interface Probe
mg/kg	Milligram per Kilogram, or parts per million
LNAPL	Light Non-Aqueous Phase Liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
OM&M	Operation, Maintenance & Monitoring
PAH	Polycyclic Aromatic Hydrocarbon
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene (a/k/a perchloroethene)
Phase I ESA	Phase I Environmental Site Assessment
Phase II ESA	Phase II Environmental Site Assessment
PID	Photoionization Detector
POTW	Publicly Owned Treatment Works
PPB	Parts Per Billion
PPM	Parts Per Million
QA/QC	Quality Assurance/Quality Control
RAO	Remedial Action Objective
REC	Recognized Environmental Condition
RI	Remedial Investigation
RSCO	Recommended Soil Cleanup Objective
SAC	State Assistance Contract
SCG	Standard, Criteria and Guidance
SCO	Soil Cleanup Objective
SMDS	Sub-Membrane Depressurization System
SMP	Site Management Plan
SSDS	Sub-Slab Depressurization System
SVI	Soil Vapor Intrusion
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
TOGS	Technical and Operational Guidance Series
Ug/l	Microgram per Liter
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
XSD	Halogen Specific Detector

FIGURES

\GIS\GIS Mapping\Andrews Street\4355S-1A.mxd



Date: 05-29-2012 Drawn By: CPS Scale: AS NOTED	day **DAY ENVIRONMENTAL, INC.** **Environmental Consultants** **Rochester, New York 14606** **New York, New York 10016-0701**	Project Title: 300, 304-308, 320 ANDREWS STREET AND 25 EVANS STREET ROCHESTER, NEW YORK (NYSDEC SITE NO.: E828144) ENVIRONMENTAL RESTORATION PROJECT Drawing Title: Project Locus Map	Project No.: 4355S-10 FIGURE 1



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DATE	05-2012
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DATE ISSUED	05-25-2012

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DAY ENVIRONMENTAL, INC.
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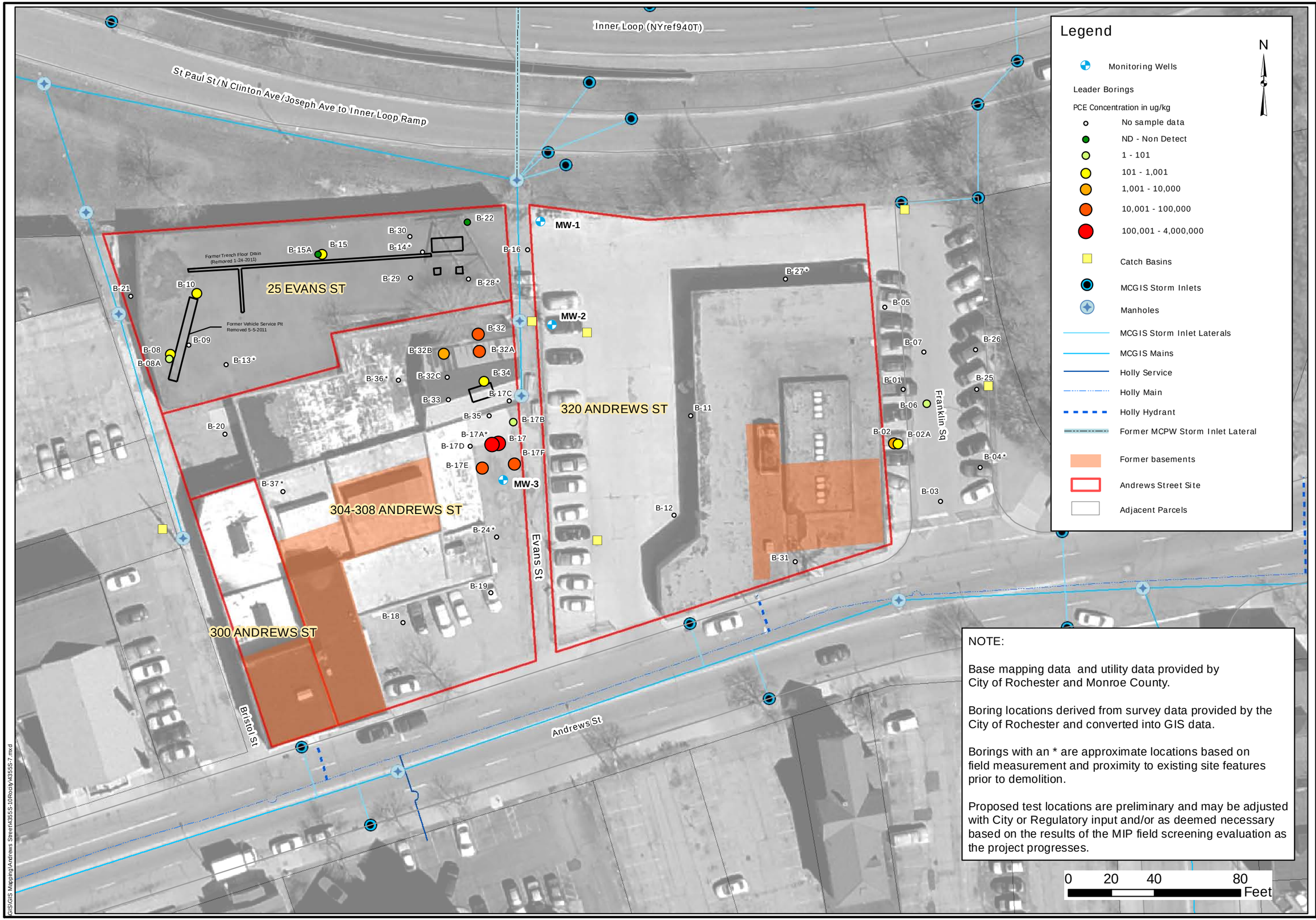
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK
ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE NO.: E828144

Drawing Title
Aerial Site Plan With Parcel Boundaries

Project No.
4355S-10

FIGURE 2



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DATE	DATE DRAWN	DATE ISSUED
05-2012	05-2012	05-25-2012

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DAY ENVIRONMENTAL, INC.
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New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT (NYSDEC SITE NO.: E828144)

Drawing Title
Site Plan with Test Locations and Peak PCE Concentrations
Detected in Soil Samples from 2006 Phase II Environmental Site Assessment

Project No.
4355S-10

FIGURE 3

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Legend

S-24 (2.0') SVOCs, Metals

Sample from test location exceeds one or more Part 375 Soil Cleanup Objective for one or more of the following:

VOC - Volatile Organic Compound
SVOC - Semi Volatile Organic Compounds
PCB - Polychlorinated Biphenyl
Metals
Pesticides

- Tested sample locations
- Andrews Street ERP Site
- Material removed and disposed as regulated non-hazardous waste
- IRM Restriction Zone
- Sub-grade slab
- Above-grade slab
- Basements
- MCGIS Storm Inlets
- Manholes
- MCGIS Storm Inlet Laterals
- MCGIS Mains
- Holly Service
- Holly Main
- Holly Hydrant

N

Sample location with an * (i.e. HM-8*) were submitted to the analytical laboratory for testing.

St Paul St/N Clinton Ave/Joseph Ave to Inn

S-24* (2.0') SVOCs, Metals

S-28* (1.5') SVOCs, Metals

S-26* (2.0') VOCs, SVOCs, Metals

Former Trench Floor Drain (Removed 1-24-2011)

Features associated with USTs

25 EVANS ST

320 ANDREWS ST

Former Vehicle Service Pit (Removed 5-5-2011)

S-59*

Sump/Well - 1
S-30*

Lift Plate

S-31* (1.0') Metals Pesticides

S-48* (1.0') PCB

S-1* (2.0') VOCs

S-10*

S-43* (4.0') Metals

Modified Sump - 1

S-11*

S-13*

S-17* (3.0') Metals

S-14*

RG&E Vault

Franklin Sq

Bristol St

304-308 ANDREWS ST

S-5*

S-34* (2.5') SVOCs, Metals

Evans St

S-7* (4.5' - 5.0') SVOCs, Metals

S-9* (1.5') SVOCs, Metals

300 ANDREWS ST

S-2*

S-4* (8.0') Metals

Andrews St

NOTE:

Sample locations, drain, pipes, basements, and misc. features were located using a Trimble GeoXH GPS Unit with Sub-Foot accuracy. These locations are to be considered approximate.

Base mapping data provided by City of Rochester and Monroe County.

0 15 30 60 Feet

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DESIGNED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
NES	05-2012	CPS	05-2012	AS NOTED	05-25-2012

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT (NYSDEC SITE NO.: E828144)

Drawing Title
Site Plan with Test Locations and Summary of Constituent Types Exceeding Soil Cleanup Objectives from 2010/2011 At-Grade and Sub-Grade Demolition Phase Study

Project No.
4355S-10

FIGURE 4

Legend

- Bedrock monitoring well
- Overburden well
- MIP / Direct - Push sample location
- Shallow boring location
- Test pit sample
- RI Overburden test boring
- Manholes
- Catch basins (CB)
- MCGIS storm inlets
- Small amount of tar substance
- Tar substance found within sewer
- Andrews Street ERP Site
- MCGIS Storm Inlet Laterals
- MCGIS Mains
- Holly Service
- Holly Main
- Holly Hydrant

N

St Paul St/N Clinton Ave/Joseph Ave to Inner Loop Ramp

Inner Loop (NYref940T)

TB-MIP-23

TB-MIP-24

TB-MIP-22

TB-MIP-20

TB-MIP-21 & UST Concrete Chip

MW-11

MW-01R MW-01R(33' Rock)

MW-01

TB-MIP-19

TP-01(5.5')

TP-02(5')NB

TP-03 (10')

TP-3

MW-04

MW-04R

TP-2

TB-02

25 EVANS ST

TP-01(2')

TP-1

MW-08

TB-MIP-15

TB-MIP-25

MW-02R MW-02R (32.5' Rock)

MW-12

TB-01

EMH-2

EMH-2 to EMH-1

MW-02

TB-MIP-14

TP-04(3-4')

MW-05R

TB-MIP-01 PCE Conrete Chip

320 ANDREWS ST

TP-4

TB-MIP-11

MW-05

TB-MIP-10

TB-MIP-12

SED-01(NWCLPP)

SB-04

SB-03

SB-01

TB-MIP-06

TB-03

EMH-1

SB-05

TB-MIP-26

SB-02

MW-07R

MW-09

MW-09R

TB-MIP-07

TB-MIP-03

TB-MIP-13

MW-07

304 ANDREWS ST

TB-MIP-02

MW-03

TB-MIP-05

TB-MIP-04

TB-MIP-09

MW-06

MW-06R

TB-MIP-08

MW-13

Franklin Sq

MW-14R

MW-14

TP-07 PC

TP-7

TP-07(3')

TB-MIP-17

TB-MIP-16

TB-MIP-18

Evans St

300 ANDREWS ST

TP-05(3.5')

TP-5

TP-6

Bristol St

MW-10R

MW-10

Andrews St

NOTE:

Sample locations were located using a Trimble GeoXH GPS Unit with Sub-Foot accuracy. These locations are to be considered approimate.

Sewer lines and features provided by the City of Rochester and Monroe County.

Base mapping data provided by City of Rochester and Monroe County.

0 20 40 80 Feet

DESIGNED BY	DRAWN BY	SCALE	DATE
NES	CPS	AS NOTED	05-2012

DATE DRAWN	DATE ISSUED
05-2012	05-10-2012

DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

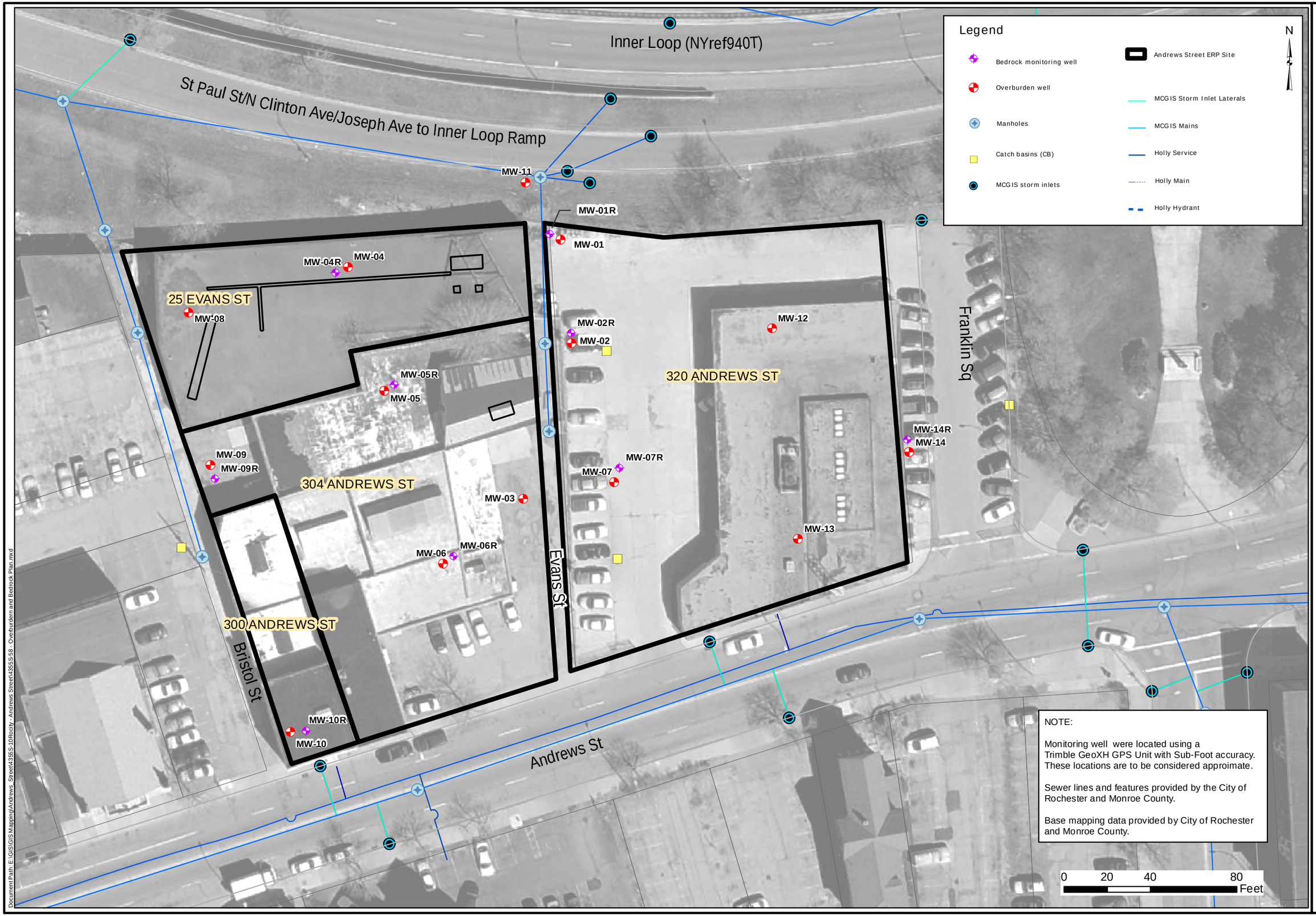
Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK
ENVIRONMENTAL RESTORATION PROJECT (NYSDEC SITE NO.: E828144)

Drawing Title
Site Plan with Cumulative Test Locations from Remedial Investigation

Project No.
4355S-10

FIGURE 5

Document Path: E:\GIS\GIS Mapping\Andrews_Street\4355S-10\Rocity - Andrews Street\4355S-57 - RI Sample Plan.mxd



Document Path: E:\GIS\GIS Mapping\Andrews, Street\4355S-10Rocity - Andrews Street\4355S-58 - Overburdern and Bedrock Plan.mxd

DESIGNED BY	DRAWN BY	SCALE	DATE
NES	CPS	AS NOTED	11-2010

DATE DRAWN	DATE ISSUED
11-2010	05-09-2012

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK
ENVIRONMENTAL RESTORATION PROJECT (NYSDEC SITE NO.: E828144)

Drawing Title
Site Plan with Monitoring Well Locations

Project No.
4355S-10

FIGURE 6

Legend - IRM Excavation

N

- Cumulative soil samples with Peak PCE detected at depth noted
- Peak PCE contour of 1.3ppm in soil

IRM excavation depth intervals in feet

- 0' - 4'
- 4' - 6'
- 6' - 8'
- 8' - 10'
- 10' - 12'

TB-MIP-13 — Sample ID
0.085 ppm — PCE in parts per million
5 ft — Depth Sample taken

- Approximate limits of excavation
- XSD Interpolated area

Note:
IRM Excavation depth contours represent an XSD value of 2.73 X 10^6, which was derived using the Protection of Groundwater SCO for PCE (i.e. 1.3 ppm)

Legend - Site Plan

- Bedrock well
- Overburden well
- Monitoring well
- Manholes
- MCGIS Storm inlets
- Laterals
- MCGIS Mains
- Andrews Street ERP Site

NOTE:

Catch basin features were located using a Trimble GeoXH GPS Unit with Sub-Foot accuracy. These locations are to be considered approximate.

Sewer lines and features provided by the City of Rochester and Monroe County.

Base mapping data provided by City of Rochester and Monroe County.

0 15 30 60 Feet

DESIGNED BY	DRAWN BY	SCALE	DATE
NES	CPS	AS NOTED	05-2012

DATE DRAWN	DATE ISSUED
05-2012	05-25-2012

DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

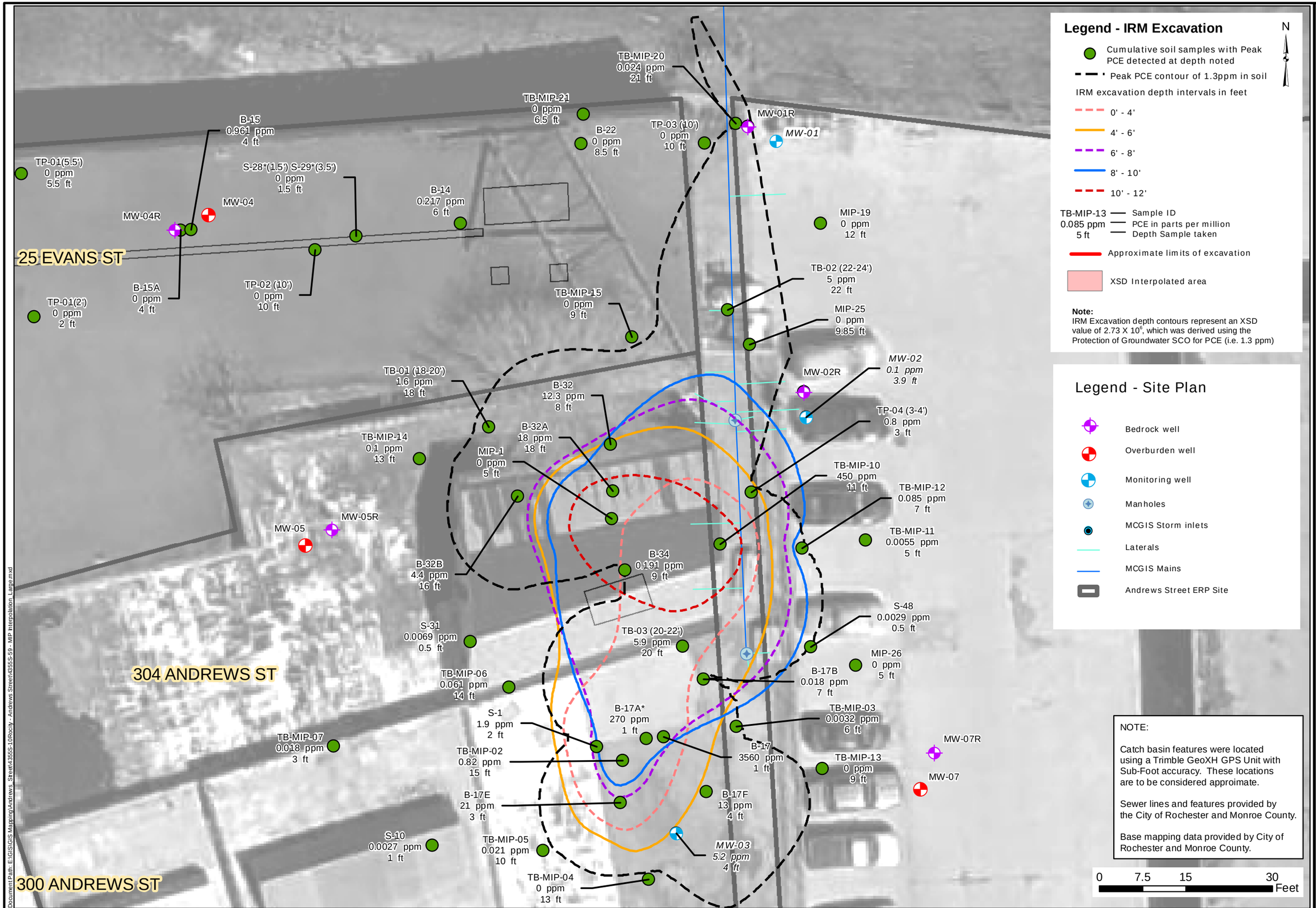
ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE NO.: E828144

Drawing Title
Site Plan with PCE in Soil Greater than 1.3ppm as Interpolated by Modeling
Peak PCE in Soil Samples and Peak XSD in depth intervals using GIS Spatial Analyst

Project No.
4355-10

FIGURE 7

Document Path: E:\GIS\GIS Mapping\Andrews Street\4355S-10\Rocity - Andrews Street\4355S-48 - MIP Interpolation.mxd



Legend - IRM Excavation

N

- Cumulative soil samples with Peak PCE detected at depth noted
- Peak PCE contour of 1.3ppm in soil

IRM excavation depth intervals in feet

- 0' - 4'
- 4' - 6'
- 6' - 8'
- 8' - 10'
- 10' - 12'

TB-MIP-13 — Sample ID
0.085 ppm — PCE in parts per million
5 ft — Depth Sample taken

- Approximate limits of excavation
- XSD Interpolated area

Note:
IRM Excavation depth contours represent an XSD value of 2.73 X 10^6, which was derived using the Protection of Groundwater SCO for PCE (i.e. 1.3 ppm)

Legend - Site Plan

- Bedrock well
- Overburden well
- Monitoring well
- Manholes
- MCGIS Storm inlets
- Laterals
- MCGIS Mains
- Andrews Street ERP Site

NOTE:

Catch basin features were located using a Trimble GeoXH GPS Unit with Sub-Foot accuracy. These locations are to be considered approximate.

Sewer lines and features provided by the City of Rochester and Monroe County.

Base mapping data provided by City of Rochester and Monroe County.

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NES	CPS	AS NOTED	05-2012

DATE DRAWN	DATE ISSUED
05-2012	06-11-2012

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Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

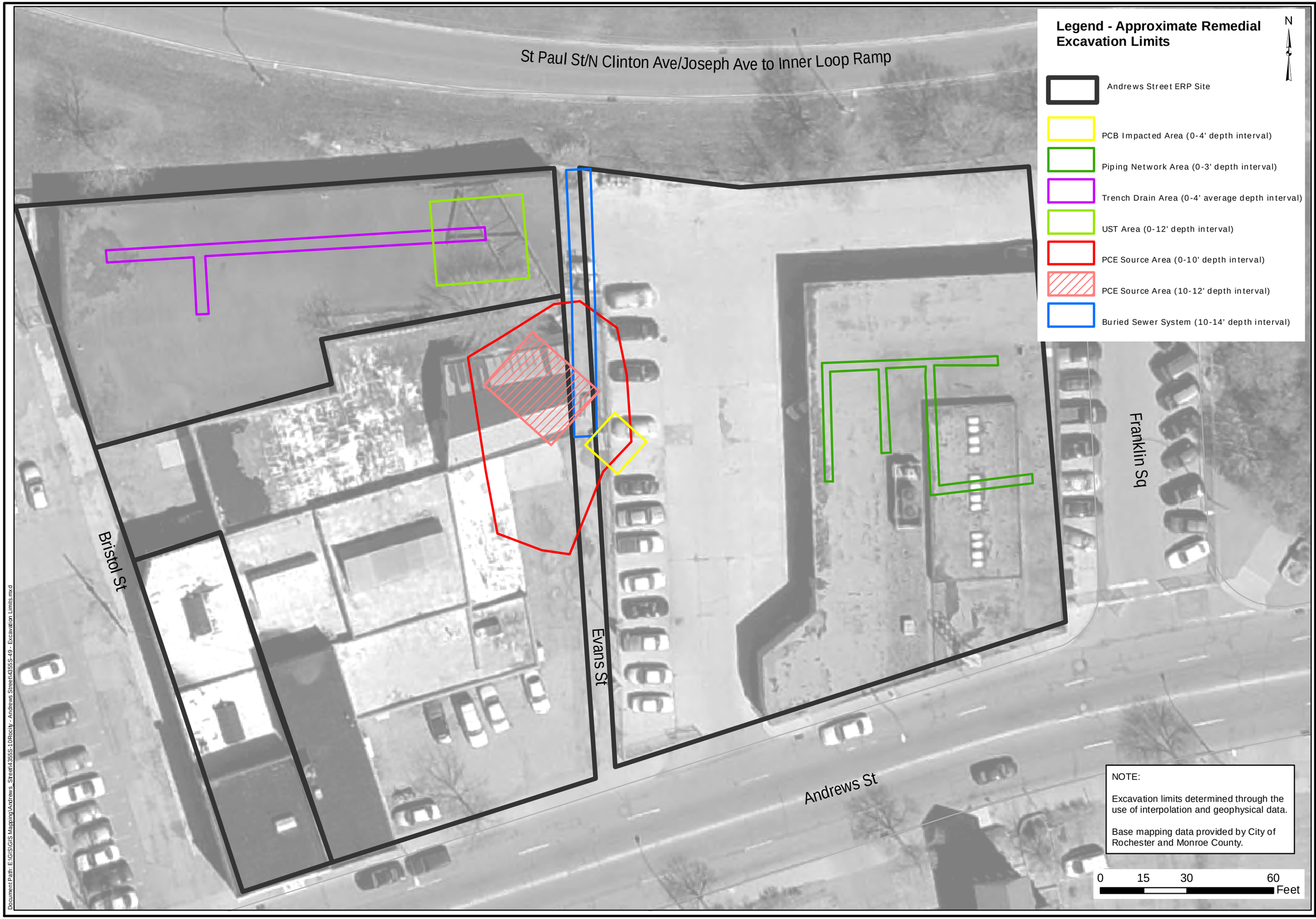
Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK
ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE NO.: E828144

Drawing Title
Enlarged PCE Extent of Soil Greater than 1.3ppm as Interpolated by Modeling
Peak PCE in Soil Samples and Peak XSD in depth intervals using GIS Spatial Analyst

Project No.
4355S-10

FIGURE 7A

Document Path: E:\GIS\GIS Mapping\Andrews_Street\4355S-10\Rocity - Andrews Street\4355S-59 - MIP Interpolation_Large.mxd



Document Path: E:\GIS\GIS Mapping\Andrews_Street\4355S-10Rocity - Andrews Street\4355S-49 - Excavation Limits.mxd

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DATE	05-2012
DRAWN BY	CPS
DATE DRAWN	05-2012
SCALE	AS NOTED
DATE ISSUED	05-10-2012

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT (NYSDEC SITE NO.: E828144)

Drawing Title
Site Plan with Approximate Remedial Excavation Limits

Project No.
4355S-10

FIGURE 8

Document Path: E:\GIS\GIS Mapping\Andrews Street\4355S-10\Rectly - Andrews Street\4355S-51 - GW Overburden Map 02 2012.mxd

DESIGNED BY	NES
DRAWN BY	CPS
DATE	05-2012
DATE DRAWN	05-2012
SCALE	AS NOTED
DATE ISSUED	05-29-2012

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DAY ENVIRONMENTAL, INC.
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Rochester, New York 14606
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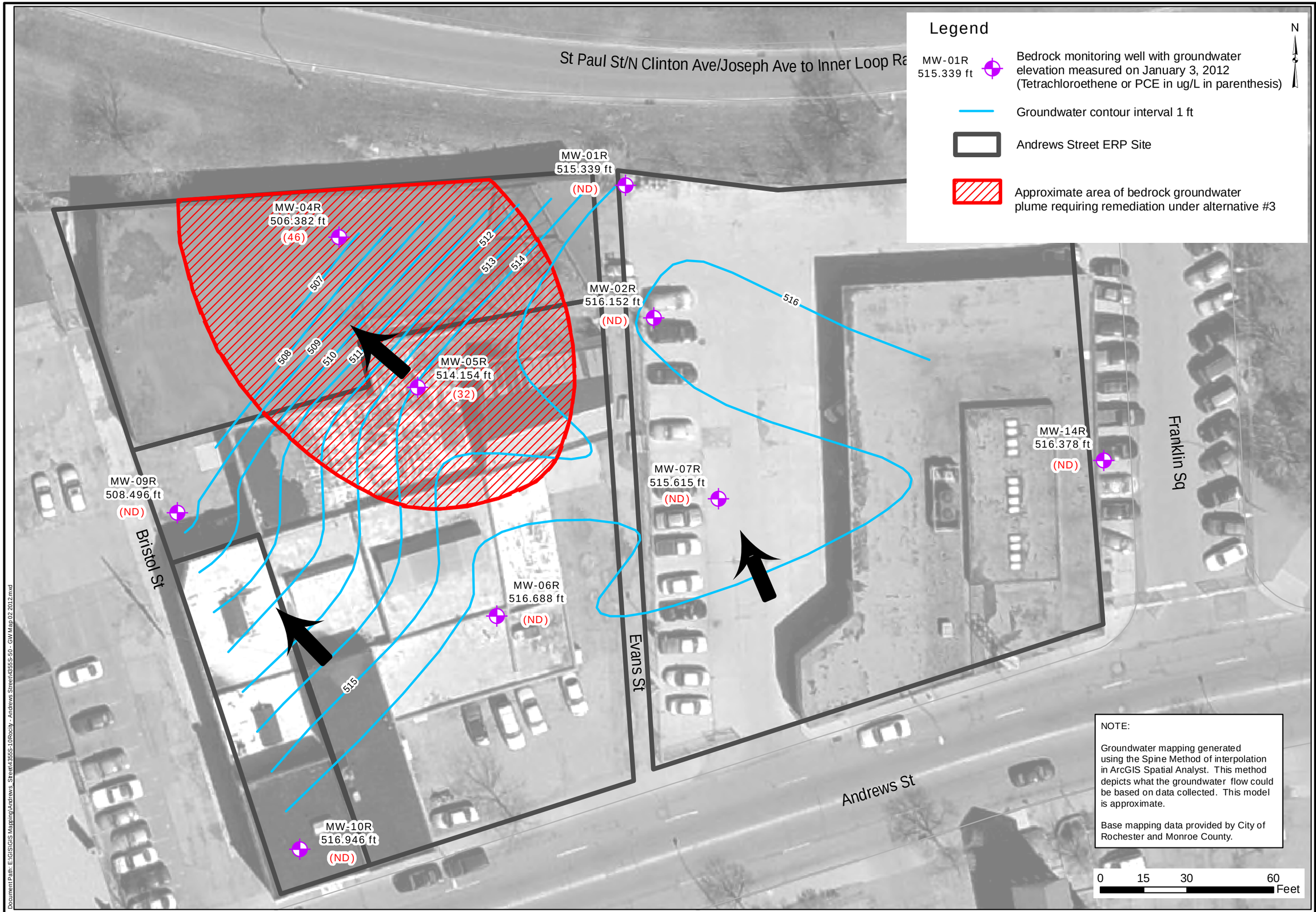
Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE NO.: E828144

Drawing Title
Site Plan with Overburden Groundwater Potentiometric Map for January 3, 2012 and PCE Concentrations Detected in January 2012 Overburden Groundwater Samples

Project No.
4355S-10

FIGURE 9



DESIGNED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
NES	05-2012	CPS	05-2012	AS NOTED	05-29-2012

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10016-0710

Project Title
300, 304-308, 320 ANDREWS STREET
AND 25 EVANS STREET
ROCHESTER, NEW YORK

ENVIRONMENTAL RESTORATION PROJECT NYSDEC SITE NO.: E828144

Drawing Title
Site Plan with Bedrock Groundwater Potentiometric Map for January 3, 2012 and PCE Concentrations Detected in January 2012 Bedrock Groundwater Samples

Project No.
4355S-10

FIGURE 10

Document Path: E:\GIS\GIS Mapping\Andrews_Street\4355S-10Rocity - Andrews Street\4355S-50 - GW Map 02 2012.mxd

APPENDIX A

Analytical Laboratory Summary Tables for Samples from 2006 Phase II Environmental Site Assessment

TABLE 2
Summary of Soil Sample Data
Andrews Street Project
City of Rochester

Sample Id.	TAGM 4046/STARS	B-2	B-2A	B-6	B-8	B-8A	B-10	B-14	B-15	B-15A	B-17	B-17A	B-17B	B-17E	B-17F	B-22	B-32	B-32A	B-32B	B-34	MW-2	MW-3
Depth	Recommend Soil Cleanup Objectives	2.5 ft.	2.5 ft.	3.5 ft.	1.5 ft.	1.5 ft.	2.5 ft.	6 ft.	4 ft.	4 ft.	1 ft.	1 ft.	7 ft.	3 ft.	4 ft.	8.5 ft.	8 ft.	18 ft.	16 ft.	9 ft.	4 ft.	3.9 ft.
units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Acetone	**200**	ND	120	ND	ND	ND	ND	ND	180	ND	ND	ND	ND	81	ND	ND	ND	ND	ND	ND	43	ND
Benzene	**60/14**	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	**300**	ND	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butlybenzene	**100**	ND	ND	ND	ND	ND	ND	ND	ND	1300	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**300**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.8	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachoroethane	**1,400**	1120	140	53.2	721	55	322	217	961	ND	**3,560,000**	**270,000**	18	**21,000**	**13,000**	ND	**12,300**	**18,000**	**4,400**	191	100	**5200**
Trichloroethene	**700**	43.5	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	**1,300**	ND	ND	ND	ND	ND	ND	12	ND
sec-Butylbenzene	**100**	ND	ND	ND	ND	ND	11.6	ND	73.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**100**	ND	ND	ND	ND	ND	ND	83.1	28.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**100**	ND	ND	ND	ND	ND	ND	ND	18.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	**100**	ND	ND	ND	ND	ND	23.1	123	181	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**13,000/200**	ND	ND	ND	ND	ND	88.2	**909**	ND	**860**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**100**	ND	ND	ND	ND	ND	**133**	**1,910**	**160**	**3,100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**100**	ND	ND	ND	ND	ND	**101**	**556**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Volatiles	**<10,000**	1,163.5	301.0	53.2	737.0	55.0	678.9	3,798.1	1,602.2	6,260.0	**3,560,000.0**	**270,000.0**	18.0	**22,387.8**	**13,000.0**	0.0	**12,300.0**	**18,000.0**	4,400.0	191.0	155.0	5,200.0
PCB 1016	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1221	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1232	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1242	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1248	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1254	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA
PCB 1260	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	ND	ND	NA	NA	NA	NA	NA	ND	NA

Table sourced from October 2006 Phase II Environmental Site Assessment for the Site, prepared by Leader

TABLE 4
Summary of Groundwater Results
Andrews Street Project
City of Rochester

Sample Id.	NYSDEC TOGs 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations ug/L	MW-1	MW-2	MW-3
Depth		15-25 ft.	17-27.5 ft.	20-30 ft.
units		ug/L	ug/L	ug/L
Acetone	50	ND	ND	ND
Benzene	1	ND	ND	ND
2-Butanone	50	ND	ND	ND
n-Butlybenzene	5	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	11	ND
Tetrachoroethane	5	70,000	420	1,000
Trichloroethene	5	ND	26	ND
sec-Butylbenzene	5	ND	ND	ND
n-Propylbenzene	5	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND
p-Isopropyltoluene	5	ND	ND	ND
Naphthalene	10	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND

Table sourced from October 2006 Phase II Environmental Site Assessment for the Site, prepared by Leader

APPENDIX B

Analytical Laboratory Summary Tables for Samples from 2010/2011 At-Grade and Sub-Grade Demolition Phase Study

Table 5

At-Grade and Sub-Grade Demolition Report
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological	G Protection of Groundwater	004 S-1 (2') (10/19/10)	017 S-2 (0-6") (11/16/10)	018 S-4 (0-6") (11/16/10)	019 S-5 (2'-3') (11/16/10)	020 S-7 (0-6") (11/17/10)	021 S-9 (1') (11/18/10)	029 S-10 (6"-1') (12/6/10)
Acetone	0.05	100	100	500	1,000	2.2	0.05	U	U	U	U	U	U	U
Benzene	0.06	2.9	4.8	44	89	70	0.06	U	U	U	U	U	U	U
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Ethylbenzene	1	30	41	390	780	NA	1	U	U	U	U	U	U	U
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Methylene chloride	0.05	51	100	500	1,000	12	0.05	U	U	U	U	0.0018 J	U	U
Tetrachloroethene	1.3	5.5	19	150	300	2	1.3	**1.9** D **AG**	U	U	U	U	U	0.0027 J
Toluene	0.7	100	100	500	1,000	36	0.7	U	U	U	U	U	U	U
Trichloroethene	0.47	10	21	200	400	2	0.47	U	U	U	U	U	U	U
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	U	U	0.0035 J	U	U	U	U
Xylene (mixed)	0.26	100	100	500	1,000	0.26	1.6	0.0026 J	U	U	U	U	U	U
Total VOCs								1.9026	U	0.0035	U	0.0018	U	0.0027
Total TICs (1)								0.0013	U	U	U	U	U	U
Total VOCs and TICs (1)								1.9039	U	0.0035	U	U	U	0.0027

Notes

U = Not Detected
NA = Not Available
VOC = Volatile Organic Compound
TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO
B = Exceeds Residential Use SCO
C = Exceeds Restricted Residential Use SCO
D = Exceeds Commercial Use SCO
E = Exceeds Industrial Use SCO
F = Exceeds Protection of Ecological Resources SCO
G = Exceeds Protection of Groundwater SCO

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

Table 5

At-Grade and Sub-Grade Demolition Report
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological	G Protection of Groundwat	033 S-11 (3') (1/18/11)	034 S-13 (3') (1/18/11)	035 S-14 (3') (1/18/11)	036 S-17 (3') (1/18/11)	039 S-24 (2') (1/24/11)	040 S-26 (2') (1/25/11)	041 S-28 (1.5') (1/25/11)
Acetone	0.05	100	100	500	1,000	2.2	0.05	U	U	U	U	U	U	0.028 J
Benzene	0.06	2.9	4.8	44	89	70	0.06	U	U	U	U	U	**0.089** J **AG**	U
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	0.0034 J
Ethylbenzene	1	30	41	390	780	NA	1	U	U	U	U	U	0.25 J	0.021
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	0.011
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	0.26 J	U
Methylene chloride	0.05	51	100	500	1,000	12	0.05	U	U	U	U	0.0055 J	U	0.0033 J
Tetrachloroethene	1.3	5.5	19	150	300	2	1.3	U	U	U	U	U	U	U
Toluene	0.7	100	100	500	1,000	36	0.7	U	U	U	U	U	0.21 J	0.0019 NJ
Trichloroethene	0.47	10	21	200	400	2	0.47	U	U	U	U	U	U	U
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Xylene (mixed)	0.26	100	100	500	1,000	0.26	1.6	U	U	U	U	U	**1.05** NJ **AF**	0.068
Total VOCs								U	U	U	U	0.0055	1.859	0.1366
Total TICs (1)								U	U	U	0.493	0.296	32.42	3.508
Total VOCs and TICs (1)								U	U	U	0.493	0.3015	34.279	3.6446

Notes

U = Not Detected

NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

F = Exceeds Protection of Ecological Resources SCO

G = Exceeds Protection of Groundwater SCO

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

Table 5

At-Grade and Sub-Grade Demolition Report
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological	G Protection of Groundwater	042 S-29 (3.5') (1/25/11)	043 S-30 (6.5') (1/26/11)	045 S-31 (0.5') (1/31/11)	046 S-34 (2.5') (1/31/11)	047 S-43 (4') (2/9/11)	048 S-48 (0.5') (2/17/11)	049 S-59 (4.5') (5/5/11)
Acetone	0.05	100	100	500	1,000	2.2	0.05	U	U	U	U	U	U	U
Benzene	0.06	2.9	4.8	44	89	70	0.06	U	U	U	U	U	U	U
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Ethylbenzene	1	30	41	390	780	NA	1	U	U	U	U	U	U	U
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Methylene chloride	0.05	51	100	500	1,000	12	0.05	U	0.0023 J	U	0.0021 J	U	0.0024 J	U
Tetrachloroethene	1.3	5.5	19	150	300	2	1.3	U	U	0.0069	0.026	U	0.0029 J	U
Toluene	0.7	100	100	500	1,000	36	0.7	U	U	U	0.0012 J	U	U	U
Trichloroethene	0.47	10	21	200	400	2	0.47	U	U	U	U	U	U	U
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U	U
Xylene (mixed)	0.26	100	100	500	1,000	0.26	1.6	U	U	U	0.0042 J	U	U	U
Total VOCs								0	0.0023	0.0069	0.0335	U	0.0053	U
Total TICs (1)								32.64	U	U	0.0022	U	U	U
Total VOCs and TICs (1)								32.64	0.0023	0.0069	0.0357	U	0.0053	0

Notes

U = Not Detected

NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

F = Exceeds Protection of Ecological Resources SCO

G = Exceeds Protection of Groundwater SCO

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

Table 6

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	CAS Number	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	004 S-1 (2') (10/19/10)	017 S-2 (0-6") (11/16/10)	018 S-4 (0-6") (11/16/10)	019 S-5 (2'-3') (11/16/10)	020 S-7 (0-6") (11/17/10)	
2-Methylnaphthalene	91-57-6	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	0.19 J	
Acenaphthene	83-32-9	20	100	100	500	1,000	20	98	U	U	U	U	0.21 J	
Acenapthylene	208-96-8	100	100	100	500	1,000	NA	107	U	U	U	U	U	
Anthracene	120-12-7	100	100	100	500	1,000	NA	1,000	U	0.13 J	U	U	0.35 J	
Benz(a)anthracene	56-55-3	1	1	1	5.6	11	NA	1	0.1 J	0.31 J	0.072 J	U	0.98	
Benzo(a)pyrene	50-32-8	1	1	1	1	1.1	2.6	22	0.098 J	0.22 J	0.055 J	U	0.87	
Benzo(b)fluoranthene	205-99-2	1	1	1	5.6	11	NA	1.7	0.14 J	0.32 J	0.083 J	U	1.2	ABC
Benzo(g,h,i)perylene	191-24-2	100	100	100	500	1,000	NA	1,000	0.064 J	0.13 J	U	U	0.55	
Benzo(k)fluoranthene	207-08-9	0.8	1	3.9	56	110	NA	1.7	U	0.11 J	U	U	0.39	
1,1-Biphenyl	92-52-4	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NA	NA	NA	NA	NA	NA	U	0.053 J	U	U	U	
Carbazole	86-74-8	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	0.22 J	
Chrysene	218-01-9	1	1	3.9	56	110	NA	1	0.1 J	0.29 J	0.065 J	U	1.1	ABG
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	0.56	1.1	NA	1,000	U	U	U	U	0.11 J	
Dibenzofuran	132-64-9	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	0.13 J	
Dimethylphthalate	131-11-3	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	
Fluoranthene	206-44-0	100	100	100	500	1,000	NA	1,000	0.2 J	0.64	0.16 J	U	2.1	
Fluorene	86-73-7	30	100	100	500	1,000	30	386	U	U	U	U	0.19 J	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	5.6	11	NA	8.2	0.065 J	0.13 J	U	U	0.5	
Naphthalene	91-20-3	12	100	100	500	1,000	NA	12	U	U	U	U	0.44	
Phenanthrene	85-01-8	100	100	100	500	1,000	NA	1,000	0.15 J	0.49	0.14 J	U	1.7	
Phenol	108-95-2	0.33	100	100	500	1,000	30	0.33	U	U	0.048 J	U	0.049 J	
Pyrene	129-00-0	100	100	100	500	1,000	NA	1000	0.17 J	0.52	0.12 J	U	1.7	
Total SVOCs									1.087	3.343	0.743	0	12.979	
Total TICs (1)									1.25	1.191	0.11	0.19	3.591	
Total SVOCs and TICs (1)									2.337	4.534	0.853	0.19	16.57	

Notes

A = Exceeds Unrestricted Use SCO
B = Exceeds Residential Use SCO
C = Exceeds Restricted Residential Use SCO
D = Exceeds Commercial Use SCO
U = Not Detected
E = Exceeds Industrial Use SCO
F = Exceeds Protection of Ecological Resources SCO

(1) Refer to the analytical

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

NA = Not Available

Table 6

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	CAS Number	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	021 S-9 (1') (11/18/10)		029 S-10 (6"-1') (12/6/10)	033 S-11 (3') (1/18/11)	034 S-13 (3') (1/18/11)	035 S-14 (3') (1/18/11)
2-Methylnaphthalene	91-57-6	NA	NA	NA	NA	NA	NA	NA	U		U	U	U	U
Acenaphthene	83-32-9	20	100	100	500	1,000	20	98	U		U	U	U	U
Acenapthylene	208-96-8	100	100	100	500	1,000	NA	107	0.27 J		U	U	U	U
Anthracene	120-12-7	100	100	100	500	1,000	NA	1,000	0.22 J		0.12 J	U	U	U
Benz(a)anthracene	56-55-3	1	1	1	5.6	11	NA	1	**1.5** J	**ABCG**	0.31 J	U	0.072 J	U
Benzo(a)pyrene	50-32-8	1	1	1	1	1.1	2.6	22	**1.8** J	**ABCDE**	0.25 J	U	0.053 J	U
Benzo(b)fluoranthene	205-99-2	1	1	1	5.6	11	NA	1.7	**2.3** J	**ABCG**	0.32 J	U	0.079 J	U
Benzo(g,h,i)perylene	191-24-2	100	100	100	500	1,000	NA	1,000	1.3 J		0.15 J	U	U	U
Benzo(k)fluoranthene	207-08-9	0.8	1	3.9	56	110	NA	1.7	**0.86**	**A**	0.15 J	U	U	U
1,1-Biphenyl	92-52-4	NA	NA	NA	NA	NA	NA	NA	U		U	U	U	U
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NA	NA	NA	NA	NA	NA	0.085 NJ		U	U	0.065 J	U
Carbazole	86-74-8	NA	NA	NA	NA	NA	NA	NA	0.28 J		U	U	U	U
Chrysene	218-01-9	1	1	3.9	56	110	NA	1	**1.8** J	**ABG**	0.29 J	U	0.067 J	U
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	0.56	1.1	NA	1,000	0.29 J		U	U	U	U
Dibenzofuran	132-64-9	NA	NA	NA	NA	NA	NA	NA	0.054 J		U	U	U	U
Dimethylphthalate	131-11-3	NA	NA	NA	NA	NA	NA	NA	U		U	U	U	U
Fluoranthene	206-44-0	100	100	100	500	1,000	NA	1,000	3.1 DJ		0.67	U	0.15 J	U
Fluorene	86-73-7	30	100	100	500	1,000	30	386	U		U	U	U	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	5.6	11	NA	8.2	**1.2**	**ABC**	0.14 J	U	U	U
Naphthalene	91-20-3	12	100	100	500	1,000	NA	12	U		U	U	U	U
Phenanthrene	85-01-8	100	100	100	500	1,000	NA	1,000	1.4 J		0.45	U	0.099 J	U
Phenol	108-95-2	0.33	100	100	500	1,000	30	0.33	0.061 J		U	U	U	0.052 NJ
Pyrene	129-00-0	100	100	100	500	1,000	NA	1000	2.9 J		0.58	U	0.12 J	U
Total SVOCs									19.42		3.43	0	0.705	0.052
Total TICs (1)									6.55		0.29	0.21	0.86	0.17
Total SVOCs and TICs (1)									25.97		3.72	0.21	1.565	0.222

Notes

A = Exceeds Unrestricted Use SCO
B = Exceeds Residential Use SCO
C = Exceeds Restricted Residential Use SCO
D = Exceeds Commercial Use SCO
U = Not Detected
E = Exceeds Industrial Use SCO
F = Exceeds Protection of Ecological Resources SCO

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

NA = Not Available

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

Table 6

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	CAS Number	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	036 S-17 (3') (1/18/11)	039 S-24 (2') (1/24/11)		040 S-26 (2') (1/25/11)		041 S-28 (1.5') (1/25/11)		042 S-29 (3.5') (1/25/11)	
2-Methylnaphthalene	91-57-6	NA	NA	NA	NA	NA	NA	NA	0.062 J	U J		19 DJ		0.9 J		1.8 J	
Acenaphthene	83-32-9	20	100	100	500	1,000	20	98	0.24 J	0.86 J		0.78 J		1.5 J		0.081 J	
Acenapthylene	208-96-8	100	100	100	500	1,000	NA	107	U	0.89 J		U		U		U	
Anthracene	120-12-7	100	100	100	500	1,000	NA	1,000	0.31 J	3.6 J		0.98 J		4.7		0.055 J	
Benz(a)anthracene	56-55-3	1	1	1	5.6	11	NA	1	0.62	**12**	**ABCDEG**	**2.1**	**ABCG**	**5.7**	**ABCDG**	U	
Benzo(a)pyrene	50-32-8	1	1	1	1	1.1	2.6	22	0.44	**10**	**ABCDEF**	**1.6** J	**ABCDE**	**4.6**	**ABCDEF**	U	
Benzo(b)fluoranthene	205-99-2	1	1	1	5.6	11	NA	1.7	0.67	**13**	**ABCDEG**	**2.3**	**ABCG**	**6**	**ABCDG**	U	
Benzo(g,h,i)perylene	191-24-2	100	100	100	500	1,000	NA	1,000	0.23 J	6.9		1 J		2.9		U	
Benzo(k)fluoranthene	207-08-9	0.8	1	3.9	56	110	NA	1.7	0.21 J	**4.2** J	**ABCG**	0.76 J		**2 J**	**ABG**	U	
1,1-Biphenyl	92-52-4	NA	NA	NA	NA	NA	NA	NA	U	U		1.4 J		U		0.21 J	
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NA	NA	NA	NA	NA	NA	U	U		U		U		U	
Carbazole	86-74-8	NA	NA	NA	NA	NA	NA	NA	0.23 J	1.8 J		0.47 J		2.7		U	
Chrysene	218-01-9	1	1	3.9	56	110	NA	1	0.58	**10**	**ABCG**	**1.9** J	**ABG**	**5.2**	**ABCG**	U	
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	0.56	1.1	NA	1,000	0.066 J	**1.8** J	**ABCDE**	0.27 J		**0.61** J	**ABCD**	U	
Dibenzofuran	132-64-9	NA	NA	NA	NA	NA	NA	NA	0.14 J	0.93 J		0.88 J		1.3 J		0.094 J	
Dimethylphthalate	131-11-3	NA	NA	NA	NA	NA	NA	NA	U	U		U		U		U	
Fluoranthene	206-44-0	100	100	100	500	1,000	NA	1,000	1.4	28		5		16		U	
Fluorene	86-73-7	30	100	100	500	1,000	30	386	0.22 J	1.3 J		1.6 J		2.1 J		0.17 J	
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	5.6	11	NA	8.2	0.26 J	**6.6**	**ABCD**	**0.96** J	**ABC**	**2.7**	**ABC**	U	
Naphthalene	91-20-3	12	100	100	500	1,000	NA	12	0.1 J	U		4		1.5 J		0.56	
Phenanthrene	85-01-8	100	100	100	500	1,000	NA	1,000	1.2	19		7.4		17		0.37 J	
Phenol	108-95-2	0.33	100	100	500	1,000	30	0.33	0.067 J	U		U		U		U	
Pyrene	129-00-0	100	100	100	500	1,000	NA	1000	1.2	22		4.7		12		0.053 J	
Total SVOCs									8.245	142.88		57.1		89.41		3.393	
Total TICs (1)									1.548	34.72		280.4		35.3		39.204	
Total SVOCs and TICs (1)									187.393	177.6		337.5		124.71		42.597	

Notes

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D = Exceeds Commercial Use SCO
U = Not Detected
E = Exceeds Industrial Use SCO
F = Exceeds Protection of Ecological Resources SCO

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

NA = Not Available

Table 6

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	CAS Number	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	043 S-30 (6.5') (1/26/11)	045 S-31 (0.5') (1/31/11)	046 S-34 (2.5') (1/31/11)	047 S-43 (4') (2/9/11)	048 S-48 (0.5') (2/17/11)	049 S-59 (4.5') (5/5/11)
2-Methylnaphthalene	91-57-6	NA	NA	NA	NA	NA	NA	NA	U J	U	1 J	U	U	U
Acenaphthene	83-32-9	20	100	100	500	1,000	20	98	U	U	3	U	U	U
Acenapthylene	208-96-8	100	100	100	500	1,000	NA	107	U	0.055 J	1.2 J	U	U	U
Anthracene	120-12-7	100	100	100	500	1,000	NA	1,000	U	U	9	U	0.05 J	U
Benz(a)anthracene	56-55-3	1	1	1	5.6	11	NA	1	U	0.11 J	26 D ABCDEG	0.12 J	0.11 J	U
Benzo(a)pyrene	50-32-8	1	1	1	1	1.1	2.6	22	U	0.15 J	20 D ABCDEF	0.1 J	0.1 J	U
Benzo(b)fluoranthene	205-99-2	1	1	1	5.6	11	NA	1.7	U	0.21 J	28 D ABCDEG	0.16 J	0.12 J	U
Benzo(g,h,i)perylene	191-24-2	100	100	100	500	1,000	NA	1,000	U	0.15 J	12	0.086 J	0.059 J	U
Benzo(k)fluoranthene	207-08-9	0.8	1	3.9	56	110	NA	1.7	U	0.065 J	8.3 ABCG	0.057 J	0.068 J	U
1,1-Biphenyl	92-52-4	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	117-81-7	NA	NA	NA	NA	NA	NA	NA	U	0.12 J	U	U	U	U
Carbazole	86-74-8	NA	NA	NA	NA	NA	NA	NA	U	U	4.4	U	U	U
Chrysene	218-01-9	1	1	3.9	56	110	NA	1	U	0.13 J	27 D ABCG	0.15 J	0.11 J	U
Dibenz(a,h)anthracene	53-70-3	0.33	0.33	0.33	0.56	1.1	NA	1,000	U	U	3.2 ABCDE	U	U	U
Dibenzofuran	132-64-9	NA	NA	NA	NA	NA	NA	NA	U	U	1.9 J	U	U	U
Dimethylphthalate	131-11-3	NA	NA	NA	NA	NA	NA	NA	U	U	U	U J	U	0.79 B
Fluoranthene	206-44-0	100	100	100	500	1,000	NA	1,000	U	0.17 J	53 D	0.27 J	0.22 J	U
Fluorene	86-73-7	30	100	100	500	1,000	30	386	U	0.13 J	3.6	U	U	U
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	0.5	0.5	5.6	11	NA	8.2	U	U	11 ABCDG	0.066 J	0.049 J	U
Naphthalene	91-20-3	12	100	100	500	1,000	NA	12	U	U	1.4 J	U	U	U
Phenanthrene	85-01-8	100	100	100	500	1,000	NA	1,000	U	0.096 J	49 D	0.14 J	0.16 J	U
Phenol	108-95-2	0.33	100	100	500	1,000	30	0.33	0.077 J	U	U	U	U	U
Pyrene	129-00-0	100	100	100	500	1,000	NA	1000	U	0.15 J	48 D	0.28 J	0.18 J	U
Total SVOCs									0.077	1.536	311	1.429	1.226	0.79
Total TICs (1)									U	2.11	123.1	0.25	1.926	0.12
Total SVOCs and TICs (1)									0.077	3.646	434.1	1.679	3.152	0.91

Notes

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C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

U = Not Detected

E = Exceeds Industrial Use SCO

F = Exceeds Protection of Ecological Resources SCO

(1) Refer to the analytical

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

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mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

NA = Not Available

Table 7

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals and Cyanide in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	004 S-1 (2') (10/19/10)	017 S-2 (0-6") (11/16/10)	018 S-4 (0-6") (11/16/10)	019 S-5 (2'-3') (11/16/10)	020 S-7 (0-6") (11/17/10)	021 S-9 (1') (11/18/10)	029 S-10 (6"-1') (12/6/10)
Aluminum	NA	NA	NA	NA	NA	NA	NA	6210	1830	3340	1610	4040	4740	5780
Antimony	NA	NA	NA	NA	NA	NA	NA	U	U	U	U	0.907 J	U	U
Arsenic	13	16	16	16	16	13	16	4.74	3.68	1.75	0.923 J	**13.8** AF	6.85	2.63
Barium	350	350	400	400	10,000	433	820	103	21.3	57	18.6	93.4	244	105
Beryllium	7.2	14	72	590	2,700	10	47	0.51	0.098 J	0.186 J	0.111 J	0.376	0.439	0.55
Cadmium	2.5	2.5	4.3	9.3	60	4	7.5	U	U	0.122 J	U	0.722	0.562	U
Calcium	NA	NA	NA	NA	NA	NA	NA	12900	25500	53700	23500	48400	33000	15500
Chromium	30	36	180	1,500	6,800	41	NA	10.5	3.28	4.85	3.59	7.94	12.3	9.74
Cobalt	NA	NA	NA	NA	NA	NA	NA	4.88	1.99	2.74	1.84	4.47	4.23	3.87
Copper	50	270	270	270	10,000	50	1,720	12.7 J	5.42	6.25	3.12	39.7	23.1	13.4
Iron	NA	NA	NA	NA	NA	NA	NA	17500 J	5600	7210	5730	16100	11300	12900
Lead	63	400	400	1,000	3,900	63	450	47.8 J	8.6	**77.6** AF	1.77	**230** AF	**1390** ABCDFG	48.3
Magnesium	NA	NA	NA	NA	NA	NA	NA	4390	6120	9370	6650	9870	8100	4340
Manganese	1600	2,000	2,000	10,000	10,000	1600	2,000	791 J	199	299	186	326	385	543
Total Mercury	0.18	0.81	0.81	2.8	5.7	0.18	0.73	0.088	0.089 NJ	0.022 NJ	U NJ	0.092 NJ	**0.54** NJ AF	0.052 J
Nickel	30	140	310	310	10,000	30	130	9.42	4.1	5.33	3.46	11.2	8.57	7.3
Potassium	NA	NA	NA	NA	NA	NA	NA	735	376	627	274	686	840	770
Selenium	3.9	36	180	1,500	6,800	3.9	4	1.68	1.07 J	1.09	0.758 J	2.14	1.95	1.45
Silver	2	36	180	1,500	6,800	2	8.3	0.45 J	U	U	U	0.414	0.695	0.43 J
Sodium	NA	NA	NA	NA	NA	NA	NA	350 *J	394 *J	393 *J	402 *J	461 *J	528 *J	811 N*J
Vanadium	NA	NA	NA	NA	NA	NA	NA	19	6.62	9.02	7.5	13.9	13.8	15.2
Zinc	109	2200	10,000	10,000	10,000	109	2,480	49.4 J	24.2	47.9	14.9	**245** AF	**255** AF	57.9
Total Cyanide	27	27	27	27	10,000	NA	40	0.089 J	U	U	U	U	U	U

Notes

U = Not Detected

NA = Not Available

A = Exceeds Unrestricted Use SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

F = Exceeds Protection of Ecological Resources SCO

G = Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

D = The reported values is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

* = For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

Table 7

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals and Cyanide in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	033 S-11 (3') (1/18/11)	034 S-13 (3') (1/18/11)	035 S-14 (3') (1/18/11)	036 S-17 (3') (1/18/11)	039 S-24 (2') (1/24/11)	040 S-26 (2') (1/25/11)
Aluminum	NA	NA	NA	NA	NA	NA	NA	1290	1210	1620	2320	4580	4240
Antimony	NA	NA	NA	NA	NA	NA	NA	U	U	U	0.636 J	1.12 J	0.619 J
Arsenic	13	16	16	16	16	13	16	1.03	1.15	0.875	1.4	**17.5 ABCDEFG**	**24.1 ABCDEFG**
Barium	350	350	400	400	10,000	433	820	17.7	13.9	18.4	40.7	**1020 ABCDFG**	**477 ABCDF**
Beryllium	7.2	14	72	590	2,700	10	47	0.091 J	0.083 J	0.087 J	0.148 J	0.498	0.387
Cadmium	2.5	2.5	4.3	9.3	60	4	7.5	0.068 J	0.072 J	0.077 J	0.224 J	1.78	1.27
Calcium	NA	NA	NA	NA	NA	NA	NA	21000 J	20200 J	22100 J	23600 J	31500	29100
Chromium	30	36	180	1,500	6,800	41	NA	2.22	2.18	2.84	4.63	21.6	12.1
Cobalt	NA	NA	NA	NA	NA	NA	NA	1.39	1.46	1.71	2.72	5.08	4.02
Copper	50	270	270	270	10,000	50	1,720	3.75	4.05	4.56	10.4	**109 AF**	49.3
Iron	NA	NA	NA	NA	NA	NA	NA	4120 J	4020 J	5100 J	7780 J	15400	12200
Lead	63	400	400	1,000	3,900	63	450	2.47	1.51	1.55	4.22	**1030 ABCDFG**	**1110 ABCDFG**
Magnesium	NA	NA	NA	NA	NA	NA	NA	4970 J	4480 J	5400 J	5770 J	8470	8260
Manganese	1600	2,000	2,000	10,000	10,000	1600	2,000	144 J	167 J	199 J	307 J	349	316
Total Mercury	0.18	0.81	0.81	2.8	5.7	0.18	0.73	U J	U J	U J	0.028 J	**9** D **ABCDEFG**	**0.614** D **AF**
Nickel	30	140	310	310	10,000	30	130	2.88	2.84	3.46	6.07	13.6	10.3
Potassium	NA	NA	NA	NA	NA	NA	NA	228	191	222	349	797	618
Selenium	3.9	36	180	1,500	6,800	3.9	4	0.706	0.681 J	0.891	0.61 J	3.75	3.46
Silver	2	36	180	1,500	6,800	2	8.3	U	U	0.184 J	0.248 J	**3.04 AF**	0.775
Sodium	NA	NA	NA	NA	NA	NA	NA	106 J	157 J	141 J	207 J	397 J	342 J
Vanadium	NA	NA	NA	NA	NA	NA	NA	4.48	4.4	5.75	6.63	13.5	13
Zinc	109	2200	10,000	10,000	10,000	109	2,480	9.91 J	10.9 J	10.5 J	**198** J **AF**	**681** J **AF**	**636** J **AF**
Total Cyanide	27	27	27	27	10,000	NA	40	U	U	U	U J	0.849	0.085 J

Notes

U = Not Detected

NA = Not Available

A = Exceeds Unrestricted Use SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

F = Exceeds Protection of Ecological Resources SCO

G = Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

D = The reported values is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

* = For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

Table 7

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals and Cyanide in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	041 S-28 (1.5') (1/25/11)		042 S-29 (3.5') (1/25/11)		043 S-30 (6.5') (1/26/11)		045 S-31 (0.5') (1/31/11)		046 S-34 (2.5') (1/31/11)		047 S-43 (4') (2/9/11)		048 S-48 (0.5') (2/17/11)		049 S-59 (4.5') (5/5/11)	
Aluminum	NA	NA	NA	NA	NA	NA	NA	5400		5420		4510		3140		2220		3800		5570		5930	
Antimony	NA	NA	NA	NA	NA	NA	NA	2.04 J		U		U		1.55 J		U		U		U		U	
Arsenic	13	16	16	16	16	13	16	**26.8**	**ABCDEFG**	3.79		2.88		4.44		12.3		3.17		3.8		3.67	
Barium	350	350	400	400	10,000	433	820	168		51.9		37.3		72.7 J		52 J		46.8 J		31.7		51.1	
Beryllium	7.2	14	72	590	2,700	10	47	0.588		0.462		0.324		0.24 J		0.314 J		0.28 J		0.42		0.426	
Cadmium	2.5	2.5	4.3	9.3	60	4	7.5	**7.86**	**ABCFG**	0.293 J		0.226 J		0.899		1.28		U		U		U	
Calcium	NA	NA	NA	NA	NA	NA	NA	54400		2090		4060		52200		80300		64300		63800		3000	
Chromium	30	36	180	1,500	6,800	41	NA	26.4		8.42		7.96		5.34		6.15		5.19		7.28		10.7	
Cobalt	NA	NA	NA	NA	NA	NA	NA	7.9		5.36		3.84		3.36		2.04		3.1		4.69		4.33	
Copper	50	270	270	270	10,000	50	1,720	**99**	**AF**	9.16		7.74		24		**191**	**AF**	14.6		19.5 J		5.09	
Iron	NA	NA	NA	NA	NA	NA	NA	46100		14000		11300		8510		6850		8460		13600		15400	
Lead	63	400	400	1,000	3,900	63	450	**293**	**AF**	15.4		21.4		**150**	**AF**	**181**	**AF**	**310**	**AF**	20.4		12.5	
Magnesium	NA	NA	NA	NA	NA	NA	NA	14700		1130		2150		14300		12500		15700		27200		2350	
Manganese	1600	2,000	2,000	10,000	10,000	1600	2,000	433		366		208		481		160		302		669		269	
Total Mercury	0.18	0.81	0.81	2.8	5.7	0.18	0.73	**0.355**	**AF**	0.111		0.102		0.095		0.133		**0.181** J	**AF**	0.03		0.028	
Nickel	30	140	310	310	10,000	30	130	24		8.2		8.24		6.33		7.01		7.03		9.67		9.31	
Potassium	NA	NA	NA	NA	NA	NA	NA	925		1210		744		519		281		657		975		1170	
Selenium	3.9	36	180	1,500	6,800	3.9	4	**4.47**	**AFG**	1.85		1.79		1.32		2.12		0.74 J		1.98		1.53	
Silver	2	36	180	1,500	6,800	2	8.3	1.79		0.455 J		0.464		U		0.313 J		U		U		U	
Sodium	NA	NA	NA	NA	NA	NA	NA	661 J		546 J		225 J		250 J		230 J		828 J		219 *		142	
Vanadium	NA	NA	NA	NA	NA	NA	NA	15.5		15.7		11.7		8.12		9.32		9.9		14.7		16.7	
Zinc	109	2200	10,000	10,000	10,000	109	2,480	**484** J	**AF**	27.9 J		30.4 J		79.5		**439**	**AF**	94.9		76.1 J		42.8	
Total Cyanide	27	27	27	27	10,000	NA	40	0.566 J		U		U		0.623		U		U		U		U	

Notes

U = Not Detected

NA = Not Available

A = Exceeds Unrestricted Use SCO

B = Exceeds Residential Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

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G = Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

D = The reported values is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

* = For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

Table 8

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Pesticides and PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	004 S-1 (2') (10/19/10)	017 S-2 (0-6") (11/16/10)	018 S-4 (0-6") (11/16/10)	019 S-5 (2'-3') (11/16/10)	020 S-7 (0-6") (11/17/10)	021 S-9 (1') (11/18/10)	029 S-10 (6"-1') (12/6/10)
Pesticides								U	U	U	U	U	U	U
4,4'-DDT	0.0033	1.7	7.9	47	94	0.0033	136	U	U J	U J	U J	U J	U J	U
PCBs (1)	0.1	1	1	1	25	1	3.2	U	U	U	U	U	U	U

Notes

U = Not Detected

PCBs = Polychlorinated Biphenyls

NA = Not Available

A = Exceeds Unrestricted Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

G = Exceeds Protection of Groundwater SCO

P = target analyte had a >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

(1) Refer to the analytical laboratory report for individual Aroclors detected and associated flags.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Pesticides and PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological Resources	G Protection of Groundwater	033 S-11 (3') (1/18/11)	034 S-13 (3') (1/18/11)	035 S-14 (3') (1/18/11)	036 S-17 (3') (1/18/11)	039 S-24 (2') (1/24/11)	040 S-26 (2') (1/25/11)	041 S-28 (1.5') (1/25/11)
Pesticides								U	U	U	U	U	U	U
4,4'-DDT	0.0033	1.7	7.9	47	94	0.0033	136	U	U	U	U	U	U	U
PCBs (1)	0.1	1	1	1	25	1	3.2	0.0077 J	0.033	U	0.042 P	U	U	U

Notes

U = Not Detected

PCBs = Polychlorinated Biphenyls

NA = Not Available

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D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

G = Exceeds Protection of Groundwater SCO

P = target analyte had a >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

(1) Refer to the analytical laboratory report for individual Aroclors detected and associated flags.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

At-Grade and Sub-Grade Demolition Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Pesticides and PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Residential Use	C Restricted Residential Use	D Restricted Commercial Use	E Restricted Industrial Use	F Protection of Ecological	G Protection of Groundwater	042 S-29 (3.5') (1/25/11)	043 S-30 (6.5') (1/26/11)	045 S-31 (0.5') (1/31/11)	046 S-34 (2.5') (1/31/11)	047 S-43 (4') (2/9/11)	048 S-48 (0.5') (2/17/11)	049 S-59 (4.5') (5/5/11)
Pesticides								U	U	U	U R	U	U R	U
4,4'-DDT	0.0033	1.7	7.9	47	94	0.0033	136	U	U	0.0098 J **AF**	U R	U	U R	U
PCBs (1)	0.1	1	1	1	25	1	3.2	U	U	U	U	U	**1.8** DJ **ABCDF**	U

Notes

U = Not Detected

PCBs = Polychlorinated Biphenyls

NA = Not Available

A = Exceeds Unrestricted Use SCO

C = Exceeds Restricted Residential Use SCO

D = Exceeds Commercial Use SCO

E = Exceeds Industrial Use SCO

G = Exceeds Protection of Groundwater SCO

P = target analyte had a >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

(1) Refer to the analytical laboratory report for individual Aroclors detected and associated flags.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

R =The data are unusable. The Analyte may or may not be present.

D = This flag identifies all compounds identified in an analysis at a secondary dilution factor

APPENDIX C

Analytical Laboratory Summary Tables for Samples from Remedial Investigation (as of the date of the ABCA)

Table 1

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Constituents in mg/kg or ppm

Evans Street Sewer Tar Sample

Contaminant	052 EMH-2 to EMH-1 9/19/11	
VOCs		
Tetrachloroethene	51000	DJ
Isoprobylbenzene	63	J
Total VOCs	51063	
Total TICs [1]	1.04	
Total VOCs and TICs [1]	51064.04	
SVOCs	U	
PCBs	U	

Notes

VOC = Volatile Organic Compound

SVOC - Semi-Volatile Organic Compound

TIC = Tentaitivaly Identified Compound

PCB = Polychlorinated Biphenyl

mg/kg = milligrams per kilogram or parts per million (ppm).

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

EMH-2 to EMH-1 was collected from the tires of the crawler camera susequent to it traversing the sewer between Evans Street manhole 1 and Evans Street manhole #2.

Table 2

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Constituents in mg/kg or ppm

Sediment Sample

Contaminant	131 SED-01 (NWCLPP) 12/6/11	
VOCs		
Acetone	0.047	
2-Butanone	0.013	J
Cis-1,2-Dichloroethene	0.06	
Tetrachloroethene	1.5	D
Trichloroethene	0.012	
Total VOCs	1.632	
Total TICs (1)	0.382	
Total VOCs and TICs (1)	2.014	
SVOCs		
Phenanthrene	15	J
Fluoranthene	23	
Pyrene	19	
Benzo(a)anthracene	11	J
Chrysene	11	J
Benzo(b)fluoranthene	14	J
Benzo(a)pyrene	9.1	J
Total SVOCs	102.1	
Total TICs (1)	18.034	
Total SVOCs and TICs (1)	120.134	
PCBs	U	
Metals		
Aluminum	2,820	
Arsenic	13.4	
Barium	399	
Beryllium	0.143	J
Cadmium	4.43	
Calcium	43,200	
Chromium	122	
Cobalt	11	
Copper	82.9	
Iron	119,000	
Lead	540	
Magnesium	8260	
Manganese	637	
Total Mercury	0.198	
Nickel	31.6	
Potassium	423	
Selenium	1.36	J
Sodium	467	
Thallium	1.1	J
Vanadium	14.8	
Zinc	2,740	

Notes

VOC = Volatile Organic Compound — SVOC - Semi-Volatile Organic Compound

PCB = Polychlorinated Biphenyl — mg/kg = milligrams per kilogram or parts per million (ppm)

U = Not Detected — TIC = Tentaitivaly Identified Compound

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Sediment Sample 131 SED-01 (NWCLPP) was collected from the bottom of the NorthWest Corner of the Hyrdaulic Lift Pit Plate.

Table 3

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of VOCs in mg/kg or ppm

Rock Samples

Contaminant	129 MW-2R (32.5' Rock) 11/17/11	130 MW-1R (33' Rock) 11/17/11
Total VOCs	0	0
Total TICs	U	U
Total VOCs and TICs	0	0

Notes
U = Not Detected

mg/kg = milligrams per kilogram or parts per million (ppm).

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	053 TP-01 (2') 9/26/11	054 TP-01 (5.5') 9/26/11	055 TP-02 (5') NB 9/26/11	056 TP-03 (10') 9/26/11	057 TP-04 (3-4') 9/26/11	058 TP-05 (3.5') 9/26/11	059 TP-07 (3') 9/26/11	060 TP-07 (PC) 9/26/11
Acetone	0.05	100	500	0.05	U J	U	U J	U J	U	U J	U J	U J
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U J	U J	U	U J	U J	U
Methylene chloride	0.05	100	500	0.05	U	U	U J	U J	U	U J	U J	U
Tetrachloroethene	1.3	19	150	1.3	U	U	U J	U J	0.8	0.009 J	0.012 J	0.58 J
Trichloroethene	0.47	21	200	0.47	U	U	U J	U J	U	U J	U J	U
Xylene (mixed)	0.26	100	500	1.6	U	U	U J	U J	U	U J	U J	U
Total VOCs					0	0	0	0	0.8	0.0092	0.012	0.58
Total TICs (1)					1519	U	U	0.0057	22.7	0.0067	U	5.8
Total VOCs and TICs (1)					1519	0	0	0.0057	23.5	0.0159	0.012	6.38

Notes

U = Not Detected

NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	062 TB-MIP-11 (5') 10/6/11	063 TB-MIP-03 (6') 10/6/11	064 TB-MIP-05 (10') 10/6/11	065 TB-MIP-06 (14') 10/6/11	066 TB-MIP-07 (9.5') 10/6/11	067 TB-MIP-08 (10') 10/6/11	068 TB-MIP-09 (4.5') 10/6/11	069 TB-MIP-09 (13') 10/6/11
Acetone	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U	U	U	U	U	U
Methylene chloride	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Tetrachloroethene	1.3	19	150	1.3	0.0055 J	0.0032 J	0.021	0.061	0.012	0.0027 J	0.033	0.0045 J
Trichloroethene	0.47	21	200	0.47	U	U	U	U	U	U	U	U
Xylene (mixed)	0.26	100	200	1.6	U	U	U	U	U	U	U	U
Total VOCs					0.0055	0.0032	0.021	0.061	0.012	0.0027	0.033	0.0045
Total TICs (1)					U	U	U	U	U	U	U	U
Total VOCs and TICs (1)					0.0055	0.0032	0.021	0.061	0.012	0.0027	0.033	0.0045

Notes

U = Not Detected

NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	070 TB-MIP-04 (13') 10/6/11		071 TB-MIP-13 (9') 10/6/11		072 TB-MIP-12 (7') 10/6/11		073 TB-MIP-12 (10') 10/6/11		074 TB-MIP-15 (9') 10/6/11		075 TB-MIP-14 (13') 10/6/11		076 TB-MIP-14 (21') 10/6/11		077 TB-MIP-21 (6.5') 10/6/11	
Acetone	0.05	100	500	0.05	U		U		U		U		U		U		U		U	
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U		U		U		U		U		U		U		U	
Methylene chloride	0.05	100	500	0.05	U		U		U		U		U		U		U		U	
Tetrachloroethene	1.3	19	150	1.3	U		U		0.085		U		U		0.1		0.0054		U	
Trichloroethene	0.47	21	200	0.47	U		U		0.0044	J	U		U		U		U		U	
Xylene (mixed)	0.26	100	200	1.6	U		U		U		U		U		U		U		U	
Total VOCs					0		0		0.0894		0		0		0.1		0.0054		0	
Total TICs (1)					U		U		1.383		U		0.0074		U		U		U	
Total VOCs and TICs (1)					0		0		1.4724		0		0.0074		0.1		0.0054		0	

Notes

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VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	078 TB-MIP-21 (17.5') 10/6/11	079 TB-MIP-20 (15.5') 10/6/11	080 TB-MIP-20 (21') 10/6/11	082 TB-MIP-17 (13') 10/6/11	083 TB-MIP-10 (11') 10/6/11	084 TB-MIP-02 (15') 10/6/11	087 TB-MIP-07 (3') 10/6/11	089 MW-04 (4-6') 10/25/11
Acetone	0.05	100	500	0.05	0.013 J	0.012 J	U	U	U	U	U	U
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U	U	U	U	U	U
Methylene chloride	0.05	100	500	0.05	U	U	U	U	U	U	0.004 J	U
Tetrachloroethene	1.3	19	150	1.3	U	U	0.024	0.015	**450 D ABCD**	0.82	0.018	U
Trichloroethene	0.47	21	200	0.47	U	U	U	U	0.012	U	U	U
Xylene (mixed)	0.26	100	200	1.6	U	U	U	U	0.002 J	U	U	U
Total VOCs					0.013	0.012	0.024	0.015	450.0144	0.82	0.022	0
Total TICs (1)					U	U	U	U	U	U	U	4.82
Total VOCs and TICs (1)					0.013	0.012	0.024	0.015	450.0144	0.82	0.022	4.82

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mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

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(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	090 MW-04 (17-17.9') 10/25/11	091 MW-05 (14-16') 10/26/11	092 MW-06 (21-23') 10/27/11	093 MW-08 (26-28') 10/28/11	094 MW-10 (24-26') 10/31/11	095 MW-07 (8-10') 11/1/11	096 MW-09 (8-10') 10/31/11	097 MW-11 (14-16') 11/2/11
Acetone	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U	U	U	U	U	U
Methylene chloride	0.05	100	500	0.05	0.0089	0.0091	0.0033 J	0.0045 J	U	0.0033 J	0.0028 J	0.0032 J
Tetrachloroethene	1.3	19	150	1.3	U	0.25 D	U	U	0.01	U	U	0.6 JD
Trichloroethene	0.47	21	200	0.47	U	U	U	U	U	U	U	0.0068
Xylene (mixed)	0.26	100	200	1.6	U	U	U	U	U	U J	U J	U J
Total VOCs					0.0089	0.2591	0.0033	0.0045	0.01	0.0033	0.0028	0.61
Total TICs (1)					U	U	U	U	U	U	U	U
Total VOCs and TICs (1)					0.0089	0.2591	0.0033	0.0045	0.01	0.0033	0.0028	0.61

Notes

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TIC = Tentatively Identified Compound

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C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	098 MW-11 (6-7.4') 11/2/11	100 MW-12 (30-30.8') 11/3/11	101 MW-13 (10-12') 11/3/11	102 MW-13 (24-25.9') 11/4/11	103 MW-14 (2-4') 11/4/11	104 MW-14 (6-8') 11/4/11	105 TB-01 (12-14') 11/7/11	106 TB-01 (18-20') 11/7/11
Acetone	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U	U	U	U	U	0.0079
Methylene chloride	0.05	100	500	0.05	U	0.0024 J	U	U	U	U	U	U
Tetrachloroethene	1.3	19	150	1.3	U	U	U	U	U	U	0.23 D	**1.6 D** **AD**
Trichloroethene	0.47	21	200	0.47	U	U	U	U	U	U	U	0.022
Xylene (mixed)	0.26	100	200	1.6	U	U	U	U	U	U	U	U
Total VOCs					0	0.0024	0	0	0	0	0.23	1.6299
Total TICs (1)					U	U	1.0912	U	U	U	U	U
Total VOCs and TICs (1)					0	0.0024	1.0912	0	0	0	0.23	1.6299

Notes

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TIC = Tentatively Identified Compound

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C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	107 TB-01 (24-26') 11/7/11	108 TB-03 (10-12') 11/8/11	109 TB-03 (20-22') 11/8/11	110 TB-03 (22-24') 11/8/11	120 TB-02 (10-12') 11/9/11	121 TB-02 (22-24') 11/9/11	122 TB-02 (28-28.7') 11/9/11	124 MW-01R (22-23.7') 11/10/11
Acetone	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U	U	U	0.005 J	U	U	U	U
Methylene chloride	0.05	100	500	0.05	U	U	U	U	U	U	U	U
Tetrachloroethene	1.3	19	150	1.3	U	1.2 D	**5.9 D AD**	**3.6 D AD**	U	**5 D AD**	0.028	**7.1 D AD**
Trichloroethene	0.47	21	200	0.47	U	U	R	0.016	U	U	U	U
Xylene (mixed)	0.26	100	200	1.6	U	U	U	U	U	U	U	U
Total VOCs					0	1.2	5.9	3.621	0	5	0.028	7.1
Total TICs (1)					U	U	U	U	U	U	U	U
Total VOCs and TICs (1)					0	1.2	5.9	3.621	0	5	0.028	7.1

Notes

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NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 4

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater Use	125 MW-01R (30-30.6') 11/10/11		126 MW-02R (10-12') 11/14/11		127 MW-02R (20-22') 11/15/11	
Acetone	0.05	100	500	0.05	U		U		U	
Cis-1,2-Dichloroethene	0.25	100	500	0.25	U		U		U	
Methylene chloride	0.05	100	500	0.05	U		U		U	
Tetrachloroethene	1.3	19	150	1.3	0.021		U		0.019	
Trichloroethene	0.47	21	200	0.47	U		U		0.003	J
Xylene (mixed)	0.26	100	200	1.6	U		U		U	
Total VOCs					0.021		0		0.0224	
Total TICs (1)					U		U		U	
Total VOCs and TICs (1)					0.021		0		0.0224	

Notes

U = Not Detected

NA = Not Available

VOC = Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	053 TP-01 (2') 9/26/11	054 TP-01 (5.5') 9/26/11	055 TP-02 (5')NB 9/26/11	056 TP-03 (10') 9/26/11	057 TP-04 (3-4') 9/26/11	058 TP-05 (3.5') 9/26/11	059 TP-07 (3') 9/26/11	062 TB-MIP-11 (5') 10/6/11
2-Methylnaphthalene	NA	NA	NA	NA	0.49	U	U	U	U	U	U	U
Benz(a)anthracene	1	1	5.6	1	0.19 J	0.48	U	U	U	0.29 J	U	U
Benzo(a)pyrene	1	1	1	22	0.21 J	0.45	2 ABC	U	U	0.31 J	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	0.25 J	0.61	U	U	U	0.37 J	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	U	U	0.22 J	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	0.23 J	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Chrysene	1	3.9	56	1	0.22 J	0.53	U	U	U	0.38 J	U	U
Dimethylphthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Fluoranthene	100	100	500	1,000	0.4 J	1.3	U	U	U	0.83	U	U
Fluorene	30	100	500	386	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	0.27 J	U	U	U	0.21 J	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	U	U
Phenanthrene	100	100	500	1,000	0.22 J	0.76	U	U	U	0.71	U	U
Pyrene	100	100	500	1000	0.43	1	U	U	U	0.82	U	U
Total SVOCs					2.41	5.63	2	0	0	4.14	0	0
Total TICs (1)					85.6	2.798	0.3	0.387	0.6	3.908	2.814	0.08
Total SVOCs and TICs (1)					88.01	8.428	2.3	0.387	0.6	8.048	2.814	0.08

Notes

U = Not Detected

NA = Not Available

SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

B = Exceeds Restricted Residential Use SCO

C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	063 TB-MIP-03 (6') 10/6/11	064 TB-MIP-05 (10') 10/6/11	065 TB-MIP-06 (14') 10/6/11	066 TB-MIP-07 (9.5') 10/6/11	067 TB-MIP-08 (10') 10/6/11	068 TB-MIP-09 (4.5') 10/6/11	069 TB-MIP-09 (13') 10/6/11	070 TB-MIP-04 (13') 10/6/11
2-Methylnaphthalene	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Benz(a)anthracene	1	1	5.6	1	U	U	U	U	U	U	U	U
Benzo(a)pyrene	1	1	1	22	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	U	U	U	U	U	U	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	U	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Chrysene	1	3.9	56	1	U	U	U	U	U	U	U	U
Dimethylphthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Fluoranthene	100	100	500	1,000	U	U	U	U	U	U	U	U
Fluorene	30	100	500	386	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	U	U	U	U	U	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	U	U
Phenanthrene	100	100	500	1,000	U	U	U	U	U	U	U	U
Pyrene	100	100	500	1000	U	U	U	U	U	U	U	U
Total SVOCs					0	0	0	0	0	0	0	0
Total TICs (1)					0.1	0.12	0.23	0.12	0.1	0.091	0.098	0.12
Total SVOCs and TICs (1)					0.1	0.12	0.23	0.12	0.1	0.091	0.098	0.12

Notes

U = Not Detected
NA = Not Available
SVOC = Semi-Volatile Organic Compound
TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO
B = Exceeds Restricted Residential Use SCO
C = Exceeds Commercial Use SCO
D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	071 TB-MIP-13 (9') 10/6/11	072 TB-MIP-12 (7') 10/6/11	073 TB-MIP-12 (10') 10/6/11	074 TB-MIP-15 (9') 10/6/11	075 TB-MIP-14 (13') 10/6/11	076 TB-MIP-14 (21') 10/6/11	077 TB-MIP-21 (6.5') 10/6/11	078 TB-MIP-21 (17.5') 10/6/11
2-Methylnaphthalene	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Benz(a)anthracene	1	1	5.6	1	U	0.21 J	U	U	U	U	U	U
Benzo(a)pyrene	1	1	1	22	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	U	U	U	U	U	U	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	U	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Chrysene	1	3.9	56	1	U	0.19 J	U	U	U	U	U	U
Dimethylphthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Fluoranthene	100	100	500	1,000	U	0.61	U	U	U	U	U	U
Fluorene	30	100	500	386	U	0.19 J	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	U	U	U	U	U	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	U	U
Phenanthrene	100	100	500	1,000	U	0.19 J	U	U	U	U	U	U
Pyrene	100	100	500	1000	U	0.44	U	U	U	U	U	U
Total SVOCs					0	1.83	0	0	0	0	0	0
Total TICs (1)					U	26.59	0.187	0.12	0.11	0.46	0.13	0.19
Total SVOCs and TICs (1)					0	28.42	0.187	0.12	0.11	0.46	0.13	0.19

Notes

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SVOC = Semi-Volatile Organic Compound

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mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

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(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	079 TB-MIP-20 (15.5') 10/6/11	080 TB-MIP-20 (21') 10/6/11	082 TB-MIP-17 (13') 10/6/11	083 TB-MIP-10 (11') 10/6/11	084 TB-MIP-02 (15') 10/6/11	087 TB-MIP-07 (3') 10/6/11	089 MW-04 (4-6') 10/25/11	090 MW-04 (17-17.9') 10/25/11
2-Methylnaphthalene	NA	NA	NA	NA	U	U	U	U	U	U	3.7 D	U
Benz(a)anthracene	1	1	5.6	1	U	U	U	U	U	U	U	U
Benzo(a)pyrene	1	1	1	22	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	U	U	U	U	U	U	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	U	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	0.83	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	0.17 J	0.19 J	0.16 J	0.33 J	U	U
Chrysene	1	3.9	56	1	U	U	U	U	U	U	U	U
Dimethylphthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Fluoranthene	100	100	500	1,000	U	U	U	U	U	U	U	U
Fluorene	30	100	500	386	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	U	U	U	U	U	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	1.8 J	U
Phenanthrene	100	100	500	1,000	U	U	U	U	U	U	0.33 J	U
Pyrene	100	100	500	1000	U	U	U	U	U	U	U	U
Total SVOCs					0	0	0.17	0.19	0.16	0.33	6.66	0
Total TICs (1)					0.11	0.175	2.556	1.1	0.49	0.28	43	0.443
Total SVOCs and TICs (1)					0.11	0.175	2.726	1.29	0.65	0.61	49.66	0.443

Notes

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SVOC = Semi-Volatile Organic Compound

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

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C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	091 MW-05 (14-16') 10/26/11	092 MW-06 (21-23') 10/27/11	093 MW-08 (26-28') 10/28/11	094 MW-10 (24-26') 10/31/11	095 MW-07 (8-10') 11/1/11	096 MW-09 (8-10') 10/31/11	097 MW-11 (14-16') 11/2/11	098 MW-11 (6-7.4') 11/2/11
2-Methylnaphthalene	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Benz(a)anthracene	1	1	5.6	1	U	U	U	U	U	U	U	U
Benzo(a)pyrene	1	1	1	22	U	U	U	U	U	U	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	U	U	U	U	U	U	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	U	U	U	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	U	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Chrysene	1	3.9	56	1	U	U	U	U	U	U	U	U
Dimethylphthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	0.28 J
Fluoranthene	100	100	500	1,000	U	U	U	U	U	U	U	U
Fluorene	30	100	500	386	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	U	U	U	U	U	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	U	U
Phenanthrene	100	100	500	1,000	U	U	U	U	U	U	U	U
Pyrene	100	100	500	1000	U	U	U	U	U	U	U	U
Total SVOCs					0	0	0	0	0	0	0	0.28
Total TICs (1)					0.366	2.26	0.48	U	0.074	0.85	0.84	0.39
Total SVOCs and TICs (1)					0.366	2.26	0.48	0	0.074	0.85	0.84	0.67

Notes

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mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

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(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 5

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	100 MW-12 (30-30.8') 11/3/11	101 MW-13 (10-12') 11/3/11	102 MW-13 (24-25.9') 11/4/11	104 MW-14 (6-8') 11/4/11	106 TB-01 (18-20') 11/7/11	109 TB-03 (20-22') 11/8/11	121 TB-02 (22-24') 11/9/11	124 MW-1R (22-23.7') 11/10/11	127 MW-2R (20-22') 11/15/11
2-Methylnaphthalene	NA	NA	NA	NA	U	U	U	U	U	U	U	U	U
Benz(a)anthracene	1	1	5.6	1	U	U	U	0.25	U	U	U	U	U
Benzo(a)pyrene	1	1	1	22	U	U	U	0.25 J	U	U	U	U	U
Benzo(b)fluoranthene	1	1	5.6	1.7	U	U	U	0.36 J	U	U	U	U	U
Benzo(g,h,i)perylene	100	100	500	1,000	U	U	U	0.22 J	U	U	U	U	U
Benzo(k)fluoranthene	0.8	3.9	56	1.7	U	U	U	U	U	U	U	U	U
1,1-Biphenyl	NA	NA	NA	NA	U	U	U	U	U	U	U	U	U
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	U	U	U	U	U	U	U	U	U
Chrysene	1	3.9	56	1	U	U	U	0.25 J	U	U	U	U	U
Dimethylphthalate	NA	NA	NA	NA	0.18 J	0.16 J	0.23 J	0.16 J	U	U	U J	U J	U
Fluoranthene	100	100	500	1,000	U	U	U	0.46	U	U	U	U	U
Fluorene	30	100	500	386	U	U	U	U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	8.2	U	U	U	0.17 J	U	U	U	U	U
Naphthalene	12	100	500	12	U	U	U	U	U	U	U	U	U
Phenanthrene	100	100	500	1,000	U	U	U	0.23 J	U	U	U	U	U
Pyrene	100	100	500	1000	U	U	U	0.39	U	U	U	U	U
Total SVOCs					0.18	0.16	0.23	2.74	0	0	0	0	0
Total TICs (1)					0.39	0.46	0.59	0.816	0.32	0.29	0.53	0.55	0.68
Total SVOCs and TICs (1)					0.57	0.62	0.82	3.556	0.32	0.29	0.53	0.55	0.68

Notes

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TIC = Tentatively Identified Compound

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C = Exceeds Commercial Use SCO

D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	053 TP-01 (2') 9/26/11	056 TP-03 (10') 9/26/11	057 TP-04 (3-4') 9/26/11	058 TP-05 (3.5') 9/26/11	059 TP-07 (3') 9/26/11	062 TB-MIP-11 (5') 10/6/11	063 TB-MIP-03 (6') 10/6/11	064 TB-MIP-05 (10') 10/6/11
Aluminum	NA	NA	NA	NA	3740	2020 J	3680	2670 J	4080	2070	2450	2510
Antimony	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Arsenic	13	16	16	16	8.83	1.15	3.55	4.19	**56.6 ABCD**	1.56	1.71	1.94
Barium	350	400	400	820	149 J	24 J	57.7 J	66.1 J	42.1 J	20.3	42.1	30.6
Beryllium	7.2	72	590	47	0.21 J	U	0.25 J	0.16 J	0.19 J	0.093 J	0.118 J	0.124 J
Cadmium	2.5	4.3	9.3	7.5	U	U	U	U	U	U	U	U
Calcium	NA	NA	NA	NA	23300 J	33200 J	R	29900 J	24100 J	26900	27400	34500
Chromium	30	180	1,500	NA	7.7	2.84	6.45	3.6	4.9	3.53	4.29	4.32
Cobalt	NA	NA	NA	NA	4.32	2.34	5.85	2.81	4.13	2.04	2.15	2.48
Copper	50	270	270	1,720	42.2	6.21 J	10.5 J	14.8 J	11.1 J	2.86	4.54	3.79
Iron	NA	NA	NA	NA	10900	6630	11200	6260	8490	6090	7190	7680
Lead	63	400	1,000	450	**324 A**	R	30.7 J	**184 J A**	**509 ABD**	2.13	2.31	2.6
Magnesium	NA	NA	NA	NA	5630 J	9440 J	R	6220 J	8890 J	6150	7910	7800
Manganese	1600	2,000	10,000	2,000	411 J	307 J	865	237 J	317 J	207 J	258 J	235 J
Total Mercury	0.18	0.81	2.8	0.73	**0.859** D **ABD**	0.004	0.052	**0.356 A**	0.168	0.009 J	0.006 J	0.005 J
Nickel	30	310	310	130	7.12	3.54	7.87	5.67	6.76	3.92	4.88	5.35
Potassium	NA	NA	NA	NA	722	420	289	487	516	434	453	575
Selenium	3.9	180	1,500	4	1.71	U	1.24	U	0.72 J	0.711 J	0.595 J	U
Silver	2	180	1,500	8.3	0.56 J	0.17	0.42 J	0.33 J	0.25 J	U	U	U
Sodium	NA	NA	NA	NA	382 J	267 J	137	371 J	161 J	192 J	196 J	233 J
Vanadium	NA	NA	NA	NA	11.3	7.24	13.2	7.59	10.6	7.19	7.66	8.85
Zinc	109	10,000	10,000	2,480	**209 A**	15.5 J	28.5 J	**139 A**	41.1 J	15.5	19.7	18.5

Notes

U = Not Detected NA = Not Available TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO **B** = Exceeds Restricted Residential Use SCO **C** = Exceeds Commercial Use SCO **D** =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm). R = Data rejected due to severe quality control issues.

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

NJ = The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as potential false positive and/or elevated quantitative value.

UJ = Not Detected at an estimated detection limit as qualified by the data validator

Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	065 TB-MIP-06 (14') 10/6/11	066 TB-MIP-07 (9.5') 10/6/11	067 TB-MIP-08 (10') 10/6/11	068 TB-MIP-09 (4.5') 10/6/11	069 TB-MIP-09 (13') 10/6/11	070 TB-MIP-04 (13') 10/6/11	071 TB-MIP-13 (9') 10/6/11	072 TB-MIP-12 (7') 10/6/11
Aluminum	NA	NA	NA	NA	2940	2850	2020	2810	1700	1930	2450	5340
Antimony	NA	NA	NA	NA	u	U	U	U	U	U	U	U
Arsenic	13	16	16	16	1.39	1.86	1.27	4.06	1.3	1.26	1.85	4.8
Barium	350	400	400	820	34.4	32.7	43.4	32.2	18	19.8	29.2	37.9
Beryllium	7.2	72	590	47	0.114 J	0.121 J	0.071 J	0.203 J	U	0.087 J	0.112 J	0.371 J
Cadmium	2.5	4.3	9.3	7.5	U	U	U	U	U	U	U	0.111 J
Calcium	NA	NA	NA	NA	33100	37200	21300	40900	20300	22700	26600	2220
Chromium	30	180	1,500	NA	5.08	4.55	3.11	4.71	3.57	3.5	4.12	7.91
Cobalt	NA	NA	NA	NA	2.5	2.59	3.12	2.53	1.69	1.92	2.38	4.72
Copper	50	270	270	1,720	4.19	3.62	2.77	3.8	2.38	2.75	3.68	13.1
Iron	NA	NA	NA	NA	7420	7730	7140	8440	6160	5980	7180	10100
Lead	63	400	1,000	450	2.49	2.15	1.64	5.03	1.23	1.55	2.27	7.71
Magnesium	NA	NA	NA	NA	7590	7470	5770	7830	5510	6360	6980	1380
Manganese	1600	2,000	10,000	2,000	223 J	246 J	604 J	157 J	184 J	201 J	220 J	170 J
Total Mercury	0.18	0.81	2.8	0.73	0.003 J	0.003 J	U	0.016	U	0.003 J	U	0.015
Nickel	30	310	310	130	5.45	5.19	5.07	5.65	3.39	3.68	5.1	10.4
Potassium	NA	NA	NA	NA	677	593	333	838	296	366	551	1290
Selenium	3.9	180	1,500	4	0.753 J	0.561 J	0.459 J	U	U	U	0.404 J	0.602 J
Silver	2	180	1,500	8.3	U	U	U	U	U	U	U	U
Sodium	NA	NA	NA	NA	227 J	228 J	251 J	223 J	215 J	202 J	231 J	329 J
Vanadium	NA	NA	NA	NA	9.29	9.31	7.08	8.63	8.24	7.4	8.33	16.2
Zinc	109	10,000	10,000	2,480	20.1	18.8	17.1	19.2	12.8	15	18.8	23

Notes

U = Not Detected

NA = Not Available

TIC = Tentatively Identified Compound

A = Exceeds Unrestricted Use SCO

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mg/kg = milligrams per kilogram or parts per million (ppm).

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Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	073 TB-MIP-12 (10') 10/6/11	074 TB-MIP-15 (9') 10/6/11	075 TB-MIP-14 (13') 10/6/11	076 TB-MIP-14 (21') 10/6/11	077 TB-MIP-21 (6.5') 10/6/11	078 TB-MIP-21 (17.5') 10/6/11	079 TB-MIP-20 (15.5') 10/6/11	080 TB-MIP-20 (21') 10/6/11
Aluminum	NA	NA	NA	NA	2340	2490	3850	2180	3090	2220	2790	1680
Antimony	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Arsenic	13	16	16	16	1.24	1.75	1.39	1.32	3	1.17	1.95	1.04 J
Barium	350	400	400	820	29.1	16.7	25.6	15.5	23.6	18.4	31.4	11.6
Beryllium	7.2	72	590	47	0.091 J	0.131 J	0.173 J	0.101 J	0.207 J	0.124 J	0.125 J	0.09 J
Cadmium	2.5	4.3	9.3	7.5	U	U	U	U	U	U	U	U
Calcium	NA	NA	NA	NA	41000	27400	39900	24700	49100	27600	27500	20000
Chromium	30	180	1,500	NA	4.07	4.27	6.54	3.9	5.31	4.66	4.99	3.45
Cobalt	NA	NA	NA	NA	2.1	2.25	2.82	2.08	3.03	2.03	2.59	1.54 J
Copper	50	270	270	1,720	3.59	3.43	4.66	3	6	1.95 J	5.8	1.97 J
Iron	NA	NA	NA	NA	6430	7040	8380	6720	8460	6600	7340	5630
Lead	63	400	1,000	450	1.9	2.42	2.84	1.73	4.92	1.98	2.27	1.34
Magnesium	NA	NA	NA	NA	8490	7190	11000	6490	8510	7360	6490	4910
Manganese	1600	2,000	10,000	2,000	275 J	225 J	249 J	211 J	246 J	196 J	237 J	170 J
Total Mercury	0.18	0.81	2.8	0.73	0.003 J	0.004 J	0.003 J	U	0.004 J	U	U	U
Nickel	30	310	310	130	4.38	4.67	6.16	4.34	6.82	4.39	5.15	3.44
Potassium	NA	NA	NA	NA	512	436	799	451	1040	478	622	322
Selenium	3.9	180	1,500	4	U	0.487 J	U	U	0.707 J	U	0.456 J	0.582 J
Silver	2	180	1,500	8.3	U	U	U	U	U	U	U	U
Sodium	NA	NA	NA	NA	258 J	300 J	278 J	165 J	313 J	347 J	258 J	381 J
Vanadium	NA	NA	NA	NA	7.75	8.5	9.93	8.18	8.27	8.17	8.75	7.31
Zinc	109	10,000	10,000	2,480	16.5	17	26.2	15.5	25.3	15.9	19.1	13.3

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Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	082 TB-MIP-17 (13') 10/6/11	083 TB-MIP-10 (11') 10/6/11	084 TB-MIP-02 (15') 10/6/11	087 TB-MIP-07 (3') 10/6/11	089 MW-04 (4-6') 10/25/11	090 MW-04 (17-17.9') 10/25/11	091 MW-05 (14-16') 10/26/11	092 MW-06 (21-23') 10/27/11
Aluminum	NA	NA	NA	NA	1480	2720	2870	4860	5960	1960	2570	1100
Antimony	NA	NA	NA	NA	U	U	U	U	U	U	U	U
Arsenic	13	16	16	16	3.03	3.17	1.62	12.7	4.5	1.22	6.05	0.763 J
Barium	350	400	400	820	25.4	27.1	29.5	142	59.4 J	17.8 J	30.1	4.6 J
Beryllium	7.2	72	590	47	0.066 J	0.191 J	0.146 J	0.393	0.351 N	0.095 J	0.179 J	U
Cadmium	2.5	4.3	9.3	7.5	U	U	U	0.148 J	0.669	0.273 J	0.518	0.162 J
Calcium	NA	NA	NA	NA	38800	74500	44400	29400	1790	22100	39600	16100
Chromium	30	180	1,500	NA	3.16	5.15	5.02	9.72	9.62	3.7	4.81	3.26
Cobalt	NA	NA	NA	NA	1.69	2.35	2.68	3.88	4.18	1.78	2.64	1.24 J
Copper	50	270	270	1,720	2.7	7.46	5.23	25.7	7.06	2	3.78	1.78 J
Iron	NA	NA	NA	NA	5780	8480	7650	10900	13800	5180	9970	3560
Lead	63	400	1,000	450	1.6	5.24	3.43	**268** **A**	6.77	1.2	2.94	0.678 J
Magnesium	NA	NA	NA	NA	5370	15900	12500	6040	1720	6520	9300	3380
Manganese	1600	2,000	10,000	2,000	231	294	260	337	92.9	169	237	126
Total Mercury	0.18	0.81	2.8	0.73	0.007 J	0.006 J	0.006 J	**0.596** **A**	0.033	U	U	U
Nickel	30	310	310	130	3.62	5.4	6.02	8.48	9.83	3.67	4.77	2.94
Potassium	NA	NA	NA	NA	204	938	721	796	1220	389	605	121
Selenium	3.9	180	1,500	4	0.427 J	0.585 J	0.643 J	1.54	1.55	0.447 J	1.24	U
Silver	2	180	1,500	8.3	U	U	U	U	U J	U J	U	U
Sodium	NA	NA	NA	NA	249	196	198	404	707	245	214	261
Vanadium	NA	NA	NA	NA	6.16	8.96	8.76	12.9	15.9 J	6.25 J	7.77	4.35
Zinc	109	10,000	10,000	2,480	13.9	22.8	21.5	**120** **A**	28.2 J	12.2 J	19	10.4

Notes

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Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	093 MW-08 (26-28') 10/28/11	094 MW-10 (24-26') 10/31/11	095 MW-07 (8-10') 11/1/11	096 MW-09 (8-10') 10/31/11	097 MW-11 (14-16') 11/2/11	100 MW-12 (30-30.8') 11/3/11	102 MW-13 (24-25.9') 11/4/11	104 MW-14 (6-8') 11/4/11
Aluminum	NA	NA	NA	NA	3980	1860	2480	2910	1590	1880	1530	1880
Antimony	NA	NA	NA	NA	U	U	0.67 J	0.58 J	U	0.43 J	U	U
Arsenic	13	16	16	16	2.89	1.75	1.25	1.02	U	0.52 J	U	U
Barium	350	400	400	820	27.1	13.1	32.2	41.4	10.6	19.9	15.4	32.4
Beryllium	7.2	72	590	47	0.195 J	0.106 J	0.11 J	0.12 J	0.06 J	0.08 J	U	0.09 J
Cadmium	2.5	4.3	9.3	7.5	0.552	0.331 J	0.34	0.39	U	0.19 J	U	0.13 J
Calcium	NA	NA	NA	NA	39300	33600	37800	35900	23000	29800	27500	40400
Chromium	30	180	1,500	NA	7.66	4.4	5.37	4.12	3.23	3.06	2.44	2.49
Cobalt	NA	NA	NA	NA	4.3	2.11	3.07	3	1.88	2.4	2.17	1.83
Copper	50	270	270	1,720	6.3	4.04	7.64	9.7	5.06	3.18	2.72	3.02
Iron	NA	NA	NA	NA	10800	6880	7710	7960	5820	5550	4660	4930
Lead	63	400	1,000	450	2.39	1.33	2.4	2.77	1.3	1.55	1.06	5.34
Magnesium	NA	NA	NA	NA	9770	10000	8590	8010	6580	7130	6790	10200
Manganese	1600	2,000	10,000	2,000	350	305	298	296	214	238	219	193
Total Mercury	0.18	0.81	2.8	0.73	U	U	0.003 J	0.0054 J	0.006 J	U	U	0.005 J
Nickel	30	310	310	130	8.7	4.48	6.69	5.56	3.19	4.64	3.4	3.37
Potassium	NA	NA	NA	NA	692	250	437	495	239	360	288	380
Selenium	3.9	180	1,500	4	1.02 J	0.884 J	U	U	U	U	U	U
Silver	2	180	1,500	8.3	U	U	U	U	U	U	U	U
Sodium	NA	NA	NA	NA	321	302	31.1 J	84.4 J	63.3 J	148	124	144
Vanadium	NA	NA	NA	NA	12.6	8.31	7.93	8.85	7.89	6.69	5.1	4.55
Zinc	109	10,000	10,000	2,480	24.1	16.9	19	21.1	12.2	12.9	14.2	16.4

Notes

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Table 6

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	106 TB-01 (18-20') 11/7/11	109 TB-03 (20-22') 11/8/11	121 TB-02 (22-24') 11/9/11	124 MW-01R (22-23.7') 11/10/11	127 MW-02R (20-22') 11/15/11
Aluminum	NA	NA	NA	NA	1220	1660	896	1470	1750
Antimony	NA	NA	NA	NA	0.54 J	U	U	U	0.64 J
Arsenic	13	16	16	16	U	U	U	U	0.41 J
Barium	350	400	400	820	10.9	20.1	5.42	11.6	28
Beryllium	7.2	72	590	47	0.06 J	0.07 J	U	0.07 J	U
Cadmium	2.5	4.3	9.3	7.5	U	U	U	U	U
Calcium	NA	NA	NA	NA	39000	34000	13200	25100	22000
Chromium	30	180	1,500	NA	1.66	2.64	1.76	3.27	2.75 *
Cobalt	NA	NA	NA	NA	1.57	1.83	1.13 J	1.76 J	1.71
Copper	50	270	270	1,720	2.99	5.43	3.62	6.28	4.71
Iron	NA	NA	NA	NA	3620	4940	3600	6060	4640
Lead	63	400	1,000	450	1.21	2.51	1.46 J	1.86 J	1.97
Magnesium	NA	NA	NA	NA	3980	9030	3340	7070	5040
Manganese	1600	2,000	10,000	2,000	157	211	127	232	182
Total Mercury	0.18	0.81	2.8	0.73	0.004 J	0.004 J	0.004 J	U	0.032
Nickel	30	310	310	130	2.44	3.11	1.95 J	3.61	4.09
Potassium	NA	NA	NA	NA	291	363	127	247	271
Selenium	3.9	180	1,500	4	U	U	U	0.6 J	U
Silver	2	180	1,500	8.3	U	U	U	U	U
Sodium	NA	NA	NA	NA	93.8 *	91.6	73.8 J	137	461
Vanadium	NA	NA	NA	NA	3.43	5.27	4.85	8.16	5.53
Zinc	109	10,000	10,000	2,480	10.9 N	13.4	8.39	12.4	12.6

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Table 7

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	053 TP-01 (2') 9/26/11		056 TP-03 (10') 9/26/11		057 TP-04 (3-4') 9/26/11		058 TP-05 (3.5') 9/26/11		059 TP-07 (3') 9/26/11		062 TB-MIP-11 (5') 10/6/11		063 TB-MIP-03 (6') 10/6/11		064 TB-MIP-05 (10') 10/6/11	
PCBs (1)																				
Aroclor-1248	0.1	1	1	3.2	U		U		U		U		U		U		U		U	
Aroclor-1260	0.1	1	1	3.2	U		U		U		U		U		U		U		U	

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PCBs = Polychlorinated Biphenyls

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Table 7

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	065 TB-MIP-06 (14') 10/6/11		066 TB-MIP-07 (9.5') 10/6/11		067 TB-MIP-08 (10') 10/6/11		068 TB-MIP-09 (4.5') 10/6/11		069 TB-MIP-09 (13') 10/6/11		070 TB-MIP-04 (13') 10/6/11		071 TB-MIP-13 (9') 10/6/11		072 TB-MIP-12 (7') 10/6/11	
PCBs (1)																				
Aroclor-1248	0.1	1	1	3.2	U		U		U		U		U		U		U		U	
Aroclor-1260	0.1	1	1	3.2	U		U		U		U		U		U		U		U	

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Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	073 TB-MIP-12 (10') 10/6/11		074 TB-MIP-15 (9') 10/6/11		075 TB-MIP-14 (13') 10/6/11		076 TB-MIP-14 (21') 10/6/11		077 TB-MIP-21 (6.5') 10/6/11		078 TB-MIP-21 (17.5') 10/6/11		079 TB-MIP-20 (15.5') 10/6/11		080 TB-MIP-20 (21') 10/6/11	
PCBs (1)																				
Aroclor-1248	0.1	1	1	3.2	U		U		U		U		U		U		U		U	
Aroclor-1260	0.1	1	1	3.2	U		U		U		U		U		U		U		U	

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Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	082 TB-MIP-17 (13') 10/6/11		083 TB-MIP-10 (11') 10/6/11		084 TB-MIP-02 (15') 10/6/11		087 TB-MIP-07 (3') 10/6/11		089 MW-04 (4-6') 10/25/11		090 MW-04 (17-17.9') 10/25/11		091 MW-05 (14-16') 10/26/11		092 MW-06 (21-23') 10/27/11	
PCBs (1)																				
Aroclor-1248	0.1	1	1	3.2	U		U		U		U		U		U		U		U	
Aroclor-1260	0.1	1	1	3.2	U		U		U		U		U		U		U		U	

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RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	093 MW-08 (26-28') 10/28/11	094 MW-10 (24-26') 10/31/11	095 MW-07 (8-10') 11/1/11	096 MW-09 (8-10') 10/31/11	097 MW-11 (14-16') 11/2/11	100 MW-12 (30-30.8') 11/3/11	102 MW-13 (24-25.9') 11/4/11	104 MW-14 (6-8') 11/4/11
PCBs (1)												
Aroclor-1248	0.1	1	1	3.2	U J	U	U	U	U	U	U	U
Aroclor-1260	0.1	1	1	3.2	U J	U	U	U	U	U	U	U

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Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 7

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	106 TB-01 (18-20') 11/7/11	109 TB-03 (20-22') 11/8/11	111 SB-01 (0-2') 11/8/11	112 SB-01 (2-4') 11/8/11	113 SB-02 (0-2') 11/8/11	114 SB-02 (2-4') 11/8/11	115 SB-03 (0-2') 11/9/11	116 SB-03 (2-4') 11/9/11
PCBs (1)												
Aroclor-1248	0.1	1	1	3.2	U	U	U	U	U	U	0.031 J	0.058 J
Aroclor-1260	0.1	1	1	3.2	U	0.082	U	U	0.013 J	U	U	U

Notes

U = Not Detected NA = Not Available PCBs = Polychlorinated Biphenyls

A = Exceeds Unrestricted Use SCO **B** = Exceeds Restricted Residential Use SCO **C** = Exceeds Commercial Use SCO **D** =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 7

RI/RAA Report
300,304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Unrestricted Use	B Restricted Residential Use	C Restricted Commercial Use	D Protection of Groundwater	117 SB-04 (0-2') 11/9/11		118 SB-04 (2-4') 11/9/11		119 SB-05 (2-4') 11/911		121 TB-02 (22-24') 11/9/11		124 MW-01R (22-23.7') 11/10/11		127 MW-02R (20-22') 11/15/11		
PCBs (1)																	
Aroclor-1248	0.1	1	1	3.2	0.1	J	0.092	J	U		U		U		0.11	J	A
Aroclor-1260	0.1	1	1	3.2	U		U		U		U		U		U		

Notes

U = Not Detected
NA = Not Available
PCBs = Polychlorinated Biphenyls
NT = Not Tested
A = Exceeds Unrestricted Use SCO
B = Exceeds Restricted Residential Use SCO
C = Exceeds Commercial Use SCO
D =Exceeds Protection of Groundwater SCO

mg/kg = milligrams per kilogram or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 8A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	134 MW-01 1/9/12	135 MW-02 1/9/12	136 MW-03 1/5/12	137 MW-04 1/6/12	138 MW-05 1/9/12	139 MW-06 1/6/12	140 MW-07 1/9/12	141 MW-08 1/4/12	142 MW-09 1/6/12	143 MW-10 1/5/12
1,1-Dichloroethane	5	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5	0.79 J	0.81 J	U	U	U	U	U	U	U	U
Acetone	50	U	U	U J	U J	U	U J	U	U J	U J	U J
Chloroform	7	4.6	0.62 J	U	U	U	U	U	U	U	U
Cis-1,2-Dichloroethene	5	**120 X**	**62 X**	1.8	U	U	U	U	U	U	U
Methyl tert-butyl Ether	10	U	U	U J	3.6 J	U J	U J	U J	U	U J	U J
trans-1,2-Dichloroethene	5	1.7	1	U	U	U	U	U	U	U	U
Tetrachloroethene	5	**48000 D X**	**19000 D X**	**1300 D X**	U J	**260 D X**	**14 J X**	U	U	U	U J
Toluene	5	U	U	U	U	U	U	U	U	U	U
Trichloroethene	5	**230 J X**	**180 J X**	**44 X**	U	U	U	U	U	U	U
Trichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	1.5
Vinyl Chloride	2	0.59 J	0.46 J	U	U	U	U	U	U	U	U
Total VOCs		48357.68	19244.89	1345.8	3.6	260	14	0	0	0	1.5
Total TICs (1)		U	U	U	0.9	U	U	U	U	U	U
Total VOCs and TICs (1)		48357.68	19244.89	1345.8	4.5	260	14	0	0	0	1.5

Notes

U = Not Detected NA = Not Available VOC = Volatile Organic Compound TIC = Tentatively Identified Compound

UJ = Not Detected at an estimated detection limit as qualified by the data validator µg/L = micrograms per Liter or parts per billion (ppb).

X = Exceeds Groundwater Standard or Guidance Value.

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibration Range.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 8A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	144 MW-11 1/5/12	145 MW-12 1/4/12	146 MW-13 1/4/12	147 MW-14 1/3/12						
1,1-Dichloroethane	5	U	U	U	U						
1,1-Dichloroethene	5	U	U	U	U						
Acetone	50	1 J	U J	U J	U J						
Chloroform	7	U	U	U	U						
Cis-1,2-Dichloroethene	5	2.4	U	U	U						
Methyl tert-butyl Ether	10	U J	U	U	U						
trans-1,2-Dichloroethene	5	U	U	U	U						
Tetrachloroethene	5	220 D X	U	U	U						
Toluene	5	U	U	U	U						
Trichloroethene	5	4.4	U	U	U						
Trichlorofluoromethane	5	U	U	U	U						
Vinyl Chloride	2	U	U	U	U						
Total VOCs		227.8	0	0	0						
Total TICs (1)		0.55	U	U	U						
Total VOCs and TICs (1)		228.35	0	0	0						

Notes

U = Not Detected NA = Not Available VOC = Volatile Organic Compound TIC = Tentatively Identified Compound

UJ = Not Detected at an estimated detection limit as qualified by the data validator µg/L = micrograms per Liter or parts per billion (ppb).

X = Exceeds Groundwater Standard or Guidance Value.

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibration Range.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 8B

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected VOCs in µg/L or ppb

Bedrock Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	148 MW-01R 1/9/12	149 MW-02R 1/9/12	150 MW-04R 1/6/12	151 MW-05R 1/9/12	152 MW-06R 1/6/12	153 MW-07R 1/9/12	154 MW-09R 1/6/12	155 MW-10R 1/5/12	156 MW-14R 1/3/12	
1,1-Dichloroethane	5	0.59 J	U	U	U	U	U	U	U	U	
1,1-Dichloroethene	5	U	U	U	U	U	U	U	U	U	
Acetone	50	U	1.9 J	U J	U	U J	U	U J	U J	U J	
Chloroform	7	U	U	U	U	U	U	U	U	U	
Cis-1,2-Dichloroethene	5	1.8	2.3	1.5	U	U	U	U	U	U	
Methyl tert-butyl Ether	10	U	U	U J	U J	U J	U J	U J	U J	U	
trans-1,2-Dichloroethene	5	U	U	U	U	U	U	U	U	U	
Tetrachloroethene	5	U J	U J	46 J X	32 X	U J	U	U J	U J	U	
Toluene	5	U	U	U	U	U	U	0.48 J	U	U	
Trichloroethene	5	U	U	7.8 X	10 X	U	U	U	U	U	
Trichlorofluoromethane	5	U	U	U	U	U	U	U	U	U	
Vinyl Chloride	2	2.1 X	0.99 J	U	U	U	U	U	U	U	
Total VOCs		4.49	5.19	55.3	42	0	0	0.48	0	0	
Total TICs (1)		U	U	U	U	0.45	U	U	U	U	
Total VOCs and TICs (1)		4.49	5.19	55.3	42	0.45	0	0.48	0	0	

Notes

U = Not Detected NA = Not Available VOC = Volatile Organic Compound TIC = Tentatively Identified Compound

UJ = Not Detected at an estimated detection limit as qualified by the data validator µg/L = micrograms per Liter or parts per billion (ppb).

X = Exceeds Groundwater Standard or Guidance Value.

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibaration Range.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags.

Table 9A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	134 MW-01 1/9/12	135 MW-02 1/9/12	136 MW-03 1/5/12	137 MW-04 1/6/12	138 MW-05 1/9/12	139 MW-06 1/6/12	140 MW-07 1/9/12	141 MW-08 1/4/12	142 MW-09 1/6/12	143 MW-10 1/5/12
Total SVOCs	NA	0	0	0	0	0	0	0	0	0	0
Total TICs [1]	NA	U	U	U	3.2	6.7	U	U	5.2	U	9.2
Total SVOCs and TICs (1)	NA	0	0	0	3.2	6.7	0	0	5.2	0	9.2

Notes
NA = Not Available SVOC = Semi-Volatile Organic Compound TIC = Tentatively Identified Compound U = Not Detected

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 9A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in µg/L or ppb

Overburden Groundwater Samples

Contaminant	Groundwater Standard or Guidance Value	144 MW-11 1/5/12	145 MW-12 1/4/12	146 MW-13 1/4/12	147 MW-14 1/3/12						
Total SVOCs	NA	0	0	0	0						
Total TICs [(1)]	NA	U	U	4.7	2.5						
Total SVOCs and TICs (1)	NA	0	0	4.7	2.5						

Notes
NA = Not Available SVOC = Semi-Volatile Organic Compound TIC = Tentatively Identified Compound U = Not Detected

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 9B

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected SVOCs in µg/L or ppb

Bedrock Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	148 MW-01R 1/9/12	149 MW-02R 1/9/12	150 MW-04R 1/6/12	151 MW-05R 1/9/12	152 MW-06R 1/6/12	153 MW-07R 1/9/12	154 MW-09R 1/6/12	155 MW-10R 1/5/12	156 MW-14R 1/3/12	
Total SVOCs	NA	0	0	0	0	0	0	0	0	0	
Total TICs [1]	NA	U	3.2	U	46	2.7	20	63.4	6.2	2.5	
Total SVOCs and TICs (1)	NA	0	3.2	0	46	2.7	20	63.4	6.2	2.5	

Notes
NA = Not Available SVOC = Semi-Volatile Organic Compound TIC = Tentatively Identified Compound U = Not Detected

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

(1) Refer to the analytical laboratory report for individual TICs detected and associated flags. TICs qualified with an "A" (suspected Aldol-condensation product) or a "B" (analyte found in blank as well as the sample) were not included in the total TICs presented on this table.

Table 10A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	134 MW-01 1/9/12	135 MW-02 1/9/12	136 MW-03 1/5/12	137 MW-04 1/6/12	138 MW-05 1/9/12	139 MW-06 1/6/12	140 MW-07 1/9/12	141 MW-08 1/4/12	142 MW-09 1/6/12	143 MW-10 1/5/12
Aluminum	NA	36.6 J	20.7 J	81.9	337	20 J	U	496	U	U	U
Antimony	3	U	U	U	U	**8.96 J X**	U	U	U	U	U
Arsenic	25	U	U	U	7.12 J	U	U	U	U	U	U
Barium	1,000	68.3	96.8	53.3	67.7	44.7 J	17.9 J	96.3	71.1	87.7	24.1 J
Calcium	NA	141000	86700	73800 J	153000 J	344000	192000 J	65800	131000	85600 J	223000 J
Chromium	50	R	U	U	41.3	R	1.14 J	U	4.58 J	1.57 J	U
Cobalt	NA	U	U	U	U	U	U	U	U	U	U
Copper	200	U J	U	U	U	U	U	U	U	U	U
Iron	300	R	R	170 J	**6330 X**	R	218 J	R	**399 J X**	63.6 J	83.5 J
Lead	25	4 J	4.29 J	U	U	U	U	5.04 J	U	U	U
Magnesium	35,000	**42600 X**	28800	28700	**80900 X**	**74800 X**	**96100 X**	15800	**42300 X**	19000	**91900 X**
Manganese	300	182 J	R	63.1	96.2	R	117	85 J	62.3	32.1	50.1
Nickel	100	R	U	U	28.1	R	U	U	U	U	7.27 J
Potassium	NA	23000	18600	8020	30500	31000	10800	6910	16700	6380	15100
Selenium	10	U	U	U	U	**40.1 X**	8.19 J	U	U	7.58 J	U
Sodium	20,000	**299000 X**	**183000 X**	**190000 X**	**811000 X**	**268000 X**	**466000 X**	**147000 X**	**109000 X**	**126000 X**	**354000 X**
Thallium	0.5	U	U	U	U	U	U	U	U	U	U
Zinc	2,000	11.3 J	14.6 J	27.5	12.1 J	13.8 J	11.5 J	U	U	15.0 J	13.4 J
Total Cyanide	200	5	U	U	U	3 J	4 J	U	U	13	6

Notes

U = Not Detected NA = Not Available UJ = Not Detected at an estimated detection limit as qualified by the data validator

X = Exceeds Groundwater Standard or Guidance Value µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibaration Range R = Data rejected due to severe quality control issues.

Table 10A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	144 MW-11 1/5/12		145 MW-12 1/4/12		146 MW-13 1/4/12		147 MW-14 1/3/12													
Aluminum	NA	U		U		70.1		34.2 J													
Antimony	3	U		U		U		U													
Arsenic	25	U		U		U		U													
Barium	1,000	81.8		U		U		U													
Calcium	NA	127000 J		69400		377000		239000													
Chromium	50	1.15 J		14.2		**118**	X	11.4													
Cobalt	NA	U		U		U		U													
Copper	200	3.37 J		U		U		U													
Iron	300	84.4 J		200 J		**539**	X	97.3 J													
Lead	25	U		U		U		U													
Magnesium	35,000	**43600**	X	**63800**	X	**71900**	X	**66600**	X												
Manganese	300	55.9		85.6		70.1		45.9													
Nickel	100	U		U		48.4		U													
Potassium	NA	15100		5330		49100		17700													
Selenium	10	U		**11.4 J**	X	U		U													
Sodium	20,000	**257000**	X	**150000**	X	**616000**	X	**611000**	X												
Thallium	0.5	U		U		U		U													
Zinc	2,000	8.31 J		U		7.07 J		9.6 J													
Total Cyanide	200	U		U		U		U													

Notes

U = Not Detected NA = Not Available UJ = Not Detected at an estimated detection limit as qualified by the data validator

X = Exceeds Groundwater Standard or Guidance Value µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibaration Range R = Data rejected due to severe quality control issues.

Table 10B

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected Metals in µg/L or ppb

Bedrock Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	148 MW-01R 1/9/12		149 MW-02R 1/9/12		150 MW-04R 1/6/12		151 MW-05R 1/9/12		152 MW-06R 1/6/12		153 MW-07R 1/9/12		154 MW-09R 1/6/12		155 MW-10R 1/5/12		156 MW-14R 1/3/12		
Aluminum	NA	36.2 J		38.7 J		U		U		U		19.6 J		U		U		92.1		
Antimony	3	U		U		U		U		U		U		U		U		U		
Arsenic	25	**27.7**	X	9.9 J		**32.7**	X	U		8.4 J		7.47 J		U		U		U		
Barium	1,000	44.3 J		46.5 J		125		37.8 J		89.7		70		55.9		94.9		80.1		
Calcium	NA	193000		202000		176000 J		125000		183000 J		60700		30700 J		153000 J		215000		
Chromium	50	U		R		U		U		14.4		R		7.3		47		27.9		
Cobalt	NA	U		U		U		U		U		U		U		U		U		
Copper	200	U		U		U		U		U		U		U		2.19 J		U		
Iron	300	**21000**	X	**9670 J**	X	**633**	X	**18600**	X	**7190**	X	**7140 J**	X	**1750**	X	**24200**	X	**18100**	X	
Lead	25	6.88		3.18 J		U		U		U		2.95 J		U		U		U		
Magnesium	35,000	**103000**	X	**111000**	X	**140000**	X	**117000**	X	**148000**	X	**130000**	X	**53800**	X	**128000**	X	**136000**	X	
Manganese	300	160 J		119 J		13.9		**404**	X	77		91.2 J		23.6		**417**	X	185		
Nickel	100	U		R		U		U		12 J		U		U		16.5 J		13.4 J		
Potassium	NA	8570		10400		9050		13800		9860		21100		28600		9340		10700		
Selenium	10	U		U		U		U		U		U		U		U		U		
Sodium	20,000	**487000**	X	**406000**	X	**263000**	X	**196000**	X	**221000**	X	**183000**	X	**66100**	X	**76700**	X	**582000**	X	
Thallium	0.5	U		U		U		U		U		U		U		U		U		
Zinc	2,000	14.1 J		14.1 J		11.1 J		U		12.1 J		U		9.86 J		12.7 J		9.34 J		
Total Cyanide	200	U		U		U		U		U		U		U		7		U		

Notes

U = Not Detected NA = Not Available UJ = Not Detected at an estimated detection limit as qualified by the data validator

X = Exceeds Groundwater Standard or Guidance Value µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

J = Data indicates the presence of a compound that meets the identification criteria. The result is less than the quantitation limit but greater than the method detection limit. The concentration given is an approximate value.

D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.

E = Value Exceeds Calibaration Range R = Data rejected due to severe quality control issues.

Table 11A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs and Pesticides in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	134 MW-01 1/9/12	135 MW-02 1/9/12	136 MW-03 1/5/12	137 MW-04 1/6/12	138 MW-05 1/9/12	139 MW-06 1/6/12	140 MW-07 1/9/12	141 MW-08 1/4/12	142 MW-09 1/6/12	143 MW-10 1/5/12
Pesticides	NA	U	U	U	U	U	U	U	U	U	U
PCBs	0.09	U	U	U	U	U	U	U	U	U	U

Notes

NA = Not Available

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

U = Not Detected

Table 11A

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs and Pesticides in µg/L or ppb

Overburden Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	144 MW-11 1/5/12	145 MW-12 1/4/12	146 MW-13 1/4/12	147 MW-14 1/3/12						
Pesticides	NA	U	U	U	U						
PCBs	0.09	U	U	U	U						

Notes

NA = Not Available

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

U = Not Detected

Table 11B

RI/RAA
300, 304-308 Andrews St and 25 Evans St
Rochester, NY

NYSDEC Site #E828144

Summary of Detected PCBs and Pesticides in µg/L or ppb

Bedrock Groundwater Samples

Contaminant	X Groundwater Standard or Guidance Value	148 MW-01R 1/9/12	149 MW-02R 1/9/12	150 MW-04R 1/6/12	151 MW-05R 1/9/12	152 MW-06R 1/6/12	153 MW-07R 1/9/12	154 MW-09R 1/6/12	155 MW-10R 1/5/12	156 MW-14R 1/3/12	
Pesticides	NA	U	U	U	U	U	U	U	U	U	
PCBs	0.09	U	U	U	U	U	U	U	U	U	

Notes

NA = Not Available

µg/L = micrograms per Liter or parts per billion (ppb).

Groundwater Standards or Guidance Values as referenced in New York State Department of Environmental Conservation (NYSDEC) Technical and Guidance Series (TOGS) 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

U = Not Detected

APPENDIX D

Remedial Alternatives Tables

TABLE A

ANDREWS STREET SITE, ROCHESTER, NEW YORK
NYSDEC SITE NO. E828144

COMPARISON OF REMEDIAL ALTERNATIVES

Remediation Criteria	Remedial Alternative #1	Remedial Alternative #2	Remedial Alternative #3
Protection of Human Health and Environment	NO	YES	YES
Compliance with SCGs	NO	YES	YES
Long-Term Effectiveness and Permanence	NO	YES	YES
Reduction of Toxicity, Mobility, and Volume	Little	YES	YES
Short-Term Impacts and Effectiveness	Impacts - NO Effectiveness - NO	Impacts - NO Effectiveness - YES	Impacts - YES Effectiveness - YES
Implementability	Easy	Moderate	Difficult
Acceptable for Planned Future Use	NO	YES	YES
Total Present Worth Cost	$0.00	$1,524,389	$3,476,938

TABLE B

ANDREWS STREET SITE, ROCHESTER, NEW YORK
NYSDEC SITE #E828144

Opinion of Probable Cost
Alternative #1 - No Further Action

This alternative assumes no further action will be taken at a cost of $0.00

TABLE C

ANDREWS STREET SITE, ROCHESTER, NEW YORK
NYSDEC SITE #E828144

Opinion of Probable Cost

Alternative #2 - IRM Removals, In-Situ Groundwater Remediation, Institutional Controls; Engineering Controls; and Groundwater Monitoring

Capital/Initial Costs

IRM Work Plan,. HASP, QAPP, CPP	$22,000
Decommissioning of Select Existing Wells/Installation of New Wells	$32,000
IRM - PCE Source Area Soil Removal	$255,000
IRM - Evans St Right-Of-Way Sewer and Soil Removal	$26,500
IRM - UST Area Tanks and Soil Removal	$25,000
IRM - PCB Area Soil Removal	$6,500
IRM - 320 Andrews St Piping Network and Soil Removal	$13,000
IRM - Trench Drain Area Soil Removal	$19,500
Remediation Work Plan, HASP, QAPP, CPP	$21,500
In-Situ Remediation	$545,000
Institutional Controls (Env. Easement, Site Management Plan, Survey)	$30,000
Engineering Controls (SSDS on 50,000 SF Bldg)	$178,000
20% Contingency	$234,800
Total	**$1,408,800**

Operation/Maintenance/Annual Costs

Years 1 and 2 Groundwater Monitoring ($33,500 X 2 yrs)	$67,000
Years 3-5 Groundwater Monitoring ($8,500 X 3 yrs)	$25,500
10% Contingency	$9,250
Total Operation/Maintenance/Annual Costs	**$101,750**

Closeout Costs

Final Engineering Report	$25,500
20% Contingency	$5,100
Total Closeout Costs	**$30,600**

Present Worth Cost

Capital/Initial Costs	$1,408,800
Years 1-2 Groundwater Monitoring Present Worth (F=1.8594)	$68,519
Years 3-5 Groundwater Monitoring Present Worth (F=4.3295-1.8594)	$23,095
Closeout Costs (F= 0.7835)	$23,975
Total Present Worth Cost	**$1,524,389**

Assumptions

- Closeout costs adjusted for 5 years at 5% discount factor
- F = Discount Factor of 5% at the n^{th} year of the project
- Conduct long-term groundwater monitoring for 3 years (quarterly for 8 wells for yrs 1-2, annually for 8 wells for yrs 3-5)
- In-situ remediation may include one or more of Permanganate, Fenton's, Zero Valent Iron, Ozone, Persulfate, Bioremediation, and Thermal treatment
- Dewatering of deeper IRM excavations is required
- Majority of Cover System will consist of buildings and impervious pavement; thus, Cover System considered normal construction cost and is not included in this environmental opinion of probable cost
- Higher of NYS or Federal Prevailing Wage Rates Apply

TABLE D

ANDREWS STREET SITE, ROCHESTER, NEW YORK
NYSDEC SITE #E828144

Opinion of Probable Cost

Alternative #3 - Full Removal of Impacted Fill Material, Soil and USTs, Groundwater Remediation; and Groundwater Monitoring

Capital/Initial Costs

Remediation Work Plan,. HASP, QAPP, CPP	$40,000
Decommissioning of Select Existing Wells/Installation of New Wells	$78,000
Complete Contaminated Soil and Fill removal	$1,573,500
In-Situ Remediation	$1,065,000
20% Contingency	$551,300
Total	**$3,307,800**

Operation/Maintenance/Annual Costs

Years 1-2 Groundwater Monitoring ($50,000 X 2 yrs)	$100,000
Years 3-5 Groundwater Monitoring ($12,500 X 3 yrs)	$37,500
10% Contingency	$3,750
Total Operation/Maintenance/Annual Costs	**$141,250**

Closeout Costs

Final Engineering Report	$35,000
20% Contingency	$7,000
Total Closeout Costs	**$42,000**

Present Worth Cost

Capital/Initial Costs	$3,307,800
Years 1-2 Groundwater Monitoring Present Worth (F=1.8594)	$102,267
Years 3-5 Groundwater Monitoring Present Worth (F=4.3295-1.8594)	$33,964
Closeout Costs (F= 0.7835)	$32,907
Total Present Worth Cost	**$3,476,938**

Assumptions

- Closeout costs adjusted for 5 years at 5% discount factor
- F = Discount Factor of 5% at the n^{th} year of the project
- Conduct long-term groundwater monitoring for 5 years (quarterly for 10 wells yrs 1-2, annually for 10 wells yrs 3-5)
- Zero Valent Iron, Ozone, Persulfate, Bioremediation, and Thermal treatment in Overburden and Bedrock
- Dewatering of deeper excavations is required
- Higher of NYS or Federal Prevailing Wage Rates Apply