APPENDIX D
FINAL ENGINEERING REPORT
SITE MANAGEMENT PLAN
WARD STREET SITE
INDEX #B8-0566-99-10
SITE #C828117

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1.0 Introduction

1.1 Purpose

This Site Management Plan (SMP) has been developed at the request of Germanow-Simon Corporation (Germanow-Simon) and pertains to the Ward Street Site (Site) located in the City of Rochester, Monroe County, New York (Figure 1). It has been developed to assist Germanow-Simon's contractors and designers in continuing the operation ~~planning for the implementation~~ of the Multi-Phase Vacuum Extraction System (MPVE) (if deemed necessary) and any subsequent development work at the Site, by describing the methods and procedures for monitoring, management and characterization of any materials and groundwater containing contaminants that may be encountered during subsurface activities at the Site.

New York State Department of Environmental Conservation (NYSDEC) regulations require the management of waste environmental media containing contaminants as either hazardous waste or non-hazardous solid waste, as set forth in 6 NYCRR Parts 371-376 and 6 NYCRR Part 360, respectively. Proper management will require that care be taken in planning, monitoring and characterizing the waste soil/fill materials and water generated at the Site to confirm their hazardous or non-hazardous status and allow for proper off-site disposal in compliance with all applicable laws. Alternatively, with NYSDEC's prior approval, some of those wastes may be relocated and placed on-site.

This SMP provides guidance for planning and performing such monitoring, testing and management of excavated soil/fill materials or groundwater that may be encountered at the Site, whether returned to the excavation, placed elsewhere on-site or sent off-site for disposal in compliance with applicable law.

As required in the Engineering Certification, the Site Management Plan contains and/or refers to documents that identify use restrictions, institutional controls, engineering controls and and/or operation and maintenance requirements. The applicable use restriction, institutional controls, and engineering controls for the Ward Street Site are discussed in Section 2 subsections A through E of the Environmental Easement contained in Appendix C of the Final Engineering Report and presented below. Following their listing is the section of the Site Management Plan that discusses the institutional and engineering control.

A. The Controlled Property may be used for any commercial or industrial use as long as the following long-term engineering controls are employed. The following engineering controls, which were placed on the Controlled Property as shown in the Figure EN-3, entitled "Site Plan of Extraction Well Layout – Building B Annex," prepared by Stantec Consulting Services Inc., dated October 2006, and Figure EN-4, entitled "Site Plan of Extraction Well Layout – Lilac Laundry Area," prepared by Stantec Consulting Services Inc., dated October 2006, both attached as Schedule B, and which commenced full-scale operation on October 6, 2006:

(i) A multi-phase vacuum extraction system ("MPVE") will be operated on-site beneath, and off-site in front of, the Building B Annex as illustrated in attached Figure EN-3, and on-site beneath the former Lilac Laundry area as illustrated in attached Figure EN-4, until the remedial requirements are achieved to the satisfaction of the Department. (See Section 3.0 of SMP)

(ii) In order to eliminate potential for soil vapor intrusion into the Building B Annex, the sub-slab depressurization ("SSD") system, which is comprised of horizontal screens placed beneath the Building B Annex floor that will be connected to a radon mitigation blower/fan located along the outer wall of the Building B Annex as illustrated in attached Figure EN-3, and will be operated after the MPVE system is shut down, including after the MPVE system is demobilized from the Controlled Property. (See Section 3.4 of SMP)

(iii) Grantor must maintain the impervious surfaces (primarily asphalt and concrete) covering the soils beneath the Building B Annex and its adjoining parking lot to the west as illustrated in attached Figure EN-3 and the former Lilac Laundry Area as illustrated in attached Figure EN-4 until the NYSDEC is satisfied that such impervious surfaces no longer need be maintained. (See Section 7.1 of SMP)

(iv) The prior approval of the NYSDEC and the City of Rochester must be obtained before Grantor implements any activity at the Controlled Property which breaches the impervious surfaces (primarily asphalt and concrete) or disturbs the soils beneath the Building B Annex and its adjoining parking lot to the west as illustrated in attached Figure EN-3 and/or the former Lilac Laundry Area as illustrated in attached Figure EN-4, and any such activity must be implemented in accordance with any Department-approved plan for the performance of long term management of remaining contaminants at the Controlled Property, including operation, maintenance, and/or monitoring requirements ("Site Management Plan"). (See Section 9.0 of SMP)

(v) The prior approval of the NYSDEC must be obtained before the groundwater underlying the

Controlled Property may be used for any purpose. (See Section 7.3 of SMP)

B. The Controlled Property may not be used for a higher level of use than the institutional control described in paragraph A above, such as unrestricted residential or restricted residential use, and the engineering controls described in subparagraphs A(ii), (iv) and (v) above may not be discontinued without an amendment or extinguishment of this Environmental Easement. (See Section 9.0 of SMP)

C. Grantor covenants and agrees that, until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.

(See Section 9.0 of SMP)

D. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property. (See Section 9.0 of SMP)

E. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the institutional and engineering controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls. (See Section 9.0 of SMP)

1.2 Background

Germanow-Simon and its affiliated companies currently occupy the Site and employ approximately 85 individuals at manufacturing facilities that produce bimetal thermometers, plastic optics, and gauge and watch crystals.

The Site contains three major buildings. These three structures are located at 408 St. Paul Street, main offices and parts department; 392 St. Paul Street, thermometer manufacturing; and 23 Emmett Street, optics, gauge and watch crystal manufacturing.

The Site is bounded to the west and northwest by commercial buildings, to the north and northeast by Emmett Street and a parking lot, to the east by a recently purchased parking lot at 8-28 Ward Street, to the south and southeast by Ward Street, and to the southwest by St. Paul Street. The nearest residential building is located approximately 100 feet to the south-southeast of the Building B Annex across Ward Street. The gorge of the Genesee River is located approximately 350 feet southwest of the Site across St. Paul Street. The Cork Street cul-de-sac bisects the northern portion of the Site in a northwest to southeast direction and terminates at the mid-point of the Site.

The remedial investigation determined that impacted sub-surface soils constituting areas requiring remedial measures could be grouped into two distinct areas. The first area is centered beneath the Building B Annex. The most likely cause of contamination in this area is suspected to have been surface spill(s) of the chlorinated volatile organic compound (VOC) tetrachloroethylene (PCE), a solvent used in dry-cleaning, by Dinaburg Distributing when this portion of the Site was used by Dinaburg Distributing for chemical distribution before Germanow-Simon occupied the property. The contaminants in this area appear to have moved with groundwater to the Ward Street right-of-way in front of the Building B Annex.

The second area is known as the Former Lilac Laundry Area. The most likely cause of contamination in this area is a spill(s) of petroleum-based Stoddard solvent and PCE by Lilac Laundry when this portion of the Site was being used for dry cleaning by Lilac Laundry before Germanow-Simon occupied the property. The contaminants in this area do not appear to be moving in Site groundwater. Through groundwater monitoring in the former Lilac Laundry Area, the groundwater in this area was found to meet the NYSDEC's groundwater quality standards, and, with NYSDEC approval, the extraction and monitoring wells in the former Lilac Laundry Area were decommissioned and the underground piping from the manifold to each of these wells was grouted in place on October 13 and 14, 2011.

1.3 Completed Environmental Investigation, Remedial Actions and Pilot Tests

Several environmental investigations have been completed at the Site since 1999. Much of the initial work was conducted under a related Voluntary Cleanup Agreement (VCA) initiated in October 1999 as part of the Department's Voluntary Cleanup Program (VCP). The Site was transferred in October 2004 into New York State's Brownfield Cleanup Program (BCP).

A complete summary of environmental investigations conducted at the Site is presented in the Department-approved Remedial Investigation Report dated June 29, 2006. A MPVE Pilot Study was conducted in December 2005/January 2006. Findings from the pilot study are presented in the Department-approved MPVE System Pilot Test Report dated April 13, 2006.

The multi phase vacuum extraction (MPVE) design was outlined in the Alternative Analysis Report and Remedial Work Plan (AAR/RWP) dated July 17, 2006, which was approved by the Department in its August 31, 2006 letter following completion of the required 45-day public comment period, and presented in detail in the Department-approved Remedial Design Work Plan (RDWP) dated August 8, 2006. The MPVE system was installed in August, September and October 2006, and operation of the MPVE system commenced on October 6, 2006. Note that because the rate of VOC removal had reached an asymptomatic condition and pursuant to NYSDEC approval, the MPVE system was shut down on February 22, 2011 and has not been restarted since that time. The existing sub-slab depressurization system (SSDS) for the Building B Annex Area was turned on at the time the MPVE operation was suspended.

In November and December 2011 and November 2012, pursuant to NYSDEC approval, an enhanced reductive dechlorination polishing program was initiated to reduce residual contamination by VOCs in the subsurface. Monitoring of the effects of this polishing program is in progress.

Copies of select figures, summary tables of field screening, soil and groundwater analytical results, etc. from the Remedial Investigation conducted on the Site are attached to this SMP. Copies of the select soil boring logs for the Site are presented in Appendix A.

2.0 Development and Pre-Excavation Planning

2.1 Existing Information

MPVE operation and decommissioning, ~~The planned implementation of a full-scale MPVE as the selected remediation,~~ as well as any future excavation and development activities have the potential to disturb environmental media and fill materials at the Site which contain both non-chlorinated and chlorinated volatile organic contaminants (VOCs) as a result of the Site's past use for drycleaning, a gasoline station, and the distribution of industrial solvents, including drycleaning solvents. The planning and design for the implementation of the MPVE took into account, and any future excavation activities must take into account~~,~~ ~~the~~ information from the previous investigations, documented subsurface contamination, and the intended location of proposed remediation construction/development. The NYSDEC-approved RDWP to which a previously prepared SMP was appended already took into account these site-related considerations.

Future site development and excavation planning activities shall require prior approval by NYSDEC and the City of Rochester before proceeding. To this end, the Environmental Easement presented in Appendix C, which is acceptable to the NYSDEC has been recorded by Germanow-Simon, and the Site has been flagged by the City's Division of Environmental Quality in the City of Rochester Building Information System (BIS) in order to protect potential developers and establish proper management of construction activities prior to their commencement. This flagging provides an institutional control mechanism as required in the Engineering Certification. Further information regarding the BIS flagging system is provided in Section 8.0 of this report.

General Subsurface Conditions

Soils on the subject property are mapped in the Monroe County Soil Survey as Urban Land, which are areas that have been so altered or obscured by public works that identification of the soils is not feasible. These areas are commonly located in the older parts of the City of Rochester.

Based upon the subsurface investigations completed to date, the overburden on the subject property includes fill, upper till and lower till deposits. The shallow subsurface fill and glacial till deposits comprise a 20 ft. thick profile of silty sand sediments that overlie dolomitic bedrock tentatively assigned to the Silurian DeCew Formation. The DeCew Formation forms the cap rock of the nearby Upper Falls in the Genesee River Gorge. The DeCew formation was formed by deposits of lime sand and silt sediments that are very similar to sediments that comprise the upper beds of the Rochester Shale (Gates Member)[1]. The DeCew Formation is generally on the order of 6 to 16 feet thick and is underlain by the Rochester Shale.

[1] Goodman, W.M. (2005), Bedrock Exposures Within the Lower Genesee River Gorge: Their Context within the Stratigraphic Framework for the Niagara Region, Rochester Committee for Scientific Information, Bulletin #329.

Miscellaneous fill thicknesses range from 0.0 to 11.2 ft. and averaged 6.4 ft. across the site. The depth to bedrock across the site ranges between 17.5 ft. and 23.1 ft. below ground surface (BGS) and averages 20.1 ft. BGS. The glacial till profile beneath the fill is divisible into upper and lower portions based upon texture and density. The depth to dense, lower till ranges from 10.0 to 16.0 ft. BGS and averages 12.8 ft. BGS.

Fill Material

The fill encountered across the site consists primarily of re-worked till and some imported gravel materials. Based upon analysis of samples from borings B-7 and B-10, the fill materials consist 20.0% - 35.8% gravel, 31.3% - 47.3% sand, 25.9% - 26.6% silt, and 6.1% - 7.0% clay. Miscellaneous fill includes trace amounts of brick, concrete, cinders and ash.

Estimates of porosity, using mass and volume measurements for fill samples, range from 22.7% to 30.7%. Wet densities range from 138.4 to 142.6 pounds per cubic foot (pcf). Dry densities range from 115.9 to 125.8 pcf.

Upper Till Deposits

Average upper till descriptions include moist, brown fine sand, some silt, with trace clay and gravel. The upper till deposits are slightly finer-grained and less dense than the lower till profile. Based upon grain-size analyses of samples from B-7, B-10 and B-15, the upper till deposits consist of 0.0% - 7.3% gravel, 32.8% - 48.0% sand, 47.1 – 52.6% silt, and 4.9% - 11.0% clay.

Estimates of porosity, using mass and volume measurements for upper till samples, range from 28.9% to 36.5%. Wet densities range from 127.8 to 138.4 pounds per cubic foot (pcf). Dry densities range from 106.9 to 121.8 pcf.

Lower Till Deposits

The lower till deposits represent a dense lodgment till. The transition from upper to lower till is marked by a dramatic increase in N-values (i.e. density). Average lower till descriptions include moist, gray to gray-brown, fine sand and silt, some coarse to fine gravel, with trace clay. The lower till deposits encountered in soil borings appear to be poorly sorted with a higher gravel fraction than the upper till deposits. Based upon grain-size analyses of samples from borings B-7, B-10 and B-15, the lodgment tills consist of 11.8% to 25.2% gravel, 34.4% to 37.0% sand, 35.3% to 46.3% silt, and 4.9% to 5.5% clay.

Estimates of porosity, using mass and volume measurements for lower till samples, range from 22.6% to 23.4%. Wet densities range from 136.9 to 147.4 pounds per cubic foot (pcf). Dry densities range from 122.8 to 130.7 pcf.

Groundwater

The surficial geology provides for a low permeability hydrogeologic setting characterized by a shallow water table, low hydraulic conductivities, and low average linear velocities of groundwater flow.

The depths to water in overburden across the site range from 7.1 to 11.4 ft. BGS and average 9.1 ft. BGS. The average depth to water of 9.1 ft. BGS corresponds to the base of the upper till profile. Shallow groundwater generally flows in a radial direction from the center of the block at the end of Cork Street with the flows through the on-site and off-site impacted areas being in a west-southwesterly direction towards the corner of Ward Street and St. Paul Street. Maximum, average and minimum groundwater levels as observed in select on-site and off-site monitoring wells are illustrated in Figure 4.

A noticeable depression in the water table exists beneath the west end of Ward Street. Groundwater flow from both the north and south sides of Ward Street appears to be directed toward the center of the street before the flow proceeds southwesterly toward the intersection with St. Paul Street. The patterns in the equipotential lines suggest a prominent influence of utilities along the western portion of Ward Street on local groundwater flow directions.

Water level data in bedrock collected on September 12, 2005 show that depths to water across the Site in wells screened in bedrock ranged from 8.9 to 11.8 ft. BGS and averaged 10.6 ft. BGS. Groundwater in bedrock generally flows in a westerly direction towards St. Paul Street and the Genesee River Gorge.

Field Screening of Soils

Documented PID headspace readings are available for this Site. This information is summarized in the attached table:

Selected Table~~s~~ from Stantec, June 2006, Remedial Investigation Report as noted:
Table 1 Summary of PID Headspace Readings (ppm)

Soil Analytical Data

The soil analytical results are summarized in the following tables:

Selected Tables from Stantec, July 2006, Remedial Work Plan as noted:
Table 1: Summary of Analytical Results – VOCs
Table 2: Chemical Screening for Sub-Surface Soils - VOCs

Chemical screening for on-site and off-site VOCs in soils was conducted by comparing the detected concentrations of each analyzed VOC to the associated TAGM 4046-recommended soil cleanup objective (TAGM-RSCO). Several chlorinated and non-chlorinated VOCs were reported in six off-site and seven on-site borings in sub-surface soils at levels greater than the TAGM-RSCOs. Although human and ecological receptors are unlikely to be exposed to these

VOC-impacted soils in circumstances other than in the course of excavation work, these substances have been identified as Contaminants of Concern (CoCs) since they exceed the TAGM-RSCOs, and/or because they appear to be having a measurable impact on groundwater. These CoCs indicate the presence of impacted areas to be addressed ~~that will be addressed~~ by the MPVE and the enhanced reductive dechlorination polishing program. Soil analytical results were also compared to groundwater analytical results, PID readings and passive soil vapor survey results in order to aid in the delineation of impacted areas to be addressed by the MPVE and the enhanced reductive dechlorination polishing program.

Germanow-Simon anticipates that ~~the~~ through the use of the MPVE system, along with an enhanced reductive dechlorination polishing program, this will attain soil and groundwater quality concentrations meeting the applicable NYSDEC standards, criteria and guidance values (SCGs) for the intended use of the Site. Because of the complexities of the Site, it is nevertheless not completely certain that the MPVE and an enhanced reductive dechlorination polishing program will attain applicable SCGs. Therefore, ~~during the implementation of the MPVE, and~~ in the event that SCGs are not attained, ~~in the future,~~ persons conducting work at the Site must abide by the requirements of this SMP when excavating or otherwise disturbing fill, soil or groundwater in the following areas in which contaminants exceeding TAGM-RSCOs were identified.

Impacted sub-surface soils that constitute areas requiring remedial measures on the Site are grouped into two distinct areas:

1. The first on-site area is located beneath the Building B Annex as observed in borings for MW-22, MW-22R, MW-101 and MW-105. Concentrations of the chlorinated VOC, tetrachloroethylene (PCE), were measured in soil samples collected from these borings in excess of TAGM-RSCOs at depths ranging from 0.5 to 10 ft BGS. Though concentrations obtained from MW-101 are estimates (non-ASP analyses), it is assumed that they exceed TAGM-RSCOs for the purposes of contaminant location. The most likely cause of contamination in this area is suspected to have been surface spills of PCE dry-cleaning solvent near MW-105 by Dinaburg Distributing when this portion of the Site was used by Dinaburg Distributing for chemical distribution before Germanow-Simon occupied the property. This area is shown on Figure 4. The in-situ on-site volume of soils with impacts in excess of TAGM-RSCOs in this area is estimated at 1,900 C.Y., or 3,200 tons of soil, for an estimated on-site contaminant mass in this area of 240 lbs for PCE and 21 lbs for TCE and 5.2 lbs for other VOCs. Soil concentrations for PCE in this area exceed the solubility limit (150 ppm) for PCE and indicate a potential for the presence of non-aqueous phase liquids (NAPLs). Because of the relatively high concentrations detected, the contaminants in these soils are a source of contamination having a measurable adverse impact on groundwater quality. This impact is mitigated to some extent because these soils are located beneath the floor slab of the

Building B Annex and, therefore, are not subjected to infiltrating precipitation. Also associated with this area are the on-site soils immediately to the west of the Building B Annex around MW-15 that contain residual petroleum VOCs related to the historic gasoline station which once occupied this portion of the Site. Germanow-Simon will be addressing these soils with the MPVE system and the enhanced reductive dechlorination polishing program.

2. The second on-site area, known as the f~~F~~ormer Lilac Laundry Area, is centered on borings B-8, MW-9 and MW-9R in the parking area located between Buildings A, B and C. The borings indicate concentrations of chlorinated and non-chlorinated VOCs (PCE, propylbenzene-n, sec-butylbenzene, tert-butylbenzene, trimethylbenzene-1,2,4, trimethylbenzene-1,3,5 and xylenes) in excess of TAGM-RSCOs at depths ranging from 2 to 8 ft bgs. These concentrations, combined with the presence of measurable VOCs in a discrete area of groundwater, indicate the presence of an impacted area. ~~that Germanow-Simon will be addressing with the MPVE system.~~ The most likely cause of contamination in this area is a spill(s) of petroleum-based Stoddard solvent and PCE by Lilac Laundry when this portion of the Site was being used for dry cleaning before Germanow-Simon occupied the property. The in-situ on-site volume of soils with impacts in excess of TAGM-RSCOs in this area is estimated at 800 C.Y., or 1,400 tons of soil, for an estimated on-site contaminant mass in this area of 5 lbs for PCE, 8 lbs for xylenes and 570 lbs for other petroleum-based VOCs. The former Lilac Laundry Area has been addressed with the MPVE system. Through repeated groundwater monitoring in the former Lilac Laundry Area, the groundwater in this area was found to meet the NYSDEC's groundwater quality standards, and, with NYSDEC approval, the extraction and monitoring wells in the former Lilac Laundry Area were decommissioned and the underground piping from the manifold to each of these wells was grouted in place on October 13 and 14, 2011.

The total on-site quantity of soils that are impacted at levels greater than TAGM-RSCOs is estimated at 2,700 C.Y. or 4,600 tons.

In addition to the two above-mentioned on-site areas, several off-site borings indicate the presence of contaminants in the soils to the south of the Building B Annex along Ward Street. The impacts to these sub-surface soils are such that Germanow-Simon will be implementing remedial measures off-site to address them.

1. The soils in front of the Building B Annex along Ward Street have concentrations of contaminants in excess of TAGM-RSCOs. Due to similar contaminants and corresponding depth of impacts, this off-site impacted area is most likely associated with the on-site contaminated area beneath the Building B Annex. It encompasses borings B-104 (10 to 12.4 ft) and MW-16R (12 to 13.4 ft), both of which exhibit PCE

concentrations in excess of the TAGM-RSCOs. (As with MW-101, concentrations obtained from B-104 are estimates but are assumed to exceed TAGM-RSCOs.) The in-situ off-site volume of soils with impacts in excess of TAGM-RSCOs in this area is estimated at 1,800 C.Y., or 3,100 tons of soil, for an estimated off-site mass in this area of 135 lbs. for PCE, 12 lbs. for TCE, and 3.8 lbs for other VOCs. ~~.~~ Germanow-Simon will be addressing these soils with the MPVE system and an enhanced reductive dechlorination polishing program.

The remedial investigation also delineated another off-site area with soils containing chlorinated VOCs that is located hydrogeologically up- and cross-gradient from the Building B Annex. The chlorinated VOCs are found in differing proportions in this area, and the contamination may be associated with historic uses of the former High Falls Brewing Company's parking at 8-28 Ward Street. Germanow-Simon ~~recently~~ acquired the parking lot from the High Falls Brewing Company and has entered into a separate BCA with the Department for the further investigation and remediation of this separate off-site area. In October 2008, with the NYSDEC's permission, Germanow-Simon ~~may~~ extended~~, with the Department's permission,~~ the MPVE remedial system to this off-site area as part of that separate BCA. Because this off-site area was identified during the Remedial Investigation and is the subject of another BCA, a brief discussion of this second separate off-site area is included:

1. The second off-site area is associated with boring MW-23 where a PCE concentration of 8.3 mg/kg in soil was measured. Due to the position of this area in the Ward Street R.O.W. hydrogeologically up-gradient from the Building B Annex, it is suspected that this finding is associated with off-site impacts within the former High Falls Brewing Company's parking lot which is north and apparently upgradient of the boring. The volume of soils with impacts in excess of TAGM-RSCOs in this area is estimated at 1,500 C.Y., or 2,500 tons of soil, for an estimated off-site contaminant mass in this area of 41 lbs for PCE (based on an impacted area of 6,400 sq. ft.). ~~If the subsequent investigation confirms the presence of this contamination, this parcel can be remediated to the extent necessary in conjunction with the Ward Street Site.~~

Impacts from suspected unrelated off-Site sources on the south of Ward Street (MW-17 and MW-24 areas) are not part of either of the above noted sites for which Germanow-Simon has volunteered, are not proposed for investigation and are not considered in the above calculations.

Groundwater Analytical Data

The groundwater analytical results are summarized in the following Stantec tables:

Selected Tables from Stantec, July 2006, Remedial Work Plan as noted:
Table 4: Summary of Groundwater Analytical Results – VOCs
Table 5: Chemical Screening for Groundwater - VOCs

Chemical screening for groundwater involved comparison of detected concentrations in groundwater from wells on-site and off-site to the New York State Class GA potable groundwater standards in 6 NYCRRR Part 703 and the guidance values in Technical and Operational Guidance Series (TOGS) 1.1.1, NYSDEC, June 1998.

The results of the chemical screening for groundwater are presented in Tables 4 and 5. Several VOCs were reported in overburden and bedrock groundwater on-site and off-site at concentrations greater than Class GA standards.

Figure 5 shows the interpreted horizontal distribution of total chlorinated VOC impacts in the overburden groundwater. Figure 6 presents the horizontal distribution of total chlorinated VOC impacts in bedrock.

The 24-inch sanitary sewer alignment was used to distinguish impacts on the north side of the Ward Street R.O.W. from those on the south side. Off-site impacts observed in the MW-17 and MW-24 areas, which appear to be from separate sources, were not considered in these calculations.

The more elevated on-site VOC concentrations in overburden groundwater can be grouped into two areas, both of which are associated with the previously identified on-site areas of soils containing VOCs.

1. The first on-site area includes wells MW-22 and MW-105 and coincides with the first soil-impacted area beneath the Building B Annex, but extends further southwest toward Ward Street, indicating contaminant transport and migration due to groundwater flow. This area is principally associated with chlorinated VOC impacts, as shown on Figure 54. The volume of overburden groundwater with total chlorinated VOC concentrations >1,000 µg/L is estimated at 180,000 GAL, and the volume of overburden groundwater with total non-chlorinated VOC concentrations >100 µg/L is estimated at 20,000 GAL.

2. The second on-site area, the Lilac Laundry area, is considered on the basis of analytical results from samples collected in MW-9 because no other well had exceedances, and coincides with the second soil-impacted area. The impacts from chlorinated VOCs are illustrated in Figure 54. The volume of overburden groundwater with total non-chlorinated VOC concentrations >100 µg/L is conservatively estimated at 100,000 GAL.

Off-site VOC impacts to overburden groundwater are observed associated with the front of the Building B Annex along Ward Street.

1. This off-site area is associated with monitoring well MW-16 and is apparently related to the on-site chlorinated VOC impacts below the Building B Annex, as illustrated on Figure 5. The volume of off-site overburden groundwater with total chlorinated VOC concentrations

>1,000 µg/L is estimated at more than 120,000 GAL, and the volume of off-site overburden groundwater with total non-chlorinated VOC concentrations >100 µg/L is estimated at more than 40,000 GAL.

As noted above, the remedial investigation also delineated another off-site area with groundwater containing chlorinated VOCs that corresponds to the previously discussed soil impacts located hydrogeologically up- and cross gradient from the Building B Annex. This contamination appears to be associated with the former High Falls Brewing Company's parking at 8-28 Ward Street. As noted above, Germanow-Simon ~~recently~~ acquired the parking lot from the High Falls Brewing Company and entered into a BCA for the investigation and remediation of this area. In October 2008, with the NYSDEC's permission, Germanow-Simon ~~may~~ extended~~, with the Department's permission,~~ the MPVE remedial system to this off-site area. Therefore, a brief discussion of this second separate off-site area is included:

1. The second area is associated with well MW-23, where chlorinated VOC impacts appear to be associated with the former High Falls Brewing Company parking lot. The volume of overburden groundwater with total chlorinated VOC concentrations >1,000 µg/L is estimated at more than 60,000 GAL, and the volume of overburden groundwater with total non-chlorinated VOC concentrations >100 µg/L is estimated at more than 40,000 GAL.

On-site impacts to bedrock groundwater in bedrock monitoring well MW-22R consist mainly of chlorinated solvents and are consistent with overburden soil and groundwater impacts beneath the Building B Annex~~.~~ (See Figure 6). There are no apparent impacts to bedrock groundwater in MW-9R. Off-site impacts to bedrock groundwater in MW-16R appear to be related to the on-site contaminated area below the Building B Annex.

Soil Vapor Analytical Data

In August and November of 2001, a total of 45 Emflux soil vapor survey canisters were installed along Ward Street (15 canisters) and in the Building B area (30 canisters). The analytical program targeted PCE, TCE, 1,2 dichloroethene (DCE) and vinyl chloride (VC). Soil vapor analyses were used to develop a relative contaminant distribution map. This mapping effort confirmed the presence of an impacted area below the Building B Annex, but also revealed the potential presence of off-site chlorinated VOC impacts at the eventual off-site locations of MW-23 and MW-24. A complete review of the passive soil gas surveys is presented in Stantec's ~~the~~ Remedial Investigation Report (June 29, 2006).

2.2 Construction/Design Considerations

Stantec's June 2006 Remedial Investigation Report has shown that the contaminants present at the Site consist of chlorinated and non-chlorinated VOCs, including Stoddard solvent. The subject property also contains chlorinated and non-chlorinated VOC impacted groundwater. Any waste material

that is generated from excavation activities in these areas of the Site, including trenching or footer excavation for future development, must therefore be properly characterized and managed. The process can be simplified by pre-planning how the material will be handled during necessary excavation.

In order to properly characterize the waste material, soils and/or fill materials potentially containing contaminants will be screened and segregated into designated roll-offs. Segregation is intended to decrease the volume of waste material requiring handling and treatment as a solid or hazardous waste following characterization sampling and laboratory analysis.

If hazardous waste is generated as part of this remediation program, or during future site development or maintenance activities involving subsurface disturbance, this waste should not be replaced on the Site and must be properly characterized, managed and disposed of off-site at a permitted facility in compliance with applicable law. Management of impacted materials is discussed in Section 7.0 of this SMP.

As this remediation project and future excavation projects progress, planning will need to consider that soil/fill management and waste characterization may affect the following construction elements:

- Schedules: Scheduling will need to allow for management of waste material that is generated during excavation. Should unanticipated materials or conditions be observed during excavation work, sampling may be required. Sampling will involve laboratory analysis, which typically takes from several days to several weeks to be completed. Therefore, construction schedules and design plans should allow for adequate flexibility for sampling, segregation, and temporary stockpiling of unanticipated materials on-site in roll-off containers in the parking lots to the east or north of Building B Annex.

- Subsurface Variability: Schedules should provide both contingency time and measures to address variability in subsurface conditions and the potential presence of groundwater. For example, if hazardous conditions are encountered, additional safety measures and use of personal protection gear will be required. Excavation dewatering and work stoppage could also affect construction schedules and costs.

Measures designed to address these situations are described in further detail in Sections 4.0, 5.0 and 6.0 of this SMP.

3.0 System Design Details

3.1 MPVE System Configuration

As of October 6, 2006, aA total of 33 MPVE extraction wells wereare in place at the Site in two (2) distinct areas: those beneath orf adjacent to the Building B Annex; and those in the formerromer Lilac Laundry Aarea. A radius of influence of approximately 15 feet was assumed as per the pilot study report, resulting in a grid spacing of approximately 20 feet between extraction wells. The locations of the extraction wells are shown in Stantec's the November 2006 Final Engineering Report Drawings EN-3 and EN-4. The MPVE vacuum pump unit is pre-fabricated, container-mounted, pre-piped, and pre-wired and contains the following major components:

- One 50 HP, 1300 ACFM (max) 875 ACFM @ 20"in Hg capacity belt-driven air-cooled rotary lobe vacuum pump;
- Steel and PVC piping;
- Steel, brass and PVC valves;
- 630 gallon system vessel with internally mounted high efficiency low maintenance oil/water separator and air stripper;
- Container heater and exhaust fan; and
- Aqueous phase 25 GPM Mono Progressive Cavity pump.

A second Treatment Unit container houses:

- Container heater and exhaust fan;
- Aqueous phase bag filters;
- 300-gallon water surge tank w/ float switch;
- Aqueous phase 10 GPM centrifugal pump (float switch-activated)
- Two parallel sets of two 170 lbs aqueous-phase GAC treatment vessels in series;
- Air-to-air heat exchanger to cool the vapor exhaust stream to approximately 110°F;
- Two 1,500 lbs vapor-phase GAC treatment vessels in series; and
- A 5HP centrifugal blower to reduce backpressure on the MPVE unit.

Through groundwater monitoring in the former Lilac Laundry Area, the groundwater in this area was found to meet the NYSDEC's groundwater quality standards, and, with NYSDEC approval, the extraction and monitoring wells in the former Lilac Laundry Area were decommissioned and the underground piping from the manifold to each of these wells was grouted in place on October 13 and 14, 2011. Therefore, as of October 14, 2011, a total of 28 MPVE extraction wells are in place at the Site either beneath or adjacent to the Building B Annex. However, because the rate of VOC removal had reached an asymptomatic condition and pursuant to NYSDEC approval, the MPVE system was shut down on February 22, 2011 and has not been restarted since that time.

3.2 Well head, piping configuration

For purposes of maximizing MPVE system performance, groups of extraction wells were installed, such as on-site within the Building B Annex and on the westside of the Building B Annex in the parking area of the northeast corner of St. Paul and Ward Street, off-site in front of the Building B Annex, and on-site in the former Lilac Laundry area, respectively. However, with NYSDEC approval, the extraction and monitoring wells in the former Lilac Laundry Area were decommissioned and the underground piping from the manifold to each of these wells was grouted in place on October 13 and 14, 2011. The extraction wells are 2-inch inside diameter (ID) PVC screen with 0.010-inch slots to promote well efficiency and formation airflow.

The extraction wells are individually connected to a manifold system located in a heated enclosure constructed along the east wall of the Building B Annex, using 1.5-inch diameter HDPE (low friction) pipe for vacuum extraction and 0.5-inch diameter HDPE pipe for bleed air. The piping is attached to the wellheads and drop tubes within flush-mounted 12-inch diameter steel road boxes. The wellhead and piping were installed in trenches to a depth of 18 to 24 inches within buildings, and 48 and 60 inches in exterior locations exposed to freezing weather. Where they could not be placed at sufficient depths, piping placed outdoors was heat traced and insulated to protect against freezing. Access to the drop tube, located between 18 and 60 inches from the surface within the well riser, is provided by means of a pitless adapter. This allows for removal of the drop tube for groundwater sampling using a removable threaded metal pipe. The drop tubes have been set approximately 6 inches above the bottom of all extraction wells. A quick-connect adapter is attached to the removable well caps to allow pressure measurements at the well head with a portable pressure gauge. Detailed drawings of extraction wells are shown in Stantec's November 2006 Final Engineering Report Drawing EN-8. Trenching detail is shown in Stantec's November 2006 Final Engineering Report Drawing EN-6.

A total of 19 overburden and 10 bedrock wells were installed, and 2 existing overburden and 2 existing bedrock wells were converted to extraction wells. A list of these wells is found in the following table.

Existing wells converted to extraction wells		Wells installed and used as extraction wells	
Overburden	Bedrock	Overburden	Bedrock
MW-16	MW-16R	MW-200	MW-200R
MW-22	MW-22R	MW-201	MW-203R
		MW-202	MW-204R
		MW-203	MW-205R
		MW-204	MW-206R
		MW-205	MW-207R
		MW-207	MW-208R
		MW-208	MW-210R
		MW-209	MW-211R
		MW-210	MW-212R

		MW-211	
		MW-212	
		MW-213	
		MW-214	
		MW-215	
		MW-216	
		MW-217	
		MW-218	
		MW-219	

The screen intervals were determined based on the extent of impacted soil across the soil profile. The layouts of overburden and bedrock wells are shown in Stantec's November 2006 Final Engineering Report Drawings EN-3 and EN-4.

3.3 Manifold

The manifold is housed in an insulated, heated and secured enclosure designed specifically for the manifold. The individual extraction wells converge in 4 holes bored through the brick wall on the east side of Building B Annex, and feed directly into the manifold enclosure. The individual lines loop upwards to a 6-inch schedule 80 PVC piping header, where vacuum can~~will~~ be measured for each well. Vacuum measurements can~~will~~ also be made at each sub-manifold.

3.4 Sub-slab depressurization system

In order to eliminate the potential for VOC vapor intrusion into the Building B Annex, a sub-slab depressurization (SSD) system has~~will~~ been operating~~implemented~~ following the suspension of the MPVE operation on February 22, 2011 ~~for use following MPVE remediation~~, thereby ensuring continuous SSD. Horizontal screens placed within the MPVE header network trench are~~will be~~ connected to a relatively high suction (approx. 20-50 in-H_2O) radon mitigation blower/fan located along the outer (eastern) wall of the Building B Annex. SSD will be achieved by drawing air with a radon blower/fan. ~~. Following successful remediation of the Site, the SSD blower/fan will be installed to~~ allowing continued operation. A detailed layout of the SSD is shown in Stantec's November 2006 Final Engineering Report Drawing EN-7.

The MPVE system and associated wellhead piping and manifold along with the SSD system provide engineering controls as required in the Engineering Certification.

3.5 Sewer discharge

When the MPVE system was operating, t~~T~~reated aqueous effluent was~~is~~ discharged into a sewer line located in Building B Annex. A detailed layout of this connection is shown in Stantec's November 2006 Final Engineering Report Drawing EN-6. A sewer discharge permit was obtained from Monroe County Pure Waters to discharge the treated aqueous effluent. The Sewer Use Permit is included as Appendix B.

3.6 Air discharge

A permit from the NYSDEC to discharge treated vapors was not required pursuant to the terms of the BCA. However, a substantive review and approval by the NYSDEC of the anticipated air emissions and the proposed treatment plans was required. As of spring 2008 and with NYSDEC approval, vapor treatment (vapor granular activated carbon) was taken offline.

An eight-inch exhaust stack runs horizontally from the MPVE trailer along Building B Annex until it reaches Building B, at which point it runs vertically straight up Building B. This stack rises 11 feet above the top of Building B for an approximate total stack height of 56 feet from ground surface. A detailed layout of the stack is shown in Stantec's November 2006 Final Engineering Report

Drawing EN-7. An air emission analysis was performed to determine short term and annual air emission concentrations. This analysis is found in Stantec's August 2006 Remedial Design Work Plan, Appendix B.

4.0 Soil-Fill Characterization

4.1 Pre-excavation Sampling

Sufficient data are available at this time such that it does not appear necessary to perform additional soil/fill sampling prior to excavation activities. In general, soil borings previously completed on the Site appear to provide sufficient coverage. During future excavation activities, visual observations and PID readings should be used to determine if soil/fill sampling is necessary to evaluate unanticipated conditions outside of previously identified areas of contamination ~~is necessary~~.

4.2 Excavation Sampling

Sampling of excavated fill or subsurface materials encountered during construction efforts should be considered if either of the following conditions is encountered:

- If conditions during excavation are significantly different than those observed during previously completed soil investigations, including unusual odors, visual observations such as stained soils, drums, containers, etc.; or

- If concerns, such as gross contamination, sheens on water or free-product are identified within soil.

In these situations, sampling frequency and analyses would vary based on the types and quantities of material encountered and the anticipated use/disposal of removed materials. Analysis must adequately characterize materials in light of applicable NYSDEC guidance values ~~(e.g., currently TAGM 4046)~~ and/or permitted disposal facility requirements, depending on intended destination of materials.

Typical waste disposal analyses are:

- Full Toxicity Characteristic Leaching Procedure (TCLP) VOCs,
- Full TCLP SVOCs,
- Ignitability,
- Reactivity,
- Modified Paint Filter Test, and
- pH.

5.0 Groundwater Characterization

5.1 Sampling

Sufficient data are available at this time such that it does not appear necessary to perform additional groundwater sampling prior to or during excavation activities. Groundwater that is encountered during excavation in an impacted area will need to be containerized for proper disposal. If the MPVE system is at the Site, waste waters can be run through the liquid phase GAC prior to discharge to the sanitary sewer. Monitoring wells have been installed on the subject property and appear to provide sufficient coverage for the portion of the Site affected by the impacted groundwater plumes. If excavation activities are proposed outside of these areas and are expected to extend to the depth of the water table, pre-excavation sampling may be recommended. In such cases, pre-excavation sampling frequency and analyses would vary based on the location of proposed work in relation to the characterized areas and on the anticipated quantity and handling of groundwater (see also Appendix B, Sewer Use Permit Information).

The wellheads and piping were installed in trenches at depths of 18 to 24 inches within buildings, and 48 to 60 inches in exterior areas exposed to freezing weather. Therefore, with these shallow depths below ground surface, the presence of groundwater is not anticipated during future maintenance, if needed. An exception to this would be drilling. If water is found, water will be containerized and should be run through the aqueous phase GAC if the MPVE system is at the Site. Otherwise the water will need to be properly characterized and disposed off-Site.

Surface water and rainwater should be prevented from reaching excavations; and excavations needs to be covered if there is the possibility of such an occurrence.

6.0 Monitoring During Excavation, Well Installation, Remedial System Installation and Future Development

Monitoring of materials encountered during excavation activities, well installation, remedial system installation and future development is generally needed for three purposes:

- To protect the health and safety of Site workers during intrusive activities;
- To determine that soil/fill materials and groundwater are consistent with pre-excavation characterization; or
- If no pre-excavation characterization was performed to determine whether the materials need to be characterized for handling and disposal.

6.1 Health and Safety Monitoring

Past investigations have shown that impacted materials will be encountered during construction activities in many areas of the Site. Based on the historical uses of the Site, hazardous materials may potentially be encountered.

Generally, VOCs are associated with the soil/fill and are considered as potentially hazardous materials subject to health and safety planning.

VOCs are also associated with the groundwater and are considered potentially hazardous materials subject to health and safety planning.

Health and safety planning should also give consideration to other construction-related issues, such as use of heavy equipment, noise, odor, weather conditions, confined space entry, excavation safety and other construction-related OSHA regulations.

Health and safety planning should be performed prior to excavation and other activities which disturb the surface of ~~-~~the Site. This should include the preparation of a written Health and Safety Plan (HASP) for excavation activities. The HASP would be based on the results of the previous chemical analyses, information specific to the proposed remediation activities, specific excavation tasks to be completed and the potential for exposure of Site workers to the Site contaminants.

Workers on-site performing or supervising earthwork activities, well installation and system installation and operations should be OSHA 1910.120 certified to perform work on a hazardous waste site. Previous investigations show that overall the potential for worker exposure exists, but it is relatively low. However, all contractors, developers and owner representatives involved in earthwork activities, well installation and system installation should consider the need for health and safety planning relative to their specific tasks and planned activities.

6.2 Community Air Monitoring Plan (CAMP)

Air monitoring will be required during any future excavation work to be performed at the Site to address potential volatile organic compound (VOC) and particulate air quality issues.

Tetrachloroethene (PCE) and trichloroethene (TCE) are the primary volatile organic compounds of concern that are present, or are potentially present, in the soil and groundwater at the Site. Volatilization of these compounds through disturbance of soils and/or groundwater could result in releases to the ambient air creating possible nuisance or exposure risks to the neighborhood. This CAMP details real-time monitoring activities to be carried out during excavation, trenching, soil boring, and monitoring well installations to minimize the potential for neighborhood exposure to airborne hazards resulting from fugitive emissions during potential future intrusive work.

Pursuant to DEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum - Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites, (TAGM~~HWR-89~~-4031) and the New York State Department of Health Generic Community Air Monitoring Plan, this CAMP addresses the methods that will be implemented to monitor particulate (dust) levels at the perimeter of, and within work areas. In the event elevated particulate levels are encountered, this CAMP identifies the steps that will be taken to rectify the elevated particulate levels. Air monitoring and response actions for VOCs are also included in this CAMP.

The potential intrusive activities at the site will consist of excavation, trenching and/or drilling. The following programs will be implemented to monitor and, if necessary, control the potential migration of fugitive dust and/or VOCs on the site.

6.2.1 Perimeter Monitoring

For each day of intrusive field work, a wind sock or flag will be used to monitor wind direction in the area of the work zone. Based upon the daily wind direction, two temporary particulate monitoring points will be identified, one upwind and one downwind of the work area, at the perimeter of the site. When intrusive work is conducted along Ward Street and in front of Building B Annex, particulate monitoring points will be extended beyond the site perimeter across Ward Street or St. Paul Street, as required, based on wind direction.

Real-time particulate monitoring will be carried out using an MIE PDM-3 MiniRam aerosol monitor, or its equivalent, capable of providing the measurement of airborne particulate matter. VOC monitoring will be done with an HNu Photoionization Detector (PID) fitted with an 10.2 eV lamp. Rainy, damp conditions may eliminate the need for particulate monitoring, as well as reduce the usefulness of the PID.

Prior to the commencement of drilling each day, background measurements of particulate and VOC concentrations will be logged at the up- and downwind

locations with the drill rig engine and any other gas/diesel engines operating on site.

Thereafter, readings will be continuous and measurements will be recorded every 30 minutes. These readings will be used to observe~~d~~ the difference between upwind and downwind particulate and VOC levels. If at any time, the difference between the upwind and downwind particulate levels exceed 100 micrograms/cubic meter for particulates or VOC levels downwind exceed upwind levels (adjusted for engine exhaust) by 5 ppm, then work will be temporarily halted and the Contractor will implement dust suppression techniques or any other means necessary to control VOCs, similar to those discussed in Section 6.2.3.

6.2.2 Work Area Monitoring

In addition to perimeter monitoring, monitoring for VOCs, particulates and explosivity will need to be carried out continuously within the work area to monitor personal exposures and to compare work area readings with downwind and upwind readings. The first readings of the day will be obtained prior to the commencement of work to obtain daily background readings. Readings will be logged along with the perimeter measurements. Specific monitoring and procedures to be used in the exclusion (work) zone can be found in the Health and Safety Plan (HASP) prepared for the activities at this site.

6.2.3 Fugitive Dust Control

If the monitoring described in Sections 6.2.1 or 6.2.2 result in fugitive particulate levels exceeding 100 micrograms/cubic meter above background, then the excavation, trenching or drilling Contractor will implement fugitive dust control measures which may include one or more of the following:

- using a water spray;
- establishing wind shielding around the work area;
- slowing down the excavation/drilling speed; and/or
- stopping the excavation/drilling activities.

6.2.4 Minor Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume, with emphasis given to observing spikes in levels. Application of Biosolve on open surfaces generating elevated VOC levels will be considered to control VOC vapors. If the organic vapor levels are greater than 5 ppm over background but less than 25 ppm over background at the perimeter of the work area, activities can resume provided the organic vapor level 200 ft. downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is less than 5 ppm over background. (The location of structures in the subject neighborhood may not

allow the 200 ft. buffer zone to be used).

If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown. When work shutdown occurs, downwind air monitoring as directed by the Safety Officer will be implemented to evaluate if the vapor emission levels exceed those specified in Section 6.2.5, Major Vapor Emission Response Plan.

6.2.5 Major Vapor Emission Response Plan

If total organic vapor levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial structure, whichever is less, all work activities must be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic vapor levels greater than 5 ppm above background persist 200 feet downwind or half the distance to the nearest residential or commercial structure, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20 foot zone).

If efforts to abate the emission source area are unsuccessful (e.g. Biosolve application) and if the organic vapors levels continue to persist at or near 5 ppm above background for more than 30 minutes in the 20 foot zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect.

The Major Vapor Emission Response Plan shall also be immediately placed into effect if organic vapor levels are greater than 10 ppm above background at the 20 foot zone.

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in the Health and Safety Plan prepared for the work will go into effect.

2. The local police authorities will immediately be contacted by the Safety Officer and advised of the situation. Evacuation or neighborhood notification plans can be discussed at that time.

3. Air monitoring will be conducted at 30 minutes intervals within the 20 foot zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Safety Officer.

6.2.6 Record Keeping and Quality Control

For the duration of the field activities, a monitoring log book will be kept to record calibration, operational notes and monitoring readings. Instrumentation will be calibrated and/or operationally checked, either daily or at intervals recommended by the manufacturer. Only approved calibration gases will be used. All operators

will have been trained in the proper use, maintenance, limitation, and interpretation of results of the monitoring equipment.

6.3 Soil/Fill/Groundwater Monitoring

Monitoring of soil and fill materials that are excavated and groundwater that is pumped during construction should be performed for two reasons:

- To determine that the material encountered during excavation is consistent with the material encountered during previous investigations; and
- To allow characterization of the non-hazardous or hazardous nature of material encountered in the event that no previous investigation results are available for a specific area.

Monitoring should generally consist of documentation of visible characteristics of the soil, fill and groundwater encountered, including obvious staining, sheens, odors, or other indicators of contamination such as solvents, oils, tars or containers. It is recommended that construction monitoring be by a trained individual, such as an environmental engineer, scientist, or geologist and be performed during all earthwork activities, well installation, system installation and future development.

Several portable monitoring instruments are available to assist in field monitoring of materials. Such instruments are primarily used for detection of VOCs or dust and particulates. Since volatile organics (VOCs) have been detected in the past at the Site, this type of instrumentation is appropriate for construction excavation monitoring. Types of instruments available for this purpose include:

- Photoionization detector instruments (PID) - these instruments operate by pumping a sample of ambient air into a chamber where the air is ionized using a light source of specific energy (either 10.2, 10.6, or 11.7 eV). Such instruments are manufactured by HNu and Microtip.
- Flame ionization detector instruments (FID) - these instruments operate on a similar principle as the PIDs; however, ionization is caused by a flame produced by combusting hydrogen. The OVA manufactured by Foxboro is such an instrument.
- Combustible gas meters/gas monitors – these instruments are capable of measuring combustible gases, such as methane and hydrogen sulfide, and would be used during construction activities if large amounts of organic materials such as railroad timbers or peat are encountered. However, it is not expected that large amounts of organic matter will be found.
- Dust/Particulate Meters – these instruments are capable of measuring dust and particulates in ambient air. An example of an aerosol monitor is the MIE PDE-1000.

These types of instruments are readily available in the Rochester area and can be rented or purchased from several sources. However, these instruments should be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments should be recorded in the field along with visual observations.

7.0 Management of Impacted Material

7.1 On-Site Re-Use of Excavated Materials

It is recommended that non-hazardous excavated material be re-used onsite and covered with either clean soil or an impervious surface.

7.2 Off-Site Disposal of Excavated Materials

Prior to off-site disposal of removed impacted material, waste characterization sampling should be performed to determine if the stockpiled material should be disposed off-site as non-hazardous solid waste, or hazardous waste with or without treatment. A composite sample should be collected in accordance with the disposal facility requirements (e.g., 1 sample per 500 tons). Each composite sample should be submitted for laboratory analysis in accordance with the disposal facility requirements (e.g., TCL VOCs by EPA Test Method 8260 and Toxicity Characteristic Leaching Procedure (TCLP) VOCs by EPA Test Method 1311/8260).

Management of materials that will be disposed off-site will need to include characterization (sampling and laboratory analysis as required by the chosen landfill), management, and off-site transportation and disposal at an approved landfill. Appropriate measures for management of excavated materials will need to include temporarily stockpiling excavated soils and solids, as well as measures to prevent them from contaminating other materials or migrating off-site. Measures that should be incorporated into such plans include:

- Stockpile locations should be away from storm sewers, downwind property boundaries, and drainage courses;
- Dust suppression techniques, should be used as necessary;
- Placement of stockpiles of soils, fill or hazardous materials containing contaminants (e.g. drums, containers, odiferous fill) in lined roll-offs with perimeter berms;
- Covering stockpiles of contaminated soils, fill, or hazardous materials (e.g. drums, containers, odiferous fill) with weighted down poly at the end of each day of placement to prevent migration by wind-blown dust or stormwater runoff until final placement is established; and
- The use of lined and covered roll-off containers for material that will be disposed of off-site.

7.3 Off-Site Disposal of Impacted Water

Management of water will include characterization (sampling and laboratory analysis as required by the MCDES-DPW), management, pumping to the Monroe County sewer system (if permitted), and identification of and conformance to the restriction on the use of groundwater. The prior approval of the NYSDEC must be obtained before the groundwater underlying the Controlled Property may be used for any purpose. Appropriate measures for management of water will need to include temporary containerization and measures to prevent water from contaminating other materials or migrating off-site. Measures that should be incorporated into such plans include:

- Containerize water prior to pumping off-site;
- Stage containers away from downwind property boundaries and drainage sources;
- Pump water directly into containers;
- Perform necessary sampling prior to disposal;
- Coordinate with MCDES-DPW to receive permission for disposal;
- Use granular activated carbon (GAC) to treat groundwater (if appropriate); and
- Groundwater should not be used, including not using it as potable water nor in manufacturing processes.

The sewer use permit information is included in Appendix B.

If groundwater is pumped at the Site, a temporary sewer use permit is required for sewer disposal from the Monroe County Department of Environmental Services (MCDES) – Division of Pure Waters (DPW). The required information to be supplied to the MCDES-DPW is included in Appendix B.

8.0 Monitoring After Excavation

Monitoring after excavation activities are completed is generally needed for three purposes:

- To continue protection of the health and safety of Site workers and anyone else potentially affected by the remedial measures taken by checking for malfunctions of remedial systems still in place.
- To ensure remedial measures are working; and
- To determine when system shutdown and/or site closure can occur.

8.1 Operations, Maintenance and Monitoring (OM&M) Plan

A site-specific plan is needed to ensure that post-excavation monitoring is completed properly. Stantec has prepared an Operations, Maintenance & Monitoring (OM&M) Plan for monitoring of the remedial measures put in place at the Site. The OM&M Plan has been included as Appendix G of Stantec's November 2006 Final Engineering Report. The OM&M plan is provided as required in the Engineering Certification.

8.2 Post-Remediation Sampling Plan

A site-specific post-remediation sampling plan is needed to demonstrate that the contaminants of concern are at or below the remedial action objectives. The cleanup equipment will remain in place until closure sampling has been completed and approval from the Department has been obtained. The final sampling event will consist of a limited number of borings for confirmatory sampling (approximately 8). The locations of soil samples will be proposed to the Department for review and approval prior to collection. A table with recommended sampling points is attached as Table 1: Summary of Soil and Groundwater Sampling Locations and Analysis. This table may also be found in Stantec's August 2006, Quality Assurance Project Plan for the Remedial Design Work Plan.

9.0 Flagging System

An Environmental Easement has been established in conjunction with this Site Management Plan for Site's soil and groundwater. In addition, the City of Rochester has "flagged" the parcels that comprise the Site, and the parcels comprising the Site will be subject to a special environmental review prior to issuance of a permit. A special notation has been added to the City's mainframe computer database of property information for the following tax account numbers:

The City of Rochester has established a procedure for "flagging" the tax account numbers of properties that require special environmental reviews as a result of hazardous waste or hazardous substance contamination. The reviews are conducted as referrals to the City's Division of Environmental Quality (DEQ) for any permit applications for properties where soil management plans or environmental contingency plans need to be established and followed during construction activities.

Tax ID #	Address	Zoning	Use
106.620-01-021	376 St. Paul Street	Commercial	Annex Building/ Parking Lot
106.620-01-28	384 St. Paul Street	Commercial	Framed Partitions
106.620-01-29	388-392 St. Paul Street	Commercial	Building B/ Parking Lot Thermometer Division of Tel-Tru Mg. Co.
106.620-01-30	398 St. Paul Street	Commercial	Vacant
106.620-01-31	408 St. Paul Street	Commercial	Building A Main Offices
106.620-01-32	19-23 Emmett Street	Commercial	Building C Optics Division

The notation appears as a "flag" to City staff that receive future building and site preparation permit applications. The flag will require a referral to the City's DEQ before the application can be processed for approval. DEQ staff will review the permit application for consistency with the Site Management Plan, limited-use areas and land-use restrictions. A notification to the NYSDEC will be included at the time the permit is reviewed given the scope of the proposed work.

Consistent with the SMP, the Environmental Easement as set forth in Section 1.1 above, stipulates the following:

- The Controlled Property may not be used for a higher level of use than the institutional control described in paragraph A (commercial and industrial), such as unrestricted or restricted residential use, and the engineering control and the engineering controls described in subparagraphs A(ii), (iv) and (v) (sub-slab depressurization, impervious surfaces and groundwater use restriction, respectively) may not be discontinued without an amendment or extinguishment of this Environmental Easement.

- Grantor covenants and agrees that, until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type that:

  This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.

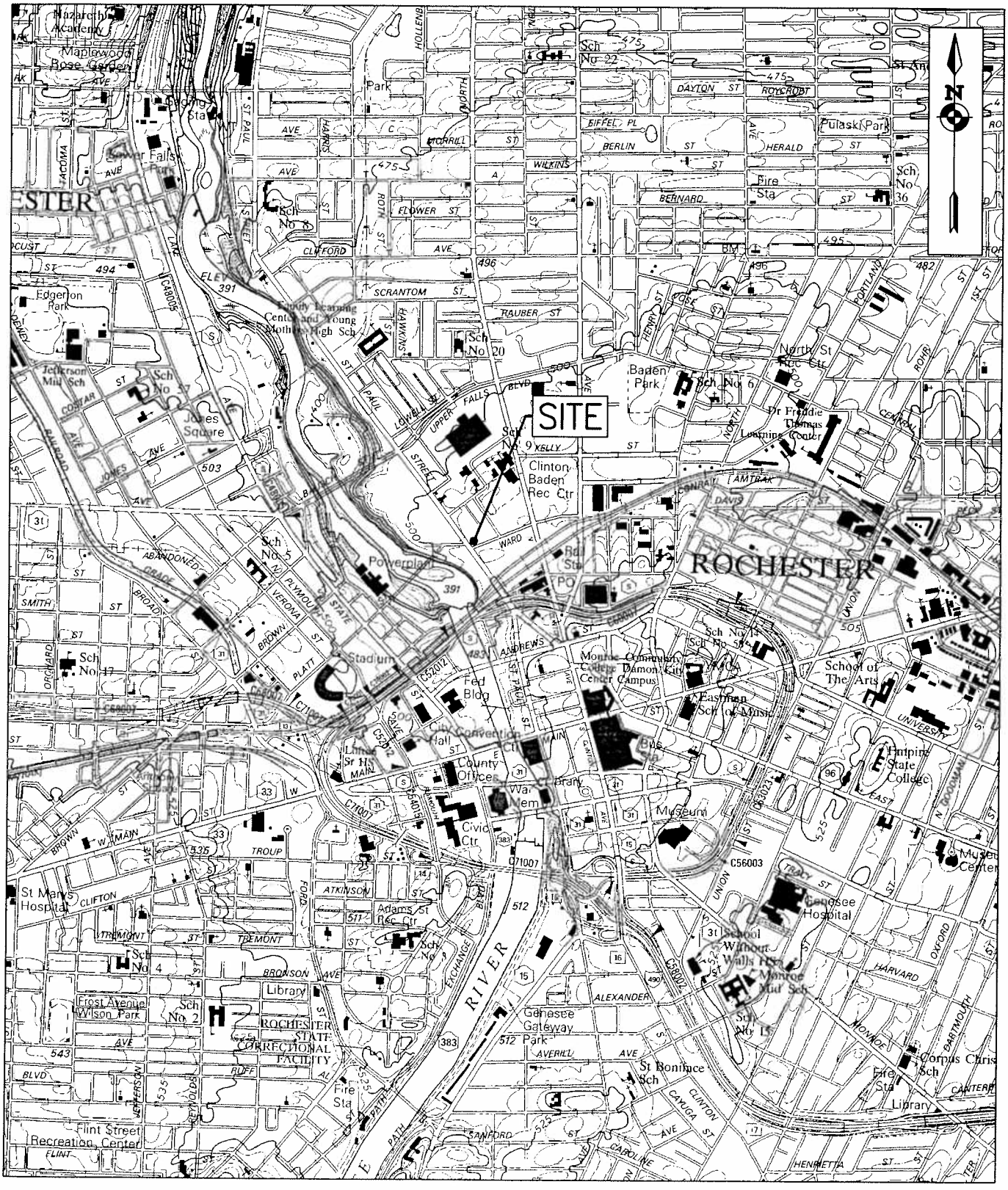
- Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the institutional and engineering controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

Please note that since the Environmental Easement was issued, the rate of VOC removal by the MPVE system had reached asymptomatic conditions and pursuant to NYSDEC approval, the MPVE system was shut down on February 22, 2011 and has not been restarted since that time. The existing sub-slab depressurization system (SSDS) for the Building B Annex Area was turned on at the time the MPVE operation was suspended.

Please note that an updated ALTA Survey dated August 1, 2012 was prepared and issued at the request of the NYSDEC, which integrates the 8-28 Ward Street Site with the Ward Street Site (see Appendix E).

Figures



PROJECT ENGINEER/ARCHITECT
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PROJECT MANAGER
M. STORONSKY

DRAWN BY
A. LESS

SCALE
1" = 2000'

FIRST ISSUE DATE
02/2006

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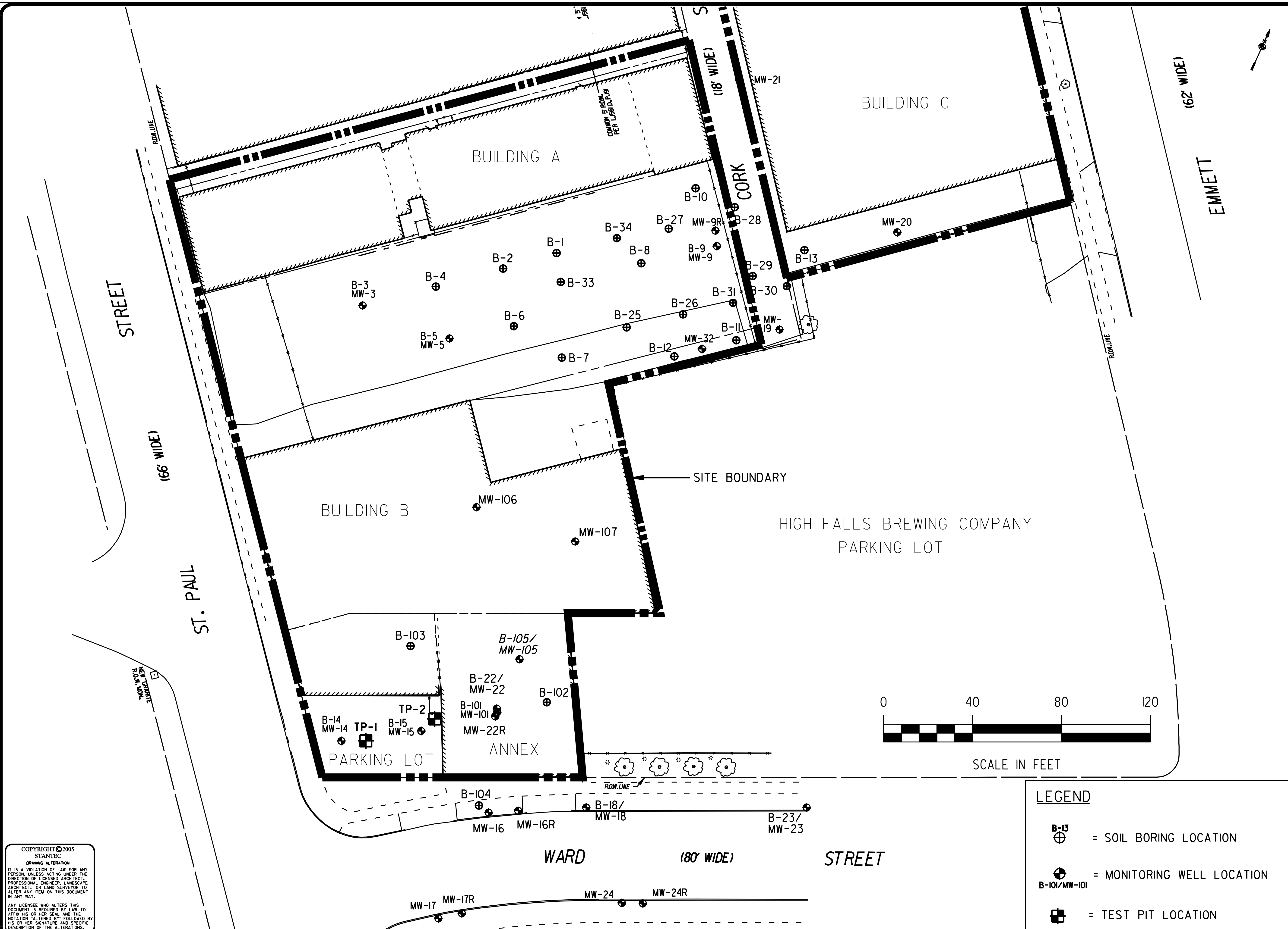
PROJECT
ALTERNATIVES ANALYSIS REPORT AND REMEDIAL WORK PLAN
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING
SITE LOCATION MAP

PROJECT NO.
190500014

DRAWING NO.
FIG. 1

U:\1405205\civil\ALTERNATIVE ALAYSIS Report Figures\FIG1.dwg



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PROJECT ENGINEER/ARCHITECT
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PROJECT MANAGER
M. STORONSKY
DRAWN BY
A. LESS

SCALE
AS SHOWN
FIRST ISSUE DATE
2/2006

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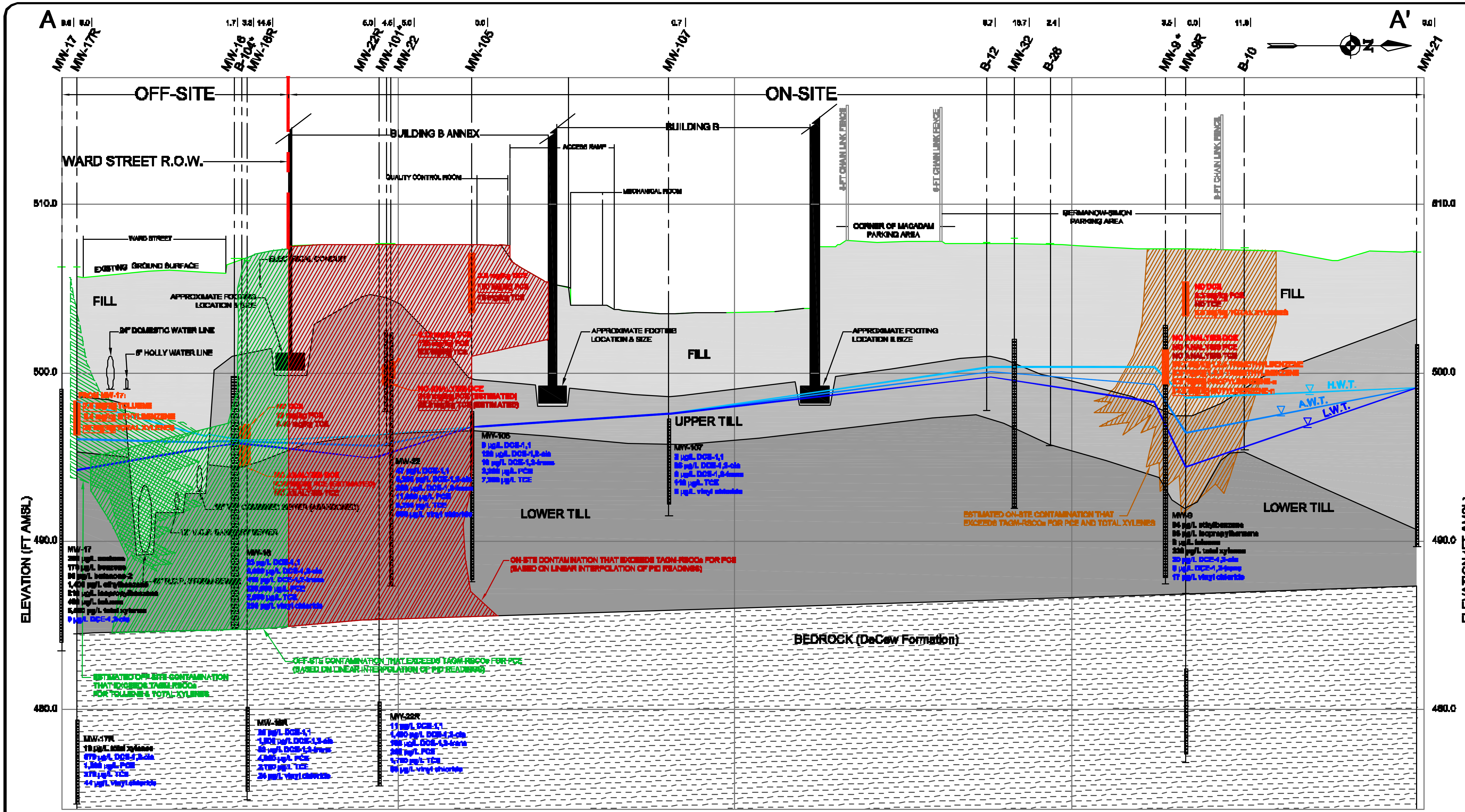
PROJECT
ALTERNATIVES ANALYSIS REPORT AND REMEDIAL WORK PLAN
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING
BORING AND MONITORING WELL LOCATION MAP

PROJECT NO.
190500014

DRAWING NO.
FIG. 2



LEGEND:

= ON-SITE PCE CONTAMINATION > TAGM-RSCOs (BASED ON LINEAR INTERPOLATION OF PID READINGS)

= ESTIMATED ON-SITE STODDARD SOLVENT CONTAMINATION > TAGM-RSCOs

= OFF-SITE PCE CONTAMINATION > TAGM-RSCOs (BASED ON LINEAR INTERPOLATION OF PID READINGS)

= ESTIMATED OFF-SITE PETROLEUM HYDROCARBON CONTAMINATION > TAGM-RSCOs

= SAMPLE LOCATION

DCE = DICHLOROETHENE -1,2 (CIS)
PCE = TETRACHLOROETHENE
TCE = TRICHLOROETHENE
ND = ANALYZED BUT NOT DETECTED

29.2 mg/kg BOXED SOIL CONCENTRATIONS EXCEED TAGM-RSCOs.

= APPROXIMATE WELL SCREEN LOCATION

H.W.T. = APPROXIMATE HIGH GROUNDWATER WATER TABLE ELEVATION

A.W.T. = APPROXIMATE AVERAGE GROUNDWATER TABLE ELEVATION

L.W.T. = APPROXIMATE LOW GROUNDWATER TABLE ELEVATION

10 µg/L total xylenes = NON-CHLORINATED VOCs IN GROUNDWATER >CLASS GA STANDARDS

870 µg/L DCE-1,2-cis = CHLORINATED VOCs IN GROUNDWATER >CLASS GA STANDARDS

3.5 | = OFFSET FROM A-A' AXIS.
[| INDICATES DISTANCE IS EAST OF AXIS)
(| INDICATES DIRECTION IS WEST OF AXIS)

* = NON-ASP SOIL ANALYSES. CONCENTRATIONS FOR PCE AND TCE IN SOIL SAMPLES COLLECTED FROM MW-101 AND B-104 ARE ESTIMATED

NOTES:

1. GROUNDWATER SURFACES, STRATA INTERFACES AND GROUND SURFACE ARE BASED ON LINEARLY INTERPOLATED SURFACES THAT INCLUDE ALL AVAILABLE BORINGS AND SURVEY DATA.
2. UNDERGROUND ELECTRICAL SERVICE IS PRESENT WITHIN WARD STREET R.O.W. TYPICAL DEPTH FOR THIS SERVICE IS 18-24" BELOW GROUND SURFACE.

KEY MAP
SCALE 1"=200'

REV		DATE	BY
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REVISIONS

PROJECT ENGINEER/ARCHITECT: D. BELASKAS, P.E.
PROJECT MANAGER: M. STORONSKY
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SCALE: H 1:30, V 1:6
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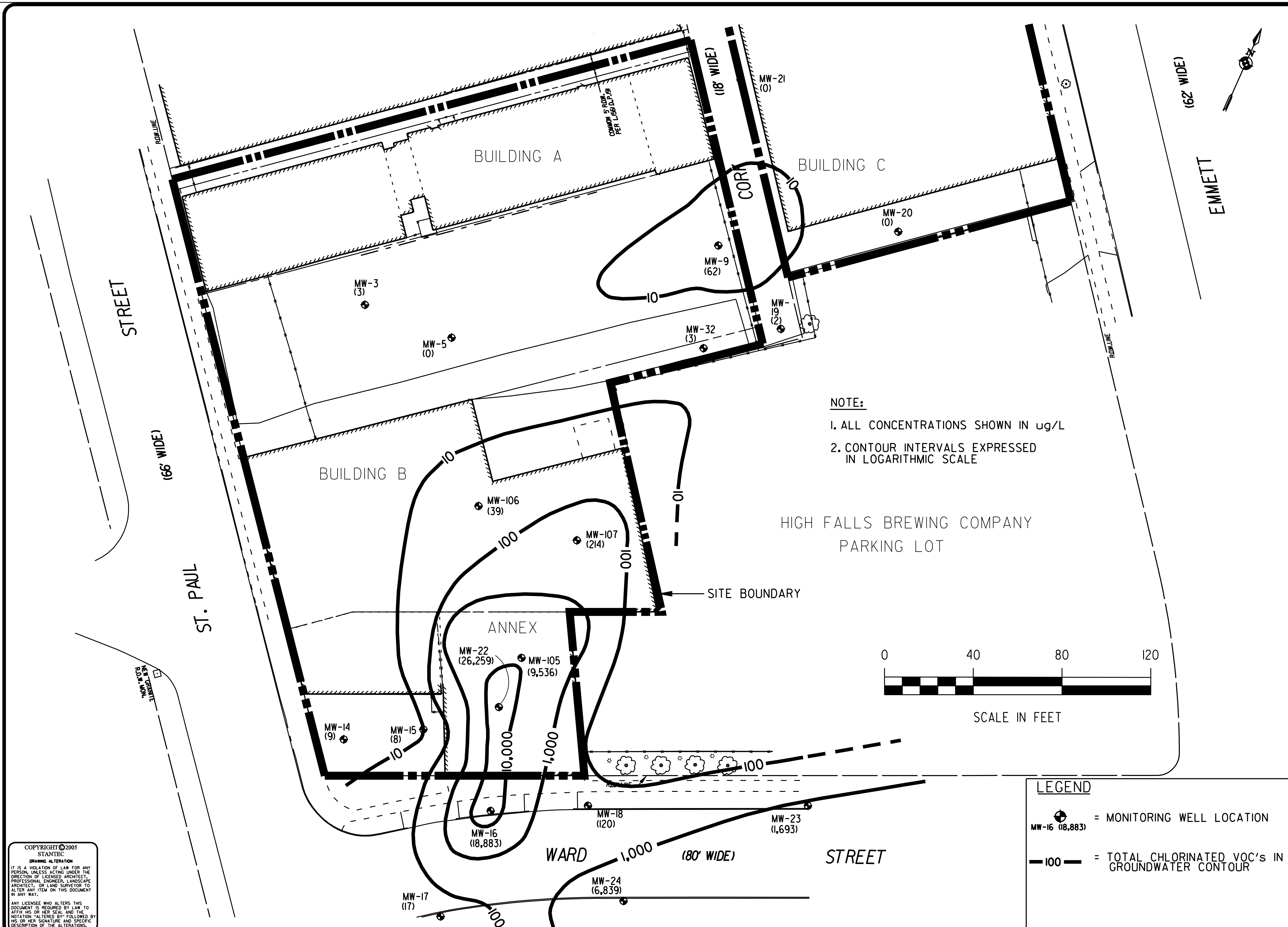
PROJECT
ALTERNATIVES ANALYSIS REPORT AND REMEDIAL WORK PLAN
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING
STRATIGRAPHY AND INTERPRETED CONTAMINANT DISTRIBUTION

PROJECT NO. 190500014
DRAWING NO. FIG. 4



REVISIONS	DATE	BY
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PROJECT ENGINEER/ARCHITECT: D. BELASKAS, P.E.
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DRAWN BY: A. LESS
SCALE: AS SHOWN
FIRST ISSUE DATE: 2/2006

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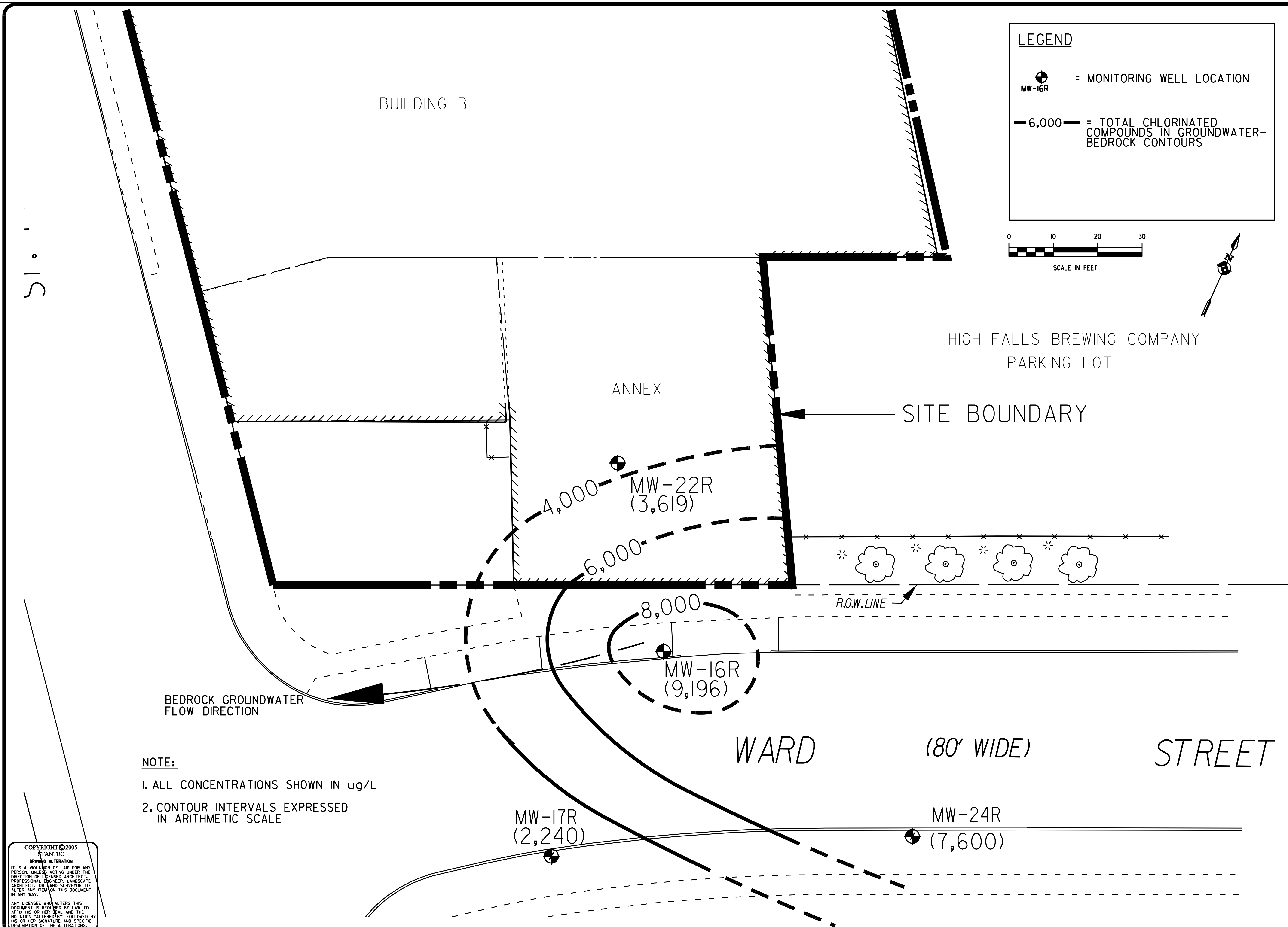
PROJECT: ALTERNATIVES ANALYSIS REPORT AND REMEDIAL WORK PLAN
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING: TOTAL CHLORINATED VOC's IN GROUNDWATER: OVERBURDEN (JULY 2005)

PROJECT NO. 190500014
DRAWING NO. FIG. 5



Workspace
Discipline: $wrkuser$
Project: $wrkproj$
Node: $node$

Plotting Parameters
Plotted By: $caduser$
Design File: $dgnfile$
Plotted: $date$ $time$
Plot Config: $pltcfg$

REVISIONS	DATE	BY
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PROJECT ENGINEER/ARCHITECT: D. BELASKAS, P.E.
PROJECT MANAGER: M. STORONSKY
DRAWN BY: A. LESS
SCALE: AS SHOWN
FIRST ISSUE DATE: 2/2006

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PROJECT: ALTERNATIVES ANALYSIS REPORT AND REMEDIAL WORK PLAN
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING: TOTAL CHLORINATED VOC's IN GROUNDWATER: BEDROCK (JULY 2005)

PROJECT NO. 190500014

DRAWING NO. FIG. 6

NOTES:

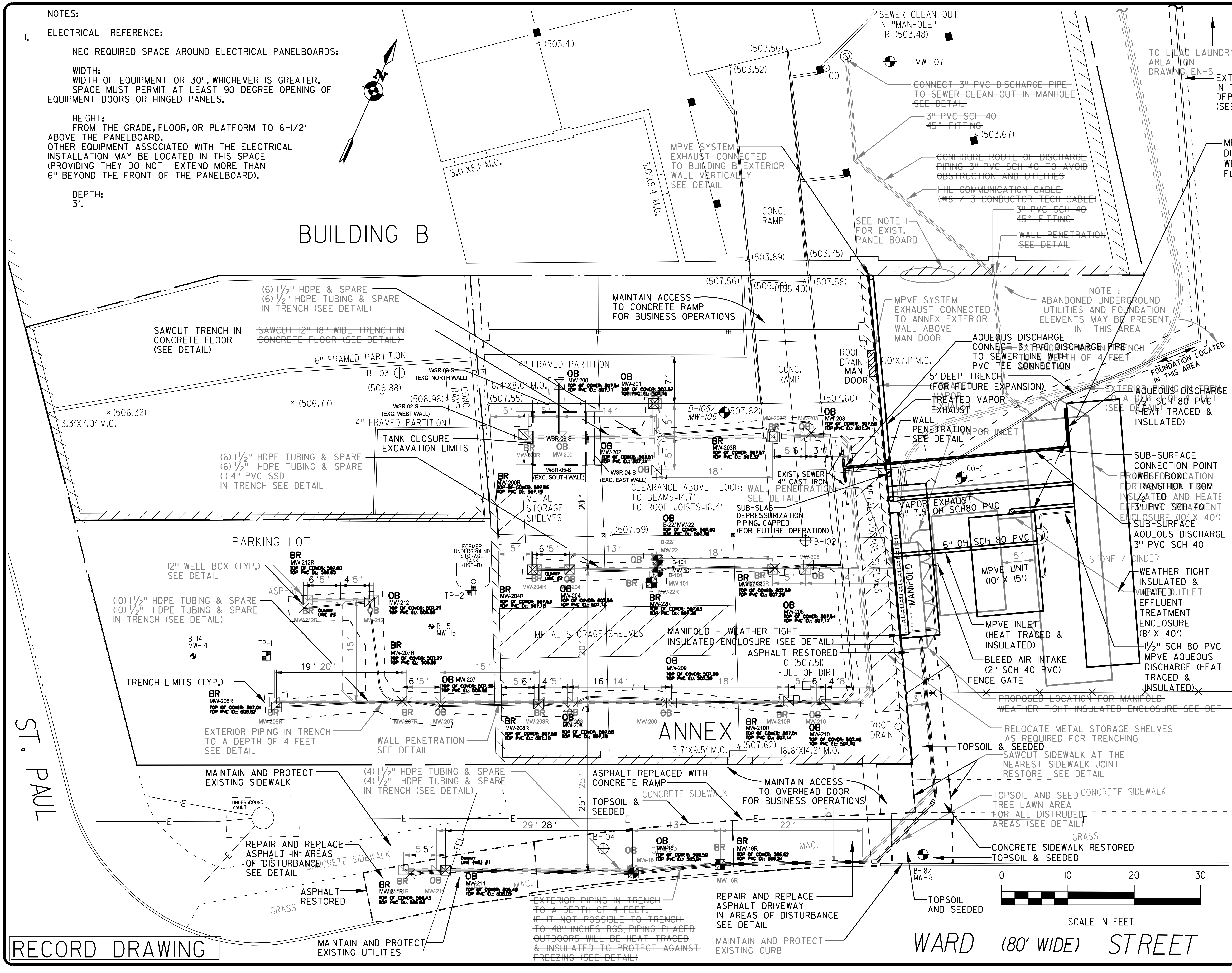
1. ELECTRICAL REFERENCE:

NEC REQUIRED SPACE AROUND ELECTRICAL PANELBOARDS:

WIDTH:
WIDTH OF EQUIPMENT OR 30", WHICHEVER IS GREATER. SPACE MUST PERMIT AT LEAST 90 DEGREE OPENING OF EQUIPMENT DOORS OR HINGED PANELS.

HEIGHT:
FROM THE GRADE, FLOOR, OR PLATFORM TO 6-1/2' ABOVE THE PANELBOARD. OTHER EQUIPMENT ASSOCIATED WITH THE ELECTRICAL INSTALLATION MAY BE LOCATED IN THIS SPACE (PROVIDING THEY DO NOT EXTEND MORE THAN 6" BEYOND THE FRONT OF THE PANELBOARD).

DEPTH:
3'.



BUILDING B
ANNEX
PARKING LOT
ST. PAUL
WARD (80' WIDE) STREET
RECORD DRAWING
SEWER CLEAN-OUT IN "MANHOLE" TR (503.48)
TO LILAC LAUNDRY AREA ON DRAWING EN-5
EXTERIOR PIPING IN TRENCH TO A DEPTH OF 4 FEET (SEE DETAIL)
MPVE VAPOR DISCHARGE (6" WELDED STEEL W/ FLEX COUPLING)
MPVE SYSTEM EXHAUST CONNECTED TO BUILDING B EXTERIOR WALL VERTICALLY SEE DETAIL
SEE NOTE 1 FOR EXIST. PANEL BOARD
MPVE SYSTEM EXHAUST CONNECTED TO ANNEX EXTERIOR WALL ABOVE MAN DOOR
NOTE: ABANDONED UNDERGROUND UTILITIES AND FOUNDATION ELEMENTS MAY BE PRESENT IN THIS AREA
FOUNDATION LOCATED IN THIS AREA
AQUEOUS DISCHARGE CONNECT 3" PVC DISCHARGE PIPE TO SEWER LINE WITH PVC TEE CONNECTION
5' DEEP TRENCH (FOR FUTURE EXPANSION)
TREATED VAPOR EXHAUST
WALL PENETRATION SEE DETAIL
AQUEOUS DISCHARGE 1½" SCH 80 PVC (HEAT TRACED & INSULATED)
SUB-SURFACE CONNECTION POINT (WELL BOX) TRANSITION FROM 1½" TO 3" PVC SCH 40
SUB-SURFACE AQUEOUS DISCHARGE 3" PVC SCH 40
VAPOR EXHAUST 6" OH SCH80 PVC
6" OH SCH 80 PVC
MPVE UNIT (10' X 15')
WEATHER TIGHT INSULATED & HEATED EFFLUENT TREATMENT ENCLOSURE (8' X 40')
MPVE INLET (HEAT TRACED & INSULATED)
BLEED AIR INTAKE (2" SCH 40 PVC)
1½" SCH 80 PVC MPVE AQUEOUS DISCHARGE (HEAT TRACED & INSULATED)
FENCE GATE
MANIFOLD
MAINTAIN ACCESS TO CONCRETE RAMP FOR BUSINESS OPERATIONS
(6) 1½" HDPE & SPARE (6) ½" HDPE TUBING & SPARE IN TRENCH (SEE DETAIL)
SAWCUT TRENCH IN CONCRETE FLOOR (SEE DETAIL)
TANK CLOSURE EXCAVATION LIMITS
(6) 1½" HDPE TUBING & SPARE (6) ½" HDPE TUBING & SPARE (1) 4" PVC SSD IN TRENCH SEE DETAIL
CLEARANCE ABOVE FLOOR: TO BEAMS=14.7' TO ROOF JOISTS=16.4'
SUB-SLAB DEPRESSURIZATION PIPING, CAPPED (FOR FUTURE OPERATION)
EXIST. SEWER 4" CAST IRON
12" WELL BOX (TYP.) SEE DETAIL
(10) 1½" HDPE TUBING & SPARE (10) ½" HDPE TUBING & SPARE IN TRENCH (SEE DETAIL)
TRENCH LIMITS (TYP.)
METAL STORAGE SHELVES
MANIFOLD - WEATHER TIGHT INSULATED ENCLOSURE (SEE DETAIL)
ASPHALT RESTORED
TG (507.51) FULL OF DIRT
EXTERIOR PIPING IN TRENCH TO A DEPTH OF 4 FEET SEE DETAIL
WALL PENETRATION SEE DETAIL
RELOCATE METAL STORAGE SHELVES AS REQUIRED FOR TRENCHING
TOPSOIL & SEEDED
SAWCUT SIDEWALK AT THE NEAREST SIDEWALK JOINT RESTORE SEE DETAIL
MAINTAIN AND PROTECT EXISTING SIDEWALK
(4) 1½" HDPE TUBING & SPARE (4) ½" HDPE TUBING & SPARE IN TRENCH (SEE DETAIL)
ASPHALT REPLACED WITH CONCRETE RAMP
TOPSOIL & SEEDED
MAINTAIN ACCESS TO OVERHEAD DOOR FOR BUSINESS OPERATIONS
TOPSOIL AND SEED TREE LAWN AREA FOR ALL DISTRUBED AREAS (SEE DETAIL)
CONCRETE SIDEWALK RESTORED
TOPSOIL & SEEDED
REPAIR AND REPLACE ASPHALT IN AREAS OF DISTURBANCE SEE DETAIL
ASPHALT RESTORED
MAINTAIN AND PROTECT EXISTING UTILITIES
REPAIR AND REPLACE ASPHALT DRIVEWAY IN AREAS OF DISTURBANCE SEE DETAIL
MAINTAIN AND PROTECT EXISTING CURB
TOPSOIL AND SEEDED
SCALE IN FEET
0 10 20 30

PROJECT ENGINEER/ARCHITECT D. BELASKAS, P.E.
PROJECT MANAGER M. STORONSKY
DRAWN BY A. LESS
SCALE AS SHOWN
FIRST ISSUE DATE NOVEMBER, 2006

0	RECORD DRAWING	11/2006	APL
	REVISIONS	DATE	BY

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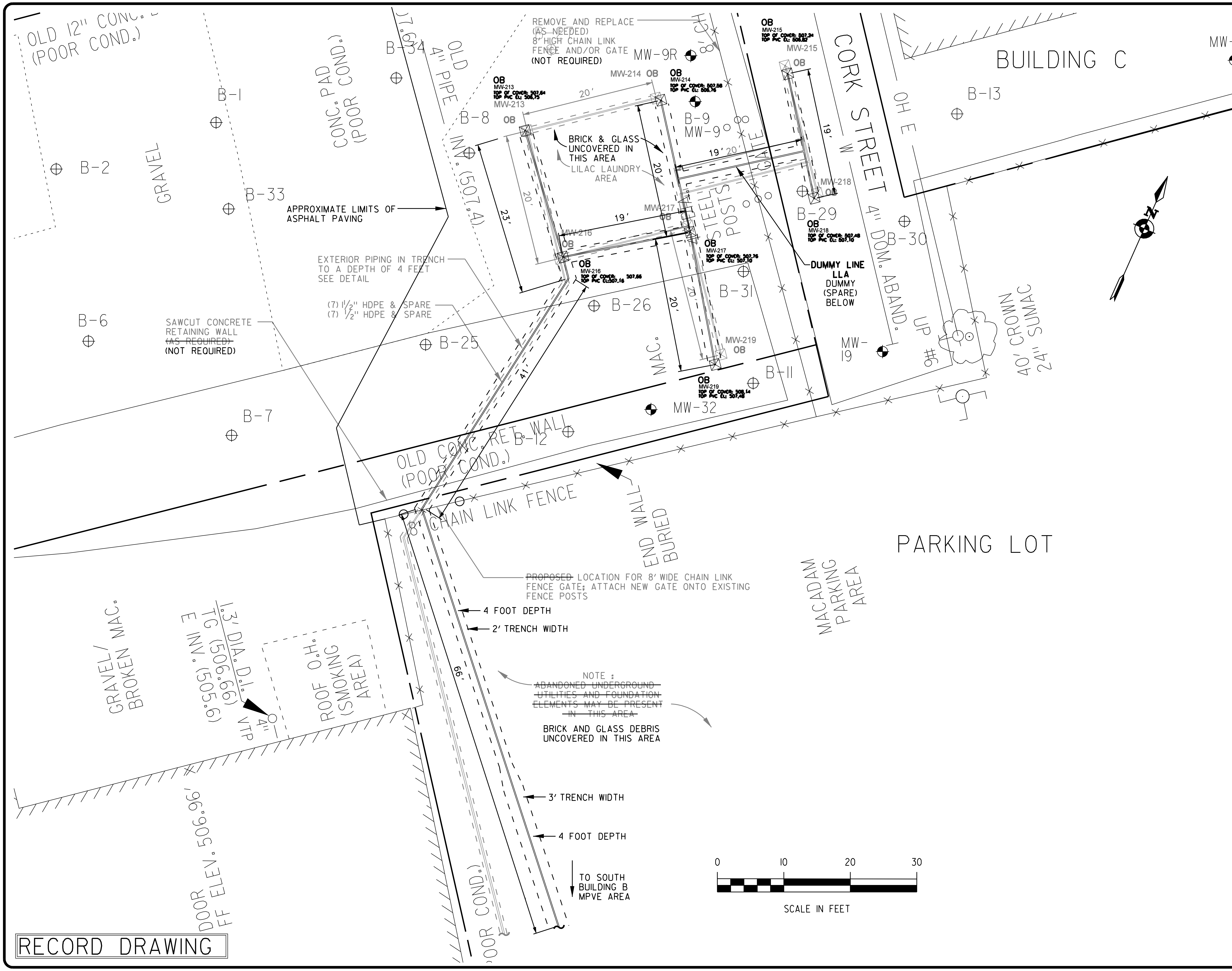
PROJECT
FINAL ENGINEERING REPORT
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING
SITE PLAN OF EXTRACTION WELL LAYOUT-BUILDING B ANNEX

PROJECT NO. 190500014
DRAWING NO. EN-3


RECORD DRAWING
BUILDING C
CORK STREET
PARKING LOT
MACADAM PARKING AREA
GRAVEL
GRAVEL / BROKEN MAC.
OLD 12" CONC. (POOR COND.)
CONC. PAD (POOR COND.)
OLD 4" PIPE INV. (507.4)
OLD CONC. RET WALL (POOR COND.)
8' CHAIN LINK FENCE
END WALL BURIED
ROOF O.H. (SMOKING AREA)
1.3' DIA. D.I. T.G. (506.66) E INV. (505.6)
DOOR FF ELEV. 506.96'
4" VTP
4" DOM. ABAND.
OH E
UP #6
40' CROWN 24" SUMAC
STEEL POSTS
GATE
REMOVE AND REPLACE (AS NEEDED) 8' HIGH CHAIN LINK FENCE AND/OR GATE (NOT REQUIRED)
BRICK & GLASS UNCOVERED IN THIS AREA
LILAC LAUNDRY AREA
APPROXIMATE LIMITS OF ASPHALT PAVING
EXTERIOR PIPING IN TRENCH TO A DEPTH OF 4 FEET SEE DETAIL
(7) 1½" HDPE & SPARE
(7) ½" HDPE & SPARE
SAWCUT CONCRETE RETAINING WALL (AS REQUIRED) (NOT REQUIRED)
DUMMY LINE LLA DUMMY (SPARE) BELOW
PROPOSED LOCATION FOR 8' WIDE CHAIN LINK FENCE GATE; ATTACH NEW GATE ONTO EXISTING FENCE POSTS
4 FOOT DEPTH
2' TRENCH WIDTH
3' TRENCH WIDTH
4 FOOT DEPTH
NOTE : ABANDONED UNDERGROUND UTILITIES AND FOUNDATION ELEMENTS MAY BE PRESENT IN THIS AREA
BRICK AND GLASS DEBRIS UNCOVERED IN THIS AREA
TO SOUTH BUILDING B MPVE AREA
MW-9R
MW-9
MW-19
MW-20
MW-32
MW-213
MW-214
MW-215
MW-216
MW-217
MW-218
MW-219
B-1
B-2
B-6
B-7
B-8
B-9
B-11
B-12
B-13
B-25
B-26
B-29
B-30
B-31
B-33
B-34
0 10 20 30
SCALE IN FEET

PROJECT ENGINEER/ARCHITECT
D. BELASKAS, P.E.
PROJECT MANAGER
M. STORONSKY
DRAWN BY
A. LESS
SCALE
AS SHOWN
FIRST ISSUE DATE
NOVEMBER, 2006

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PROJECT
FINAL ENGINEERING REPORT
WARD STREET SITE
ROCHESTER, NEW YORK

TITLE OF DRAWING
SITE PLAN OF EXTRACTION WELL LAYOUT-LILAC LAUNDRY AREA

PROJECT NO.
190500014
DRAWING NO.
EN-4

Tables

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Ward Street Site
Rochester, NY

BOREHOLE	DEPTH (ft. bgs)	PID Readings	
		PEAK (ppm)	BACKGROUND (ppm)
September, 2001			
B-17	0 - 2	0.5	0.4
	2 - 4	390	0.4
	4 - 6	245	0.4
	6 - 8	370	0.4
	8 - 10	330	0.4
	10 - 12	300	0.4
	12 - 14	141	0.4
	14 - 16	50.0	0.4
	16 - 18	59.0	0.4
	18 - 20	74.0	0.4
	20 - 22	25.0	0.4
B-18	0 - 2	0.5	0.3
	2 - 4	1.0	0.3
	4 - 6	0.7	0.3
	6 - 8	0.9	0.3
	8 - 10	1.2	0.3
	10 - 12	1.4	0.3
	12 - 14	0.8	0.3
	14 - 16	0.6	0.3
	16 - 18	0.6	0.3
	18 - 20	0.7	0.3
	20 - 22.1	0.5	0.3
B-22	2 - 2.6	170	0.5
	3 - 4	280	0.5
	5.5 - 6	190	0.5
	7 - 8	420	0.5
	9 - 10	380	0.5
	11 - 12	68	0.5
	13 - 14	20	0.5
	15.5 - 16	40	0.5
	17.5 - 18	36	0.5
	19.5 - 20	30	0.5
B-23	0 - 2	0.4	0.3
	2 - 4	2.7	0.3
	4 - 6	1.5	0.3
	6 - 8	1.8	0.3
	8 - 10	2.4	0.3
	10 - 12	4.9	0.2
	12 - 14	35.0	0.2
	14 - 16	20.0	0.2
	16 - 18	6.8	0.2
	18 - 20	1.3	0.2
	20 - 22	0.4	0.2

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Ward Street Site
Rochester, NY

BOREHOLE	DEPTH (ft. bgs)	PID Readings	
		PEAK (ppm)	BACKGROUND (ppm)
B-24	0 - 2	0.5	0.4
	2 - 4	2.3	0.4
	4 - 6	1.1	0.4
	6 - 8	3.0	0.4
	8 - 10	-	-
	10 - 12	1.9	0.4
	12 - 14	4.2	0.4
	14 - 16	4.0	0.4
	16 - 18	2.2	0.4
	18 - 20	10.0	0.4
	20 - 22	16.0	0.4
	22 - 24	12.0	0.4
February, 2005			
B-105	0.5-4	438	0.3
	4-8	19.8	0.7
	8-12	3.7	0.7
	12-16	4.1	0.7
	16-18	1.7	0.7
	18-20	2.8	0.7
B-106	0.65-4	0.3	0.0
	4-8	0.3	0.0
	8-10	0.2	0.0
	10-12	0.2	0.0
B-107	0.5-4	0.3	0.0
	4-8	1.0	0.0
	8-10	0.9	0.0
	10-12	0.2	0.0
June, 2005			
B-9R	0 - 2	18.2	0.0
	2 - 4	476	0.0
	4 - 6	139	0.0
	6 - 8	277	0.0
	8 - 10	-	0.0
	10 - 12	1.6	0.0
	12 - 14	1.9	0.0
	14 - 16	0.8	0.0
	16 - 18	0.5	0.0
	18 - 20	0.5	0.0
	20 - 20.5	0.4	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Ward Street Site
Rochester, NY

BOREHOLE	DEPTH (ft. bgs)	PID Readings	
		PEAK (ppm)	BACKGROUND (ppm)
B-16R	0 - 2	0.2	0.0
	2 - 4	0.2	0.0
	4 - 6	0.4	0.0
	6 - 8	0.4	0.0
	8 - 10	0.4	0.0
	10 - 12	0.5	0.0
	12 - 14	13.5	0.0
	14 - 16	8.6	0.0
	16 - 18	6.4	0.0
	18 - 20	4.5	0.0
	20 - 20.9	5.3	0.0
			0.0
B-19	0 - 2	0.2	0.0
	2 - 4	0.2	0.0
	4 - 6	0.1	0.0
	6 - 8	0.1	0.0
	8 - 10	0.1	0.0
	10 - 12	-	0.0
	12 - 14	0.1	0.0
	14 - 16	0.1	0.0
	16 - 18	0.0	0.0
	18 - 19	0.0	0.0
B-20	0 - 2	0.0	0.0
	2 - 4	0.0	0.0
	4 - 6	-	0.0
	6 - 8	0.0	0.0
	8 - 10	0.0	0.0
	10 - 12	0.0	0.0
	12 - 14	0.0	0.0
	14 - 16	0.1	0.0
	16 - 18	0.0	0.0
	18 - 20	0.0	0.0
	20 - 22	0.0	0.0
B-21	0 - 2	0.1	0.0
	2 - 4	-	0.0
	4 - 6	0.1	0.0
	6 - 8	0.2	0.0
	8 - 10	0.1	0.0
	10 - 12	0.2	0.0
	12 - 14	0.2	0.0
	14 - 16	0.1	0.0
	16 - 17.2	0.1	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Ward Street Site
Rochester, NY

BOREHOLE	DEPTH (ft. bgs)	PID Readings	
		PEAK (ppm)	BACKGROUND (ppm)
B-25	3-4	0.2	0.0
	5-6	0.1	0.0
	7-8	0.1	0.0
	11-12	0.1	0.0
B-26	3-4	35	0.0
	5-6	118	0.0
	7-8	34	0.0
	11-12	4.1	0.0
B-27	3-4	0.3	0.0
	5-6	8.4	0.0
	7-8	83	0.0
	11-12	1.2	0.0
B-28	3-4	0.2	0.0
	7-8	1.8	0.0
	10-11	0.2	0.0
B-29	3-4	6.4	0.0
	5-6	1,515	0.0
	7-8	1,530	0.0
	9-10	233	0.0
	11-12	2.2	0.0
B-30	3-4	0.3	0.0
	7-8	6.1	0.0
	10-12	0.2	0.0
B-31	3-4	25	0.0
	6-7	725	0.0
	9-10	1,450	0.0
	11-12	2.6	0.0
B-32	3-4	0.2	0.0
	6-7	0.3	0.0
	11-12	0.8	0.0
	13-14	0.3	0.0

TABLE 1
SUMMARY OF PID HEADSPACE READINGS (ppm)
Ward Street Site
Rochester, NY

BOREHOLE	DEPTH (ft. bgs)	PID Readings	
		PEAK (ppm)	BACKGROUND (ppm)
B-33	3-4	0.1	0.0
	7-8	0.1	0.0
	10-11	0.7	0.0
	12-13	0.3	0.0
B-34	3-4	0.2	0.0
	7-8	0.1	0.0
	11-12	0.2	0.0
	15-16	0.3	0.0

Notes:
1. ft. bgs = feet below ground surface.

Table 1: Summary of Soil Analytical Results - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	On-Site Area 1 : Building B Annex				
		MW-14	MW-14	MW-15	MW-22	MW-101*
Sample depth		8 to 10 ft	18 to 18.9 ft	8 to 10 ft	7 to 8 ft	8 to 10 ft
Northing (ft)		-48953.7	-48953.7	-48934.85	-48911.94	-48913.36
Easting (ft)		31844.91	31844.91	31876.12	31903.02	31903.84
Ground Elevation (ft AMSL)		506.80	506.80	507.40	507.66	507.70
Sampling Date		Apr-99	Apr-99	Apr-99	Aug-02	Apr-99
Volatiles						
Acetone	0.2	-	-	-	0.004	-
Benzene	0.06	-	-	-	ND	ND
Bromodichloromethane	-	-	-	-	ND	-
Bromoform	-	-	-	-	ND	-
Bromomethane	-	-	-	-	ND	-
Butanone-2	-	-	-	-	ND	-
Butylbenzene	-	-	-	-	-	-
Butylbenzene (sec)	10	0.2923	ND	0.1871	-	0.1153
Butylbenzene (tert)	10	1.1866	ND	ND	-	0.0956
Butylbenzene-n	10	ND	ND	ND	-	0.0937
Carbon Disulfide	-	-	-	-	ND	-
Carbon tetrachloride	0.6	-	-	-	ND	-
Chlorobenzene	1.7	-	-	-	ND	-
Chloroethane	1.9	-	-	-	ND	-
Chloroform	0.3	-	-	-	ND	-
Chloromethane	0	-	-	-	ND	-
Cyclohexane	-	-	-	-	ND	-
Dibromo-1,2-chloropropane-3	-	-	-	-	ND	-
Dibromochloromethane	-	-	-	-	ND	-
Dibromoethane-1,2	-	-	-	-	ND	-
Dichlorobenzene-1,2	7.9	-	-	-	ND	-
Dichlorobenzene-1,3	1.6	-	-	-	ND	-
Dichlorobenzene-1,4	8.5	-	-	-	ND	-
Dichlorodifluoromethane	-	-	-	-	ND	-
Dichloroethane-1,1	0.2	-	-	-	ND	-
Dichloroethane-1,2	0.1	-	-	-	ND	-
Dichloroethene-1,1	0.4	-	-	-	ND	-
Dichloroethene-1,2 (cis)	-	-	-	-	0.12	-
Dichloroethene-1,2 (trans)	0.3	-	-	-	ND	-
Dichloropropane-1,2	-	-	-	-	ND	-
Dichloropropene-1,3 (cis)	0	-	-	-	ND	-
Dichloropropene-1,3 (trans)	-	-	-	-	ND	-
Dioxane-1,4	-	-	-	-	-	-
Ethylbenzene	5.5	0.6068	ND	ND	ND	0.1213
Hexachlorobenzene	-	-	-	-	-	-
Hexanone-2	-	-	-	-	ND	-
Isopropylbenzene	2.3	0.361	ND	ND	ND	0.126
Isopropyltoluene-4	-	ND	ND	ND	-	ND
Isopropyltoluene-p	10	0.5197	ND	ND	-	0.2332
Methyl acetate	-	-	-	-	ND	-
Methyl ethyl ketone	-	-	-	-	-	-
Methyl tert-butyl ether	0.12	-	-	-	ND	ND
Methyl-4-pentanone-2	-	-	-	-	ND	-
Methylcyclohexane	-	-	-	-	ND	-
Methylene Chloride	0.1	-	-	-	ND	-
Methylene chloride	-	-	-	-	-	-
Propylbenzene-n	3.7	1.7507	ND	ND	-	0.152
Styrene	-	-	-	-	ND	-
Tetrachloroethane-1,1,2,2	-	-	-	-	ND	-
Tetrachloroethene	1.4	-	-	-	**120**	**310**
Toluene	1.5	-	-	-	ND	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	-	-	-	ND	-
Trichlorobenzene-1,2,4	-	-	-	-	ND	-
Trichloroethane-1,1,1	0.8	-	-	-	ND	-
Trichloroethane-1,1,2	-	-	-	-	0.002	-
Trichloroethene	0.7	-	-	-	**2.5**	**28.23**
Trichlorofluoromethane	-	-	-	-	ND	-
Trimethylbenzene-1,2,4	10	9.0018	0.0433	ND	-	0.6526
Trimethylbenzene-1,3,5	3.3	2.9304	ND	ND	-	0.2157
Vinyl chloride	0.2	-	-	-	ND	-
Xylene - m	0.8	0.3877	ND	ND	-	0.0803
Xylene - o	0.6	ND	ND	ND	-	0.064
Xylene (mixed)	1.2	-	-	-	ND	-

Notes:

-	No criteria or no analysis
ND	No results above detection limits
	Non-ASP Soil Analyses.
*	Concentrations for tetrachloroethene and trichloroethene are estimates
10	Concentration greater than TAGM-RSCOs

\\us1275-f05\shared_projects\1405205\data\Remediation\MB\RDWP\SMP\[RWP Tables 1-2-4&5.xls]1-Soil Summary

Table 1: Summary of Soil Analytical Results - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	On-Site Area 1 : Building B Annex			On-Site Area 2 : MW-9	
		MW-105	MW-106	MW-107	B-8/BA	MW-9
Sample depth		0.5 to 4 ft	4 to 8 ft	0.5 to 4 ft	6 to 8 ft	6 to 8 ft
Northing (ft)		-48887.49	-48832.82	-48828.96	-48702.43	-48681.53
Easting (ft)		31903.3	31857.86	31904.58	31880.83	31908.75
Ground Elevation (ft AMSL)		507.61	503.31	503.53	507.54	507.34
Sampling Date		Feb-05	Feb-05	Feb-05	Apr-99	Apr-99
Volatiles						
Acetone	0.2	0.078	ND	ND	-	-
Benzene	0.06	ND	ND	ND	-	-
Bromodichloromethane	-	ND	ND	ND	-	-
Bromoform	-	ND	ND	ND	-	-
Bromomethane	-	ND	ND	ND	-	-
Butanone-2	-	ND	ND	ND	-	-
Butylbenzene	-	-	-	-	-	-
Butylbenzene (sec)	10	-	-	-	**14.997**	8.3922
Butylbenzene (tert)	10	-	-	-	**11.304**	7.6374
Butylbenzene-n	10	-	-	-	**22.876**	**14.455**
Carbon Disulfide	-	ND	ND	ND	-	-
Carbon tetrachloride	0.6	ND	ND	ND	-	-
Chlorobenzene	1.7	ND	ND	ND	-	-
Chloroethane	1.9	ND	ND	ND	-	-
Chloroform	0.3	ND	ND	ND	-	-
Chloromethane	0	ND	ND	ND	-	-
Cyclohexane	-	ND	ND	ND	-	-
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	-	-
Dibromochloromethane	-	ND	ND	ND	-	-
Dibromoethane-1,2	-	ND	ND	ND	-	-
Dichlorobenzene-1,2	7.9	ND	ND	ND	-	-
Dichlorobenzene-1,3	1.6	ND	ND	ND	-	-
Dichlorobenzene-1,4	8.5	ND	ND	ND	-	-
Dichlorodifluoromethane	-	ND	ND	ND	-	-
Dichloroethane-1,1	0.2	ND	ND	ND	-	-
Dichloroethane-1,2	0.1	ND	ND	ND	-	-
Dichloroethene-1,1	0.4	ND	ND	ND	-	-
Dichloroethene-1,2 (cis)	-	3.8	0.001	ND	-	-
Dichloroethene-1,2 (trans)	0.3	ND	ND	ND	-	-
Dichloropropane-1,2	-	ND	ND	ND	-	-
Dichloropropene-1,3 (cis)	0	ND	ND	ND	-	-
Dichloropropene-1,3 (trans)	-	ND	ND	ND	-	-
Dioxane-1,4	-	-	-	-	-	-
Ethylbenzene	5.5	0.001	ND	ND	ND	ND
Hexachlorobenzene	-	-	-	-	-	-
Hexanone-2	-	ND	ND	ND	-	-
Isopropylbenzene	2.3	ND	ND	ND	ND	ND
Isopropyltoluene-4	-	-	-	-	15.73	6.4797
Isopropyltoluene-p	10	-	-	-	ND	ND
Methyl acetate	-	ND	ND	ND	-	-
Methyl ethyl ketone	-	-	-	-	-	-
Methyl tert-butyl ether	0.12	ND	ND	ND	-	-
Methyl-4-pentanone-2	-	ND	ND	ND	-	-
Methylcyclohexane	-	0.001	ND	ND	-	-
Methylene Chloride	0.1	ND	ND	ND	-	-
Methylene chloride	-	-	-	-	-	-
Propylbenzene-n	3.7	-	-	-	**15.047**	**9.2929**
Styrene	-	ND	ND	ND	-	-
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	-	-
Tetrachloroethene	1.4	**150**	0.004	0.005	ND	ND
Toluene	1.5	0.003	ND	ND	-	-
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	-	-
Trichlorobenzene-1,2,4	-	ND	ND	ND	-	-
Trichloroethane-1,1,1	0.8	ND	ND	ND	-	-
Trichloroethane-1,1,2	-	ND	ND	ND	-	-
Trichloroethene	0.7	**10**	0.002	0.002	ND	ND
Trichlorofluoromethane	-	ND	ND	ND	-	-
Trimethylbenzene-1,2,4	10	-	-	-	**85.819**	**60.687**
Trimethylbenzene-1,3,5	3.3	-	-	-	**14.688**	**8.5163**
Vinyl chloride	0.2	ND	ND	ND	-	-
Xylene - m	0.8	-	-	-	ND	ND
Xylene - o	0.6	-	-	-	ND	ND
Xylene (mixed)	1.2	0.006	ND	ND	-	-

Notes:

-	No criteria or no analysis
ND	No results above detection limits
	Non-ASP Soil Analyses.
*	Concentrations for tetrachloroethene and trichloroethene are estimates
10	Concentration greater than TAGM-RSCOs

Table 1: Summary of Soil Analytical Results - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	On-Site Area 2 : MW-9				
		MW-9R	B-11	MW-19	MW-20	MW-21
Sample depth		2 to 4 ft	6 to 8 ft	4 to 6 ft	2 to 4 ft	4 to 6 ft
Northing (ft)		-48675.39	-48716.7	-48704.6	-48642.81	-48609.15
Easting (ft)		31905.35	31933.94	31949.63	31980.19	31887.53
Ground Elevation (ft AMSL)		507.39	507.75	507.74	507.16	507.20
Sampling Date		Jun-05	Apr-99	Jun-05	Jun-05	Jun-05
Volatiles						
Acetone	0.2	ND	-	0.005	ND	ND
Benzene	0.06	ND	ND	ND	ND	ND
Bromodichloromethane	-	ND	-	ND	ND	ND
Bromoform	-	ND	-	ND	ND	ND
Bromomethane	-	ND	-	ND	ND	ND
Butanone-2	-	ND	-	ND	ND	ND
Butylbenzene	-	-	-	-	-	-
Butylbenzene (sec)	10	-	0.0639	-	-	-
Butylbenzene (tert)	10	-	0.1221	-	-	-
Butylbenzene-n	10	-	0.05	-	-	-
Carbon Disulfide	-	ND	-	ND	ND	ND
Carbon tetrachloride	0.6	ND	ND	ND	ND	ND
Chlorobenzene	1.7	ND	ND	ND	ND	ND
Chloroethane	1.9	ND	ND	ND	ND	ND
Chloroform	0.3	ND	ND	ND	ND	ND
Chloromethane	0	ND	-	ND	ND	ND
Cyclohexane	-	ND	-	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	-	ND	ND	ND
Dibromochloromethane	-	ND	-	ND	ND	ND
Dibromoethane-1,2	-	ND	-	ND	ND	ND
Dichlorobenzene-1,2	7.9	ND	ND	ND	ND	ND
Dichlorobenzene-1,3	1.6	ND	ND	ND	ND	ND
Dichlorobenzene-1,4	8.5	ND	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	-	ND	ND	ND
Dichloroethane-1,1	0.2	ND	ND	ND	ND	ND
Dichloroethane-1,2	0.1	ND	ND	ND	ND	ND
Dichloroethene-1,1	0.4	ND	ND	ND	ND	ND
Dichloroethene-1,2 (cis)	-	ND	ND	ND	ND	ND
Dichloroethene-1,2 (trans)	0.3	ND	ND	ND	ND	ND
Dichloropropane-1,2	-	ND	-	ND	ND	ND
Dichloropropene-1,3 (cis)	0	ND	-	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	-	ND	ND	ND
Dioxane-1,4	-	-	-	-	-	-
Ethylbenzene	5.5	ND	ND	ND	ND	ND
Hexachlorobenzene	-	-	-	-	-	-
Hexanone-2	-	ND	-	ND	ND	ND
Isopropylbenzene	2.3	ND	0.0165	ND	ND	ND
Isopropyltoluene-4	-	-	0.0766	-	-	-
Isopropyltoluene-p	10	-	ND	-	-	-
Methyl acetate	-	ND	-	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-	-
Methyl tert-butyl ether	0.12	ND	ND	ND	ND	ND
Methyl-4-pentanone-2	-	ND	-	ND	ND	ND
Methylcyclohexane	-	0.15	-	ND	ND	ND
Methylene Chloride	0.1	ND	ND	ND	ND	ND
Methylene chloride	-	-	-	-	-	-
Propylbenzene-n	3.7	-	0.0633	-	-	-
Styrene	-	ND	-	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	-	ND	ND	ND
Tetrachloroethene	1.4	**2.3**	ND	0.004	0.003	ND
Toluene	1.5	ND	ND	ND	0.002	0.002
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	-	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	-	ND	ND	ND
Trichloroethane-1,1,1	0.8	ND	ND	ND	ND	ND
Trichloroethane-1,1,2	-	ND	ND	ND	ND	ND
Trichloroethene	0.7	ND	ND	ND	ND	ND
Trichlorofluoromethane	-	ND	ND	ND	ND	ND
Trimethylbenzene-1,2,4	10	-	1.0393	-	-	-
Trimethylbenzene-1,3,5	3.3	-	0.0262	-	-	-
Vinyl chloride	0.2	ND	ND	ND	ND	ND
Xylene - m	0.8	-	ND	-	-	-
Xylene - o	0.6	-	0.0151	-	-	-
Xylene (mixed)	1.2	**3.8**	-	ND	ND	ND

Notes:

-	No criteria or no analysis
ND	No results above detection limits
	Non-ASP Soil Analyses.
*	Concentrations for tetrachloroethene and trichloroethene are estimates
10	Concentration greater than TAGM-RSCOs

Table 1: Summary of Soil Analytical Results - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	On-Site Area 2 : MW-9		Off-Site Area 1 : MW-16	
		B-29	B-31	MW-16R	MW-18
Sample depth		7 to 8 ft	9 to 10 ft	12 to 13.4 ft	10 to 12 ft
Northing (ft)		-48686.74	-48701.94	-48956.21	-48936.25
Easting (ft)		31930.82	31925.77	31918.69	31957.83
Ground Elevation (ft AMSL)		507.56	507.78	506.66	507.20
Sampling Date		Jun-05	Jun-05	Jun-05	Sep-01
Volatiles					
Acetone	0.2	ND	ND	ND	0.005
Benzene	0.06	ND	ND	ND	ND
Bromodichloromethane	-	ND	ND	ND	ND
Bromoform	-	ND	ND	ND	ND
Bromomethane	-	ND	ND	ND	ND
Butanone-2	-	ND	ND	ND	ND
Butylbenzene	-	-	-	-	-
Butylbenzene (sec)	10	-	-	-	-
Butylbenzene (tert)	10	-	-	-	-
Butylbenzene-n	10	-	-	-	-
Carbon Disulfide	-	ND	ND	ND	ND
Carbon tetrachloride	0.6	ND	ND	ND	ND
Chlorobenzene	1.7	ND	ND	ND	ND
Chloroethane	1.9	ND	ND	ND	ND
Chloroform	0.3	ND	ND	ND	ND
Chloromethane	0	ND	ND	ND	ND
Cyclohexane	-	ND	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	ND
Dibromochloromethane	-	ND	ND	ND	ND
Dibromoethane-1,2	-	ND	ND	ND	ND
Dichlorobenzene-1,2	7.9	ND	ND	ND	ND
Dichlorobenzene-1,3	1.6	ND	ND	ND	ND
Dichlorobenzene-1,4	8.5	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	ND	ND	ND
Dichloroethane-1,1	0.2	ND	ND	ND	ND
Dichloroethane-1,2	0.1	ND	ND	ND	ND
Dichloroethene-1,1	0.4	ND	ND	ND	ND
Dichloroethene-1,2 (cis)	-	ND	ND	ND	ND
Dichloroethene-1,2 (trans)	0.3	ND	ND	ND	ND
Dichloropropane-1,2	-	ND	ND	ND	ND
Dichloropropene-1,3 (cis)	0	ND	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	ND	ND	ND
Dioxane-1,4	-	-	-	-	-
Ethylbenzene	5.5	0.38	0.55	ND	ND
Hexachlorobenzene	-	-	-	-	-
Hexanone-2	-	ND	ND	ND	ND
Isopropylbenzene	2.3	ND	**7.9**	ND	ND
Isopropyltoluene-4	-	-	-	-	-
Isopropyltoluene-p	10	-	-	-	-
Methyl acetate	-	ND	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-
Methyl tert-butyl ether	0.12	ND	ND	ND	ND
Methyl-4-pentanone-2	-	ND	ND	ND	ND
Methylcyclohexane	-	ND	ND	ND	ND
Methylene Chloride	0.1	ND	ND	ND	0.011
Methylene chloride	-	-	-	-	-
Propylbenzene-n	3.7	-	-	-	-
Styrene	-	ND	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	ND
Tetrachloroethene	1.4	ND	ND	**12**	0.075
Toluene	1.5	ND	ND	ND	0.001
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	ND	ND	ND
Trichloroethane-1,1,1	0.8	ND	ND	ND	ND
Trichloroethane-1,1,2	-	ND	ND	ND	ND
Trichloroethene	0.7	ND	ND	0.46	0.009
Trichlorofluoromethane	-	ND	ND	ND	0.002
Trimethylbenzene-1,2,4	10	-	-	-	-
Trimethylbenzene-1,3,5	3.3	-	-	-	-
Vinyl chloride	0.2	ND	ND	ND	ND
Xylene - m	0.8	-	-	-	-
Xylene - o	0.6	-	-	-	-
Xylene (mixed)	1.2	ND	ND	ND	0.002

Notes:

-	No criteria or no analysis
ND	No results above detection limits
	Non-ASP Soil Analyses.
*	Concentrations for tetrachloroethene and trichloroethene are estimates
10	Concentration greater than TAGM-RSCOs

Table 1: Summary of Soil Analytical Results - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	Off-Site Area 1 : MW-16	Off-Site Area 2 : MW-23	Impacts From Other Suspected Off-Site Source	
		B-104*	MW-23	MW-17	MW-24
Sample depth		10 to 12.4 ft	12 to 14 ft	8 to 10 ft	20 to 21.3 ft
Northing (ft)		-48955.07	-48895.94	-49008.9	-48968.97
Easting (ft)		31913.391	32048.41	31917.44	31989.95
Ground Elevation (ft AMSL)		506.80	507.50	506.30	507.20
Sampling Date		Apr-99	Sep-01	Sep-01	Sep-01
Volatiles					
Acetone	0.2	-	ND	ND	0.012
Benzene	0.06	-	ND	0.025	ND
Bromodichloromethane	-	-	ND	ND	ND
Bromoform	-	-	ND	ND	ND
Bromomethane	-	-	ND	ND	ND
Butanone-2	-	-	ND	ND	ND
Butylbenzene	-	-	-	-	-
Butylbenzene (sec)	10	ND	-	-	-
Butylbenzene (tert)	10	ND	-	-	-
Butylbenzene-n	10	ND	-	-	-
Carbon Disulfide	-	-	ND	ND	ND
Carbon tetrachloride	0.6	-	ND	ND	ND
Chlorobenzene	1.7	-	ND	ND	ND
Chloroethane	1.9	-	ND	0.018	ND
Chloroform	0.3	-	ND	ND	ND
Chloromethane	0	-	ND	ND	ND
Cyclohexane	-	-	ND	6.5	ND
Dibromo-1,2-chloropropane-3	-	-	ND	ND	ND
Dibromochloromethane	-	-	ND	ND	ND
Dibromoethane-1,2	-	-	ND	ND	ND
Dichlorobenzene-1,2	7.9	-	ND	ND	ND
Dichlorobenzene-1,3	1.6	-	ND	ND	ND
Dichlorobenzene-1,4	8.5	-	ND	ND	ND
Dichlorodifluoromethane	-	-	ND	ND	ND
Dichloroethane-1,1	0.2	-	ND	ND	ND
Dichloroethane-1,2	0.1	-	ND	ND	ND
Dichloroethene-1,1	0.4	-	ND	ND	ND
Dichloroethene-1,2 (cis)	-	-	ND	ND	0.008
Dichloroethene-1,2 (trans)	0.3	-	ND	ND	ND
Dichloropropane-1,2	-	-	ND	ND	ND
Dichloropropene-1,3 (cis)	0	-	ND	ND	ND
Dichloropropene-1,3 (trans)	-	-	ND	ND	ND
Dioxane-1,4	-	-	-	-	-
Ethylbenzene	5.5	ND	ND	5.4	ND
Hexachlorobenzene	-	-	-	-	-
Hexanone-2	-	-	ND	ND	ND
Isopropylbenzene	2.3	ND	ND	0.72	ND
Isopropyltoluene-4	-	ND	-	-	-
Isopropyltoluene-p	10	ND	-	-	-
Methyl acetate	-	-	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-
Methyl tert-butyl ether	0.12	-	ND	ND	ND
Methyl-4-pentanone-2	-	-	ND	ND	ND
Methylcyclohexane	-	-	ND	10	ND
Methylene Chloride	0.1	-	ND	ND	0.011
Methylene chloride	-	-	-	-	-
Propylbenzene-n	3.7	ND	-	-	-
Styrene	-	-	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	-	ND	ND	ND
Tetrachloroethene	1.4	**4.76**	**8.3**	ND	0.006
Toluene	1.5	-	ND	**7.5**	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	-	ND	ND	ND
Trichlorobenzene-1,2,4	-	-	ND	ND	ND
Trichloroethane-1,1,1	0.8	-	ND	ND	ND
Trichloroethane-1,1,2	-	-	ND	ND	ND
Trichloroethene	0.7	-	ND	ND	0.16
Trichlorofluoromethane	-	-	ND	ND	ND
Trimethylbenzene-1,2,4	10	ND	-	-	-
Trimethylbenzene-1,3,5	3.3	ND	-	-	-
Vinyl chloride	0.2	-	ND	ND	ND
Xylene - m	0.8	ND	-	-	-
Xylene - o	0.6	ND	-	-	-
Xylene (mixed)	1.2	-	ND	**28**	ND

Notes:

-	No criteria or no analysis
ND	No results above detection limits
*	Non-ASP Soil Analyses. Concentrations for tetrachloroethene and trichloroethene are estimates
10	Concentration greater than TAGM-RSCOs

Table 2 : Chemical Screening of Sub-Surface Soils - VOCs

Contaminant	TAGM 4046 Recommended Soil Cleanup Objectives (mg/kg)	Frequency of Detection	Range Detected (mg/kg)		Mean of detected values (mg/kg)
			Minimum	Maximum	
Acetone	0.2	6 / 18	0.004	0.14	0.041
Benzene	0.06	1 / 21	0.025	0.025	0.025
Bromodichloromethane	-	0 / 15	-	-	-
Bromoform	-	0 / 15	-	-	-
Bromomethane	-	0 / 15	-	-	-
Butanone-2	-	0 / 15	-	-	-
Butylbenzene	-	-	-	-	-
Butylbenzene (sec)	10	6 / 9	0.0639	**15**	4
Butylbenzene (tert)	10	5 / 9	0.0956	**11**	4.1
Butylbenzene-n	10	4 / 9	0.05	**23**	9.4
Carbon Disulfide	-	0 / 15	-	-	-
Carbon tetrachloride	0.6	0 / 19	-	-	-
Chlorobenzene	1.7	0 / 19	-	-	-
Chloroethane	1.9	1 / 19	0.018	0.018	0.018
Chloroform	0.3	0 / 19	-	-	-
Chloromethane	0	0 / 15	-	-	-
Cyclohexane	-	1 / 15	6.5	6.5	6.5
Dibromo-1,2-chloropropane-3	-	0 / 15	-	-	-
Dibromochloromethane	-	0 / 15	-	-	-
Dibromoethane-1,2	-	0 / 15	-	-	-
Dichlorobenzene-1,2	7.9	0 / 16	-	-	-
Dichlorobenzene-1,3	1.6	0 / 16	-	-	-
Dichlorobenzene-1,4	8.5	0 / 16	-	-	-
Dichlorodifluoromethane	-	0 / 15	-	-	-
Dichloroethane-1,1	0.2	0 / 19	-	-	-
Dichloroethane-1,2	0.1	0 / 19	-	-	-
Dichloroethene-1,1	0.4	0 / 19	-	-	-
Dichloroethene-1,2 (cis)	-	4 / 16	0.001	3.8	0.98
Dichloroethene-1,2 (trans)	0.3	0 / 19	-	-	-
Dichloropropane-1,2	-	0 / 15	-	-	-
Dichloropropene-1,3 (cis)	0	0 / 15	-	-	-
Dichloropropene-1,3 (trans)	-	0 / 15	-	-	-
Dioxane-1,4	-	-	-	-	-
Ethylbenzene	5.5	6 / 27	0.001	5.4	1.2
Hexachlorobenzene	-	-	-	-	-
Hexanone-2	-	0 / 15	-	-	-
Isopropylbenzene	2.3	5 / 24	0.0165	**7.9**	1.8
Isopropyltoluene-4	-	3 / 8	0.0766	16	7.4
Isopropyltoluene-p	10	2 / 9	0.233	0.52	0.38
Methyl acetate	-	0 / 15	-	-	-
Methyl ethyl ketone	-	-	-	-	-
Methyl tert-butyl ether	0.12	0 / 18	-	-	-
Methyl-4-pentanone-2	-	0 / 15	-	-	-
Methylcyclohexane	-	3 / 15	0.001	10	3.4
Methylene Chloride	0.1	2 / 19	0.011	0.011	0.011
Methylene chloride	-	-	-	-	-
Propylbenzene-n	3.7	5 / 9	0.0633	**15**	**5.3**
Styrene	-	0 / 15	-	-	-
Tetrachloroethane-1,1,2,2	-	0 / 15	-	-	-
Tetrachloroethene	1.4	13 / 23	0.003	**310**	**47**
Toluene	1.5	5 / 21	0.001	**7.5**	1.5
Trichloro-1,1,2-trifluoroethane-1,2,2	-	0 / 15	-	-	-
Trichlorobenzene-1,2,4	-	0 / 15	-	-	-
Trichloroethane-1,1,1	0.8	0 / 19	-	-	-
Trichloroethane-1,1,2	-	1 / 19	0.002	0.002	0.002
Trichloroethene	0.7	8 / 22	0.002	**28**	**5.2**
Trichlorofluoromethane	-	1 / 19	0.002	0.002	0.002
Trimethylbenzene-1,2,4	10	6 / 9	0.0433	**86**	**26**
Trimethylbenzene-1,3,5	3.3	5 / 9	0.0262	**15**	**5.3**
Vinyl chloride	0.2	0 / 19	-	-	-
Xylene - m,p	0.8	3 / 12	0.0168	0.39	0.16
Xylene - o	0.6	3 / 12	0.0128	0.064	0.031
Xylene (mixed)	1.2	4 / 15	0.002	**28**	**8**

Notes:

-	No criteria or no analysis
10	Concentration greater than TAGM-RSCOs

Table 4 : Summary of Groundwater Analytical Results -

Contaminant	NYSDEC Groundwater Standards and Guidance Values (µg/L)	On-Site Area 1 : Building B Annex						
		MW-14	MW-15	MW-22	MW-22R	MW-105	MW-106	MW-107
Sampling Date		Jul-05	Jul-05	Jul-05	Jul-05	Jul-05	Jul-05	Jul-05
VOCs								
Acetone	50	ND	ND	ND	ND	ND	ND	ND
Benzene	1	**5**	**2**	**23**	**2**	ND	ND	ND
Bromodichloromethane	-	ND	ND	ND	ND	ND	ND	ND
Bromoform	-	ND	ND	ND	ND	ND	ND	ND
Bromomethane	-	ND	ND	ND	ND	ND	ND	ND
Butanone-2	50	8	ND	ND	ND	ND	ND	ND
Butylbenzene	-	-	-	-	-	-	-	-
Butylbenzene (sec)	-	-	-	-	-	-	-	-
Butylbenzene (tert)	-	-	-	-	-	-	-	-
Butylbenzene-n	-	-	-	-	-	-	-	-
Carbon Disulfide	-	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	-	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	-	ND	ND	ND	ND	ND	ND	ND
Chloroethane	-	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	3	ND	ND	ND	ND
Chloromethane	-	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	-	ND	18	4	ND	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	-	ND	ND	ND	ND	ND	ND	ND
Dibromoethane-1,2	-	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,2	3	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,3	-	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,4	-	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	ND	ND	ND	ND	ND	ND
Dichloroethane-1,1	-	ND	ND	ND	ND	ND	ND	ND
Dichloroethane-1,2	-	ND	ND	ND	ND	ND	ND	ND
Dichloroethene-1,1	5	ND	ND	**47**	**11**	**6**	ND	2
Dichloroethene-1,2 (cis)	5	**9**	4	**5200**	**1400**	**120**	**8**	**86**
Dichloroethene-1,2 (trans)	5	ND	ND	**250**	**180**	**10**	ND	**6**
Dichloropropane-1,2	1	ND	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (cis)	-	ND	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	ND	ND	ND	ND	ND	ND
Dioxane-1,4	-	-	-	-	-	-	-	-
Ethylbenzene	5	**40**	ND	2	ND	ND	ND	ND
Hexachlorobenzene	-	-	-	-	-	-	-	-
Hexanone-2	50	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	**30**	ND	ND	ND	ND	ND	ND
Isopropyltoluene-4	-	-	-	-	-	-	-	-
Isopropyltoluene-p	-	-	-	-	-	-	-	-
Methyl acetate	-	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-	-	-	-
Methyl tert-butyl ether	-	ND	ND	ND	ND	ND	ND	ND
Methyl-4-pentanone-2	-	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	-	22	ND	ND	ND	ND	ND	ND
Methylene Chloride	-	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	-	-	-	-	-	-	-	-
Propylbenzene-n	-	-	-	-	-	-	-	-
Styrene	-	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	**11000**	**260**	**2200**	ND	ND
Toluene	5	ND	ND	5	ND	ND	ND	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	ND	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,1	-	ND	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,2	1	ND	ND	**2**	ND	ND	ND	ND
Trichloroethene	5	ND	ND	**9200**	**1700**	**7200**	**26**	**110**
Trichlorofluoromethane	-	ND	ND	ND	ND	ND	ND	ND
Trimethylbenzene-1,2,4	-	-	-	-	-	-	-	-
Trimethylbenzene-1,3,5	-	-	-	-	-	-	-	-
Vinyl chloride	2	ND	**4**	**560**	**68**	ND	**5**	**5**
Xylene - m,p	-	-	-	-	-	-	-	-
Xylene - o	-	-	-	-	-	-	-	-
Xylene (mixed)	5 **	ND	ND	ND	ND	ND	ND	ND

Notes:

- : No analysis or no criteria

ND : No results above detection limits

(**) : The standard of 5 mg/l is for each discrete isomer (o-xylene, p-xylene and m-xylene)

(G) : Guidance value.

10	Reported value exceeds New York State potable groundwater standards - Technical and Operational Guidance Series 1.1.1 Class GA (NYSDEC, June 1998) and 6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

f05\shared_projects\1405205\data\Remediation\MB\RDWP\SMP\[RWP Tables 1-2-4&5.xls]1-Soil Summary

Table 4 : Summary of Groundwater Analytical Results -

Contaminant	NYSDEC Groundwater Standards and Guidance Values (µg/L)	On-Site Area 2 : MW-9					
		MW-3	MW-9	MW-9R	MW-19	MW-21	MW-32
Sampling Date		Jul-05	Jul-05	Jul-05	Jul-05	Jul-05	Jul-05
VOCs							
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
Bromodichloromethane	-	ND	ND	ND	ND	ND	ND
Bromoform	-	ND	ND	ND	ND	ND	ND
Bromomethane	-	ND	ND	ND	ND	ND	ND
Butanone-2	50	ND	ND	ND	ND	ND	ND
Butylbenzene	-	-	-	-	-	-	-
Butylbenzene (sec)	-	-	-	-	-	-	-
Butylbenzene (tert)	-	-	-	-	-	-	-
Butylbenzene-n	-	-	-	-	-	-	-
Carbon Disulfide	-	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	-	ND	ND	ND	ND	ND	ND
Chloroethane	-	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND
Chloromethane	-	ND	ND	ND	ND	ND	ND
Cyclohexane	-	ND	ND	ND	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	ND	ND	ND
Dibromochloromethane	-	ND	ND	ND	ND	ND	ND
Dibromoethane-1,2	-	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,2	3	ND	ND	ND	2	ND	ND
Dichlorobenzene-1,3	-	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,4	-	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	ND	ND	ND	ND	ND
Dichloroethane-1,1	-	ND	ND	ND	ND	ND	ND
Dichloroethane-1,2	-	ND	ND	ND	ND	ND	ND
Dichloroethene-1,1	5	ND	ND	ND	ND	ND	ND
Dichloroethene-1,2 (cis)	5	ND	**30**	ND	ND	ND	ND
Dichloroethene-1,2 (trans)	5	ND	**8**	ND	ND	ND	ND
Dichloropropane-1,2	1	ND	**2**	ND	ND	ND	ND
Dichloropropene-1,3 (cis)	-	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	ND	ND	ND	ND	ND
Dioxane-1,4	-	-	-	-	-	-	-
Ethylbenzene	5	ND	**84**	ND	3	ND	ND
Hexachlorobenzene	-	-	-	-	-	-	-
Hexanone-2	50	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	**85**	ND	**16**	ND	ND
Isopropyltoluene-4	-	-	-	-	-	-	-
Isopropyltoluene-p	-	-	-	-	-	-	-
Methyl acetate	-	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-	-	-
Methyl tert-butyl ether	-	ND	ND	ND	ND	ND	ND
Methyl-4-pentanone-2	-	ND	ND	ND	ND	ND	ND
Methylcyclohexane	-	ND	ND	2	ND	ND	ND
Methylene Chloride	-	ND	ND	ND	ND	ND	ND
Methylene chloride	-	-	-	-	-	-	-
Propylbenzene-n	-	-	-	-	-	-	-
Styrene	-	ND	ND	ND	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	3
Toluene	5	ND	**8**	ND	ND	ND	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,1	-	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,2	1	ND	ND	ND	ND	ND	ND
Trichloroethene	5	3	2	ND	ND	ND	ND
Trichlorofluoromethane	-	ND	ND	ND	ND	ND	ND
Trimethylbenzene-1,2,4	-	-	-	-	-	-	-
Trimethylbenzene-1,3,5	-	-	-	-	-	-	-
Vinyl chloride	2	ND	**17**	ND	ND	ND	ND
Xylene - m,p	-	-	-	-	-	-	-
Xylene - o	-	-	-	-	-	-	-
Xylene (mixed)	5 **	ND	**330**	ND	ND	ND	ND

Notes:

- : No analysis or no criteria

ND : No results above detection limits

(**) : The standard of 5 mg/l is for each discrete isomer (o-xylene, p-xylene and m-xylene)

(G) : Guidance value.

10	Reported value exceeds New York State potable groundwater standards - Technical and Operational Guidance Series 1.1.1 Class GA (NYSDEC, June 1998) and 6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

f05\shared_projects\1405205\data\Remediation\MB\RDWP\SMP\[RWP Tables 1-2-4&5.xls]1-Soil Summary

Table 4 : Summary of Groundwater Analytical Results -

Contaminant	NYSDEC Groundwater Standards and Guidance Values (µg/L)	Off-Site Area 1 : MW-16				Off-Site Area 2 : MW-23	
		MW-16	MW-16R	MW-18	MW-18	MW-23	MW-23
Sampling Date		Jul-05	Jul-05	Jul-05	Oct-01	Jul-05	Oct-01
VOCs							
Acetone	50	ND	ND	ND	**58**	ND	34
Benzene	1	**8**	ND	ND	ND	ND	ND
Bromodichloromethane	-	ND	ND	ND	ND	ND	ND
Bromoform	-	ND	ND	ND	ND	ND	ND
Bromomethane	-	ND	ND	ND	ND	ND	ND
Butanone-2	50	ND	ND	ND	2	ND	ND
Butylbenzene	-	-	-	-	-	-	-
Butylbenzene (sec)	-	-	-	-	-	-	-
Butylbenzene (tert)	-	-	-	-	-	-	-
Butylbenzene-n	-	-	-	-	-	-	-
Carbon Disulfide	-	6	ND	ND	ND	ND	ND
Carbon tetrachloride	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	-	ND	ND	ND	ND	ND	ND
Chloroethane	-	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND
Chloromethane	-	ND	ND	ND	ND	ND	ND
Cyclohexane	-	ND	ND	ND	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	ND	ND	ND
Dibromochloromethane	-	ND	ND	ND	ND	ND	ND
Dibromoethane-1,2	-	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,2	3	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,3	-	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,4	-	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	ND	ND	ND	ND	ND
Dichloroethane-1,1	-	ND	ND	ND	ND	ND	ND
Dichloroethane-1,2	-	ND	ND	ND	ND	ND	ND
Dichloroethene-1,1	5	**23**	**20**	ND	ND	ND	ND
Dichloroethene-1,2 (cis)	5	**3600**	**1500**	**43**	**8**	**38**	1
Dichloroethene-1,2 (trans)	5	**410**	**52**	ND	ND	ND	ND
Dichloropropane-1,2	1	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (cis)	-	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	ND	ND	ND	ND	ND
Dioxane-1,4	-	-	-	-	-	-	-
Ethylbenzene	5	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	-	-	-	-	-	-	-
Hexanone-2	50	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	ND	ND
Isopropyltoluene-4	-	-	-	-	-	-	-
Isopropyltoluene-p	-	-	-	-	-	-	-
Methyl acetate	-	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-	-	-
Methyl tert-butyl ether	-	ND	ND	ND	ND	ND	ND
Methyl-4-pentanone-2	-	ND	ND	ND	ND	ND	ND
Methylcyclohexane	-	ND	ND	ND	ND	ND	ND
Methylene Chloride	-	ND	ND	ND	ND	ND	ND
Methylene chloride	-	-	-	-	-	-	-
Propylbenzene-n	-	-	-	-	-	-	-
Styrene	-	ND	ND	ND	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	**12000**	**4900**	**62**	**16**	**1600**	**240**
Toluene	5	ND	ND	ND	ND	ND	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,1	-	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,2	1	ND	ND	ND	ND	ND	ND
Trichloroethene	5	**2600**	**2700**	**11**	**20**	**55**	**15**
Trichlorofluoromethane	-	ND	ND	ND	ND	ND	ND
Trimethylbenzene-1,2,4	-	-	-	-	-	-	-
Trimethylbenzene-1,3,5	-	-	-	-	-	-	-
Vinyl chloride	2	**250**	**24**	**4**	1	ND	ND
Xylene - m,p	-	-	-	-	-	-	-
Xylene - o	-	-	-	-	-	-	-
Xylene (mixed)	5 **	ND	ND	ND	ND	ND	ND

Notes:

- : No analysis or no criteria

ND : No results above detection limits

(**) : The standard of 5 mg/l is for each discrete isomer (o-xylene, p-xylene and m-xylene)

(G) : Guidance value.

10	Reported value exceeds New York State potable groundwater standards - Technical and Operational Guidance Series 1.1.1 Class GA (NYSDEC, June 1998) and 6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

f05\shared_projects\1405205\data\Remediation\MB\RDWP\SMP\[RWP Tables 1-2-4&5.xls]1-Soil Summary

Table 4 : Summary of Groundwater Analytical Results -

Contaminant	NYSDEC Groundwater Standards and Guidance Values (µg/L)	Impacts From Other Suspected Off-Site Sources							
		MW-17	MW-17	MW-17R	MW-17R	MW-24	MW-24	MW-24R	MW-24R
Sampling Date		Jul-05	Oct-01	Jul-05	Oct-01	Jul-05	Oct-01	Jul-05	Oct-01
VOCs									
Acetone	50	ND	**200**	ND	7	ND	23	ND	5
Benzene	1	**130**	**170**	ND	ND	ND	**2**	ND	ND
Bromodichloromethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Butanone-2	50	ND	**90**	ND	ND	ND	ND	ND	ND
Butylbenzene	-	-	-	-	-	-	-	-	-
Butylbenzene (sec)	-	-	-	-	-	-	-	-	-
Butylbenzene (tert)	-	-	-	-	-	-	-	-	-
Butylbenzene-n	-	-	-	-	-	-	-	-	-
Carbon Disulfide	-	ND	4	ND	7	ND	ND	ND	15
Carbon tetrachloride	-	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	-	68	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	-	260	190	ND	2	ND	ND	ND	ND
Dibromo-1,2-chloropropane-3	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibromoethane-1,2	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,2	3	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,3	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobenzene-1,4	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichloroethane-1,1	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichloroethane-1,2	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichloroethene-1,1	5	ND	ND	ND	**6**	**9**	**21**	ND	**7**
Dichloroethene-1,2 (cis)	5	**14**	**9**	**870**	**200**	**130**	**420**	**1600**	**210**
Dichloroethene-1,2 (trans)	5	ND	ND	ND	4	ND	**6**	ND	2
Dichloropropane-1,2	1	ND	ND	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (cis)	-	ND	ND	ND	ND	ND	ND	ND	ND
Dichloropropene-1,3 (trans)	-	ND	ND	ND	ND	ND	ND	ND	ND
Dioxane-1,4	-	-	-	-	-	-	-	-	-
Ethylbenzene	5	**1400**	**640**	ND	2	ND	ND	**810**	ND
Hexachlorobenzene	-	-	-	-	-	-	-	-	-
Hexanone-2	50	ND	6	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	**75**	**210**	ND	ND	ND	ND	ND	ND
Isopropyltoluene-4	-	-	-	-	-	-	-	-	-
Isopropyltoluene-p	-	-	-	-	-	-	-	-	-
Methyl acetate	-	ND	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether	-	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-4-pentanone-2	-	2	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	-	160	200	ND	2	ND	ND	ND	ND
Methylene Chloride	-	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	-	-	-	-	-	-	-	-	-
Propylbenzene-n	-	-	-	-	-	-	-	-	-
Styrene	-	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethane-1,1,2,2	-	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	3	3	**1000**	**1200**	**5000**	**3100**	**4600**	**260**
Toluene	5	**480**	ND	ND	5	ND	2	ND	ND
Trichloro-1,1,2-trifluoroethane-1,2,2	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorobenzene-1,2,4	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,1	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane-1,1,2	1	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	**370**	**360**	**1700**	**3200**	**1400**	**320**
Trichlorofluoromethane	-	ND	ND	ND	ND	ND	ND	ND	ND
Trimethylbenzene-1,2,4	-	-	-	-	-	-	-	-	-
Trimethylbenzene-1,3,5	-	-	-	-	-	-	-	-	-
Vinyl chloride	2	ND	ND	ND	**44**	ND	2	ND	ND
Xylene - m,p	-	-	-	-	-	-	-	-	-
Xylene - o	-	-	-	-	-	-	-	-	-
Xylene (mixed)	5 **	**5500**	**2700**	ND	**10**	ND	ND	**4200**	ND

Notes:

- : No analysis or no criteria

ND : No results above detection limits

(**) : The standard of 5 mg/l is for each discrete isomer (o-xylene, p-xylene and m-xylene)

(G) : Guidance value.

10	Reported value exceeds New York State potable groundwater standards - Technical and Operational Guidance Series 1.1.1 Class GA (NYSDEC, June 1998) and 6 NYCRR Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.

f05\shared_projects\1405205\data\Remediation\MB\RDWP\SMP\[RWP Tables 1-2-4&5.xls]1-Soil Summary

Table 5 : Chemical Screening for Groundwater - VOCs

Contaminant	NYSDEC Groundwater Standards and Guidance Values	Frequency of Detection	Range Detected (µg/L)		Mean of detected values (µg/L)
			Minimum	Maximum	
Acetone	50	6 / 27	5	**200**	**55**
Benzene	1	8 / 27	**2**	**170**	**43**
Bromodichloromethane	-	0 / 27	-	-	-
Bromoform	-	0 / 27	-	-	-
Bromomethane	-	0 / 27	-	-	-
Butanone-2	50	3 / 27	2	**90**	33
Butylbenzene	-	-	-	-	-
Butylbenzene (sec)	-	-	-	-	-
Butylbenzene (tert)	-	-	-	-	-
Butylbenzene-n	-	-	-	-	-
Carbon Disulfide	-	4 / 27	4	15	8
Carbon tetrachloride	-	0 / 27	-	-	-
Chlorobenzene	-	0 / 27	-	-	-
Chloroethane	-	0 / 27	-	-	-
Chloroform	7	1 / 27	3	3	3
Chloromethane	-	1 / 27	68	68	68
Cyclohexane	-	5 / 27	2	260	95
Dibromo-1,2-chloropropane-3	-	0 / 27	-	-	-
Dibromochloromethane	-	0 / 27	-	-	-
Dibromoethane-1,2	-	0 / 27	-	-	-
Dichlorobenzene-1,2	3	1 / 27	2	2	2
Dichlorobenzene-1,3	-	0 / 27	-	-	-
Dichlorobenzene-1,4	-	0 / 27	-	-	-
Dichlorodifluoromethane	-	0 / 27	-	-	-
Dichloroethane-1,1	-	0 / 27	-	-	-
Dichloroethane-1,2	-	0 / 27	-	-	-
Dichloroethene-1,1	5	10 / 27	2	**47**	**15**
Dichloroethene-1,2 (cis)	5	22 / 27	1	**5200**	**700**
Dichloroethene-1,2 (trans)	5	10 / 27	2	**410**	**93**
Dichloropropane-1,2	1	1 / 27	**2**	**2**	**2**
Dichloropropene-1,3 (cis)	-	0 / 27	-	-	-
Dichloropropene-1,3 (trans)	-	0 / 27	-	-	-
Dioxane-1,4	-	-	-	-	-
Ethylbenzene	5	8 / 27	2	**1400**	**370**
Hexachlorobenzene	-	-	-	-	-
Hexanone-2	50	1 / 27	6	6	6
Isopropylbenzene	5	5 / 27	**16**	**210**	**83**
Isopropyltoluene-4	-	-	-	-	-
Isopropyltoluene-p	-	-	-	-	-
Methyl acetate	-	0 / 27	-	-	-
Methyl ethyl ketone	-	-	-	-	-
Methyl tert-butyl ether	-	0 / 27	-	-	-
Methyl-4-pentanone-2	-	1 / 27	2	2	2
Methylcyclohexane	-	5 / 27	2	200	77
Methylene Chloride	-	0 / 27	-	-	-
Methylene chloride	-	-	-	-	-
Propylbenzene-n	-	-	-	-	-
Styrene	-	0 / 27	-	-	-
Tetrachloroethane-1,1,2,2	-	0 / 27	-	-	-
Tetrachloroethene	5	18 / 27	3	**12000**	**2600**
Toluene	5	5 / 27	2	**480**	**100**
Trichloro-1,1,2-trifluoroethane-1,2,2	-	0 / 27	-	-	-
Trichlorobenzene-1,2,4	-	0 / 27	-	-	-
Trichloroethane-1,1,1	-	0 / 27	-	-	-
Trichloroethane-1,1,2	1	1 / 27	**2**	**2**	**2**
Trichloroethene	5	19 / 27	2	**9200**	**1600**
Trichlorofluoromethane	-	0 / 27	-	-	-
Trimethylbenzene-1,2,4	-	-	-	-	-
Trimethylbenzene-1,3,5	-	-	-	-	-
Vinyl chloride	2	12 / 27	1	**560**	**82**
Xylene - m,p	-	-	-	-	-
Xylene - o	-	-	-	-	-
Xylene (mixed)	5 **	5 / 27	**10**	**5500**	**2500**

Notes:

- : No analysis or no criteria

ND : No results above detection limits

(**) : The standard of 5 mg/l is for each discrete isomer (o-xylene, p-xylene and m-xylene)

NS : Specific groundwater standard or guidance value not specified by TOGS 1.1.1

10	Reported value exceeds New York State potable groundwater standards - Technical and Operational Guidance Series 1.1.1 Class GA (NYSDEC, June 1998).

TABLE 1
SUMMARY OF GROUNDWATER, VAPOR AND SOIL SAMPLING LOCATIONS AND ANALYSIS

Sample No.	Location(s)	Sampling Depth	Media	Sampling Method	Sampling Analyses Baseline	Sampling Analyses Quarterly	Sampling Analyses Semi-Annually	Sampling Analyses Closure
WSR-MW-9-GW	MW-9	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-15-GW	MW-15	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-16-GW	MW-16	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-16R-GW	MW-16R	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-22-GW	MW-22	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-22R-GW	MW-22R	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-32-GW	MW-32	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-105-GW	MW-105	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-206R-GW	MW-206R	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-211R-GW	MW-211R	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-MW-218-GW	MW-218	Mid-Depth	Groundwater	peristaltic pump	TCL VOCs by EPA 8260	TCL VOCs by EPA 8260		TCL VOCs by OLM 5.1
WSR-VAP-??	EXHAUST	NA	Vapor	Tedlar Bag	TCL VOCs by EPA 8260*		TCL VOCs by EPA 8260	
WSR-CS-100-S	CS-100	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-101-S	CS-101	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-102-S	CS-102	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-103-S	CS-103	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-104-S	CS-104	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-105-S	CS-105	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-106-S	CS-106	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1
WSR-CS-107-S	CS-107	TBD	Soil	Direct Push				TCL VOCs by OLM 5.1

Notes:
1. CS = closure sampling.
2. * = vapor samples will be collected at startup and weekly for the first two weeks of operation.
3. Vapor analysis will be performed by EPA method 8260 modified for Tedlar bags.
4. Initial vapor samples will require 24 hr TAT.

Appendix A

THE SEAR-BROWN GROUP

LOG OF BORING MW-9

Germanow-Simon Corporation
408 St. Paul Street
Rochester, New York 14603-1091 USA

Project No. 14052.01

Date Completed	: 4/12/99	Geologist	: P. Smith
Drilling Method	: 4 1/4 in. Hollow Stem Auger	Boring Location	: Former Dry Cleaners
Driller	: Nature's Way	Surface Condition	: Concrete and Gravel
Sampling Method	: Splitspoon	Surface Elevation	: Not Measured

Depth In Feet	Blow Count 0-6	Blow Count 6-12	Blow Count 12-18	Blow Count 18-24	PID Peak Rdg.	GRAPHIC	USCS	DESCRIPTION
0	25	42	25	33	4.9		FILL	Black coarse-fine sand and gravel, some asphalt and silt, trace of brick (dry to moist)[FILL]
2	4	9	12	9	430		FILL	Same as previous except moist, very strong odor
4	6	6	5	2	360		FILL	same except wet
6	3	3	3	4	470		FILL	Black silt, some coarse-fine sand (wet)
8	4	9	16	16	430		FILL	9.5
10	5	9	15	18	150		GT	Dark grey discolored silt, some sand (wet)
12	10	15	18	40	107		GT	Same as previous [NATIVE]
14	18	21	34	32	42		GT	Same as previous except grey, slight odor and trace of gravel
16	32	50/5			139		GT	Same as previous
18	50/4				136		GT	Same as previous Auger refusal @ 19.9 ft. bgs
								19.9
20								
22								

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Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-9R

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/2/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/2/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Rochester, NY	Weather:	Clear, west wind, 5-15 mph	Supervisor:	P. Smith

	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
0	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
	18				26	10"	18.2	1	0-2'	Gravel surface 0.5'
		13								Medium dense, gray coarse to fine SAND and Gravel, little Silt, dry
			13							
				12						
	2				10	12"	476	2	2-4'	Loose, black, Silty coarse to fine SAND, some Gravel, moist; strong odor
		7								
			3							
				2						
	1				2	16"	139	3	4-6'	Same, except very loose, gray
5		1								
			1							(FILL)
				1						
	2				8	24"	277	4	6-8'	Same, except loose, without Gravel
		4								
			4							
				2						
	5				7	NR	--	5	8-10'	(No Recovery)
		3								
			4							
10				4						10.0'
	1				8	16"	1.6	6	10-12'	Loose, gray brown, fine SAND, some Silt, trace Gravel, wet
		3								(Upper Till)
			5							
				8						
	8				27	12"	1.9	7	12-14'	
		12								Medium dense, gray brown SILT, some fine Sand, little coarse to fine Gravel, moist
			15							
				17						
	18				44	18"	0.8	8	14-16'	same
15		22								
			22							15.5'
				35						
	20				58	18"	0.5	9	16-18'	same
		22								
			36							(Lower Till)
				42						
	50				102	16"	0.5	10	18-20'	same
		52								
			50							
20				48						

Notes:

1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-9R

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/2/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/2/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Rochester, NY	Weather:	Clear, west wind, 5-15 mph	Supervisor:	P. Smith

	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
20	15				115/6	6"	0.4	11	20-20.5	same
		100/0								20.5 ft.
									RUN 1: 20.5 - 30.5	**Top of Rock**
									REC= 97% RQD= 87%	**Decew Dolostone**: fine grained, gray, dolomitic limestone; occasional vugs.
25										
30										
										30.5 ft.
										Boring terminated at 30.5 ft bgs
										Notes: 1. Bedrock cored with NX core barrel and reamed to nominal 4 inch dia. with 3-7/8 roler bit. 2. 2-inch dia. PVC well installed in completed borehole.
35										
40										

Notes:

1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

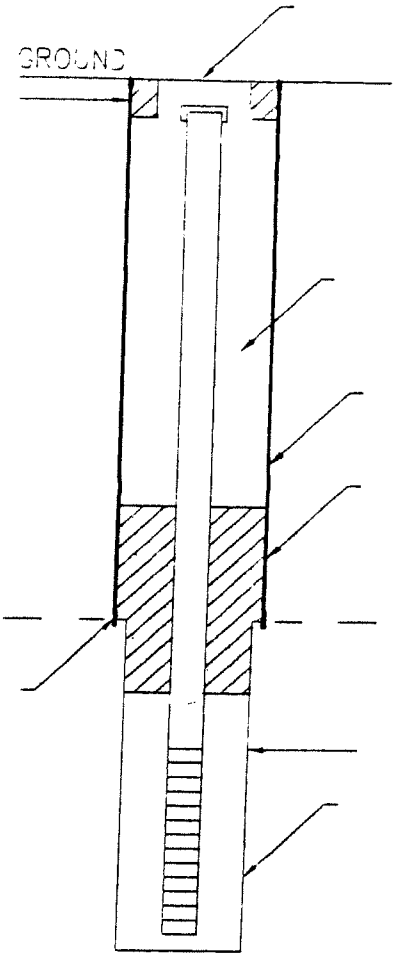
Stantec

BEDROCK MONITORING WELL

DESIGN DETAILS

PROJECT NAME WARD STREET RI
PROJECT NUMBER 1405205
CLIENT Germanow-Simon
LOCATION Rochester, NY

HOLE DESIGNATION MW-9R
DATE COMPLETED 6-2-05
DRILLING METHOD Hollow stem/wet rotary
SUPERVISOR P.Smith



SURFACE SEAL Concrete

FLUSH MOUNT ROAD BOX

WELL CASING
ANNULUS BACKFILL
TYPE: Portland Cement

O/B CASING: 4-inch Black Iron

TOP OF SEAL @ 9.5 ft

SEAL TYPE: Bentonite

TOP OF ROCK @ 20.5 ft

BOTTOM OF SEAL @ 23.0 ft

TOP OF SCREEN 25.0 ft

3-7/8 in. DIA. BEDROCK BORE

BOTTOM OF SCREEN 30.0 ft

BOTTOM OF HOLE @ 30.5 ft

PACK TYPE:
SAND, SIZE Quartzite Sand

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 5.0 ft SCREEN DIAMETER 2.0 in. SCREEN SLOT SIZE: .010

ELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in

OLE DIAMETER: 8 inch 4 inch

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-16

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/3/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/3/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Building B Annex	Weather:	Clear, sunny 70's	Supervisor:	P. Smith

0	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
										Auger advanced from 0.0 to 22.0 ft. bgs without sampling. For soil descriptions see borehole log for B-16R.
5										
10										
15										
20										

Notes:

1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-16

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/3/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/3/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Building B Annex	Weather:	Clear, sunny 70's	Supervisor:	P. Smith

	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
										Top of Rock 22.0'
										Boring terminated at 22.0 ft bgs
										Notes: 1. 2-inch dia. PVC well installed in completed borehole.

Notes:
1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

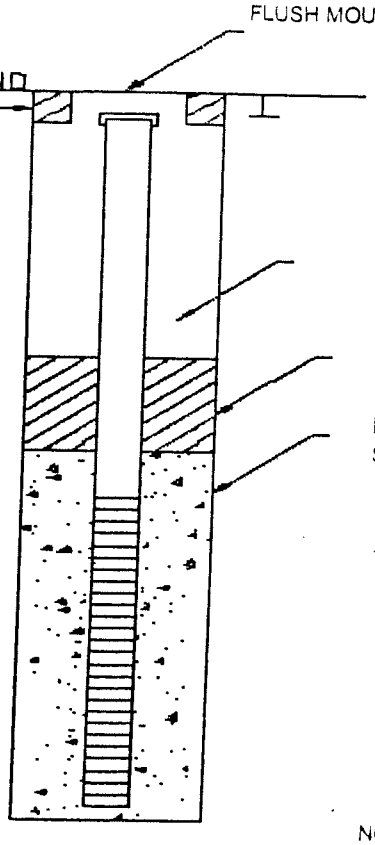
Stantec

OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME: WARD STREET RI
PROJECT NUMBER: 1405205
CLIENT: Germanow-Simon
LOCATION: Rochester, NY

HOLE DESIGNATION: MW-16
DATE COMPLETED: 6-3-05
DRILLING METHOD: Hollow stem/wet rotary
SUPERVISOR: P.Smith



SURFACE SEAL TYPE: Concrete

TOP OF SEAL @ 1.0 ft

BOTTOM OF SEAL @ 3.0 ft

TOP OF SCREEN @ 7.0 ft

BOTTOM OF SCREEN @ 22.0 ft

BOTTOM OF HOLE @ 22.0 ft

WELL CASING ANNULUS BACKFILL TYPE: Portland

SEAL TYPE: Bentonite

PACK TYPE: SAND, SIZE: Quartzite

NOTE:
ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER 2.0 in. SCREEN SLOT SIZE: .010

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in

HOLE DIAMETER: 8 inch

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-16R

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/1/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/3/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Building B Annex	Weather:	Clear, sunny 70's	Supervisor:	P. Smith

	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
0	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
	4				20	22"	0.2	1	0-2'	Brown silty fine SAND, some coarse to fine Gravel, moist
		9								
			11							
				6						
	4				4	16"	0.2	2	2-4'	same
		2								
			2							**(FILL)**
				17						
	5				22	6"	0.4	3	4-6'	Gray brown coarse to fine SAND, trace fine Gravel, concrete, wet
5		10								
			12							
				12						**6.5'**
	5				16	12"	0.4	4	6-8'	Gray brown fine SAND, some Silt, little fine Gravel, moist
		8								
			8							**(Upper Till)**
				9						
	9				27	14"	0.4	5	8-10'	same, with little coarse to fine GRAVEL, wet
		11								
			16							
10				12						
	5				20	16"	0.5	6	10-12'	same
		8								
			12							**(Upper Till)**
				21						
	23				140/11	12"	13.5	7	12-13.4'	same **12.5'**
		47								
			100/5							
	12				143/11	12"	8.6	8	14-15.4'	same
15		43								
			100/5							**(Lower Till)**
	12				123	18"	6.4	9	16-18'	same, except gray
		60								
			63							
				63						
	11				56	12"	4.5	10	18-20'	same
		23								
			33							
20				41						

Notes:
1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

Stantec

2250 Brighton Henrietta Town Line Road
Rochester, NY 14623
(716) 475-1440

Test Boring No. B-16R

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/1/2005
Project #:	190500014	Driller:	S. Loranty	Completion Date:	6/3/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	6-1/4 in. H.S.A.
Location:	Building B Annex	Weather:	Clear, sunny 70's	Supervisor:	P. Smith

	Blows on Sampler				SAMPLE					Soil and Rock Information Remarks
	0-6"	6-12"	12-18"	18-24"	N	Rec.	PID	No.	Depth	
20	11				69	18"	5.3	11	20-20.9	same, except wet
		31								
			38							
				100/5						
										21.9'
									RUN 1: 21.9 - 31.9	**Top of Rock**
										Decew Dolostone: fine grained, gray, dolomitic limestone; occasional vugs.
									REC= 95%	
25									RQD= 90%	
30										
										31.9 ft.
										Boring terminated at 31.9 ft bgs
										Notes: 1. Bedrock cored with NX core barrel and reamed to nominal 4 inch dia. with 3-7/8 roler bit. 2. 2-inch dia. PVC well installed in completed borehole.
35										
40										

Notes:
1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. MiniRae PID Model 2000 with 10.6 lamp.

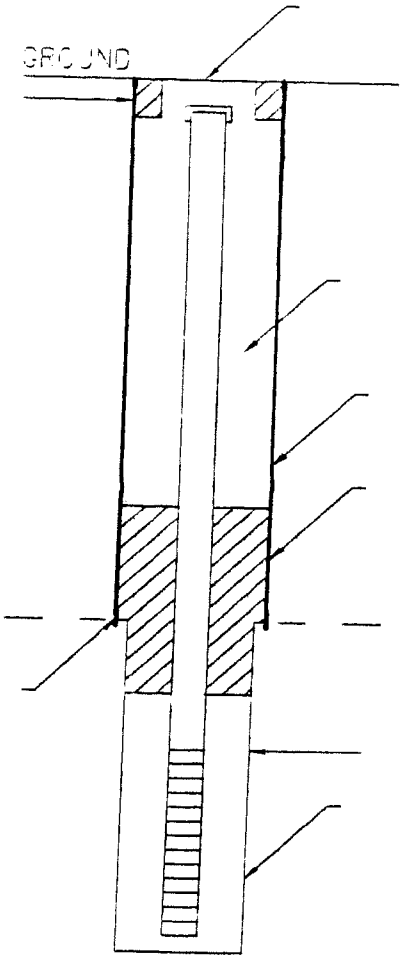
Stantec

BEDROCK MONITORING WELL

DESIGN DETAILS

PROJECT NAME WARD STREET RI
PROJECT NUMBER 1405205
CLIENT Germanow-Simon
LOCATION Rochester, NY

HOLE DESIGNATION MW-16R
DATE COMPLETED 6-3-05
DRILLING METHOD Hollow stem/wet rotary
SUPERVISOR P.Smith



FLUSH MOUNT ROAD BOX

SURFACE SEAL Concrete

WELL CASING
ANNULUS BACKFILL
TYPE: Portland Cement

O/B CASING: 4-inch Black Iron

TOP OF SEAL @ 20.0 ft

SEAL TYPE: Benton.Fe

TOP OF ROCK @ 21.9 ft

BOTTOM OF SEAL @ 23.0 ft

TOP OF SCREEN 26.5 ft

3-7/8 in. DIA. BEDROCK BORE

BOTTOM OF SCREEN 31.5 ft

PACK TYPE:
SAND, SIZE Quartzite Sand

BOTTOM OF HOLE @ 32.0 ft

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 5.0 ft SCREEN DIAMETER 2.0 in. SCREEN SLOT SIZE: .010

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in

HOLE DIAMETER: 8 inch / 4 inch

Stantec

2250 Brighton Henrietta Town L
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-22

Project:	Ward Street	Drill Contractor:	Nothnagle	Start Date:	8/28/2002
Project #:	190500014	Driller:	N. Short	Completion Date:	8/28/2002
Client:	Germanow-Simon	Elevation:		Drilling Method:	Direct Push w/ HSA
Location:	Rochester, New York	Weather:		Supervisor:	P.Smith

0	C	Blows on Sampler 0-6"	6-12"	12-18"	18-24"	SAMPLE PID	Rec.	No.	Depth	Soil and Rock Information Remarks
							36"	1	0.6-4.0	Concrete floor 0.6
										Gray and brown silty SAND, some gravel, dry
						170				(FILL) 2.6'
										Brown silty fine SAND, dry
						280				
							36"	2	4.0-8.0	Brown sandy silt, tract CLAY, moist
5										(Upper Till)
						190				gravelly @ 6.1 ft. 6.1'
										Gray brown sandy TILL, trace rounded gravel , moist to wet; dark gray w/strong odor @ 7.8', wet, trace sheen
						420				
							12"	3	8-10	
10						380				10.0'
							40"	4	10-14	same, except very dense, moderate odor
						68				(Lower Till)
						20				
							36"	5	14-18	same
15						40				(Lower Till)
						36				
							24"	6	18-20	same
20						30				20.2'

Notes:
1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. C = No. of Blows to Drive _____ Casing _____ with _____ lb. Wt. _____ Ea. Blow

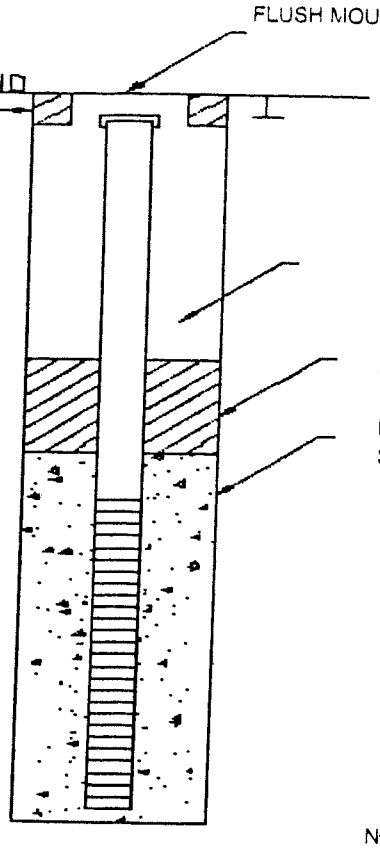
Stantec

OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME WARD STREET RI
PROJECT NUMBER 1405205
CLIENT Germanow-Simon
LOCATION Rochester, NY

HOLE DESIGNATION MW-22
DATE COMPLETED 8-28-02
DRILLING METHOD Hollow stem, wet rotary
SUPERVISOR P.Smith



SURFACE SEAL TYPE Concrete

TOP OF SEAL @ 2.0 ft

BOTTOM OF SEAL @ 4.0 ft

TOP OF SCREEN @ 5.3 ft

BOTTOM OF SCREEN @ 20.3 ft

BOTTOM OF HOLE @ 20.3 ft

WELL CASING ANNULUS BACKFILL TYPE: Portland

SEAL TYPE: Bentonite

PACK TYPE: SAND, SIZE Quartzite

NOTE:
ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 15.0 ft SCREEN DIAMETER 4 in SCREEN SLOT SIZE .010

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in

HOLE DIAMETER: 8 inch

Stantec

2250 Brighton Henrietta Town L
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-22R

Project:	Ward Street	Drill Contractor:	Nothnagle	Start Date:	8/29/2002
Project #:	190500014	Driller:	N. Short	Completion Date:	8/30/2002
Client:	Germanow-Simon	Elevation:		Drilling Method:	4-1/4" H.S.A.
Location:	Rochester, New York	Weather:		Supervisor:	Pete Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information Remarks
0	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	
										Auger advanced from 0.0 to 22.2 ft. bgs without sampling; 4-inch dia. steel casing grouted to 22.2 ft. bgs. For soil descriptions, see boring log for B-22.
5										
10										
15										
20										

Notes:

1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. C = No. of Blows to Drive Casing with lb Wt Ea Blow

Stantec

2250 Brighton Henrietta Town L
Rochester, NY 14623
(585) 475-1440

Test Boring No.: B-22R

Project:	Ward Street	Drill Contractor:	Nature's Way	Start Date:	8/29/2002
Project #:	190500014	Driller:	Steve Gingrich	Completion Date:	8/30/2002
Client:	Germanow-Simon	Elevation:		Drilling Method:	4-1/4" H.S.A.
Location:	Rochester, New York	Weather:		Supervisor:	P.Smith

		Blows on Sampler				SAMPLE				Soil and Rock Information Remarks
20	C	0-6"	6-12"	12-18"	18-24"	PID	Rec.	No.	Depth	
										22.3'
									RUN 1 22.3 - 32.3	Decew Dolostone: gray fine grained dolomitic limestone, numerous horizontal fractures, occ.pitting; gypsum-filled vugs
25										
									REC = 86%	
									RQD = 47%	
30										
										32.3'
										Boring terminated at 32.3 ft. bgs
35										
										Notes: 1. Bedrock cored with NX core barrel and reamed with 3-7/8" roller bit. 2. Two inch well installed in completed borehole.
40										

Notes:

1. N = No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow
2. C = No. of Blows to Drive Casing with lb. Wt. Ea. Blow

Stantec

BEDROCK MONITORING WELL

DESIGN DETAILS

PROJECT NAME WARD STREET RI
PROJECT NUMBER 1405205
CLIENT Germanow-Simon
LOCATION Rochester NY

HOLE DESIGNATION MW-22R
DATE COMPLETED 8-30-02
DRILLING METHOD Hollow stem/wet rotary
SUPERVISOR P.Smith

SURFACE SEAL Concrete

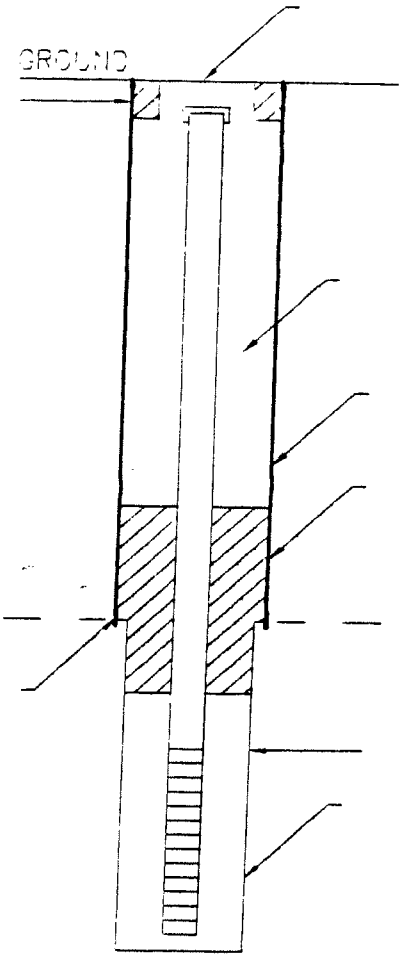
TOP OF SEAL @ 6.5 ft

TOP OF ROCK @ 22.3 ft

BOTTOM OF SEAL @ 25.5 ft

BOTTOM OF SCREEN 32.2 ft

BOTTOM OF HOLE @ 32.2 ft



FLUSH MOUNT ROAD BOX

WELL CASING
ANNULUS BACKFILL
TYPE: Portland Cement

O/B CASING: 4-inch Black Iron

SEAL TYPE: Bentonite

TOP OF SCREEN 27.2 ft

3-7/8 in. DIA. BEDROCK BORE

PACK TYPE:
SAND, SIZE Quartzite Sand

NOTE:
ALL DIMENSIONS ARE
BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 5.0 ft SCREEN DIAMETER 2.0 in. SCREEN SLOT SIZE: .010

SLL CASING MATERIAL: PVC WELL CASING DIAMETER: 2.0 in

HOLE DIAMETER: 8 inch - 4 inch

Stantec

85 Metro Park
Rochester, NY 14623
(716) 475-1440

Test Boring No.: B-32

Project:	Ward Street BCP	Drill Contractor:	Nothnagle	Start Date:	6/10/2005
Project #:	190500014	Driller:	J.Sweitzer	Completion Date:	6/10/2005
Client:	Germanow-Simon	Elevation:		Drilling Method:	Direct-push
Location:	Rochester, NY	Weather:	Clear, Sunny	Supervisor:	P. Smith
			80°		

SAMPLE				Soil Information / Remarks	
PID	Rec.	No.	Depth		
	40"	1	0-4'	Gravel surface	0.5'
				Gray coarse to fine SAND and Gravel, moist	
				(FILL)	
					2.0'
				Black SILT, Sand and Cinders and Ash, moist	
				(FILL)	
					4.0'
	40"	2	4-8'	Gray, brown SAND, some Silt, trace coarse to fine Sand, trace Clay	
				(FILL)	
					7.0'
	24"	3	8-12'	Gray brown SAND, some Silt, trace Gravel, moist	
				(Upper Till)	
			12-16'	same	
					16.0'
				Boring terminated at 16.0 ft bgs	

Notes:

1. PID Model Mini-Rae 2000 with 10.6eV lamp.

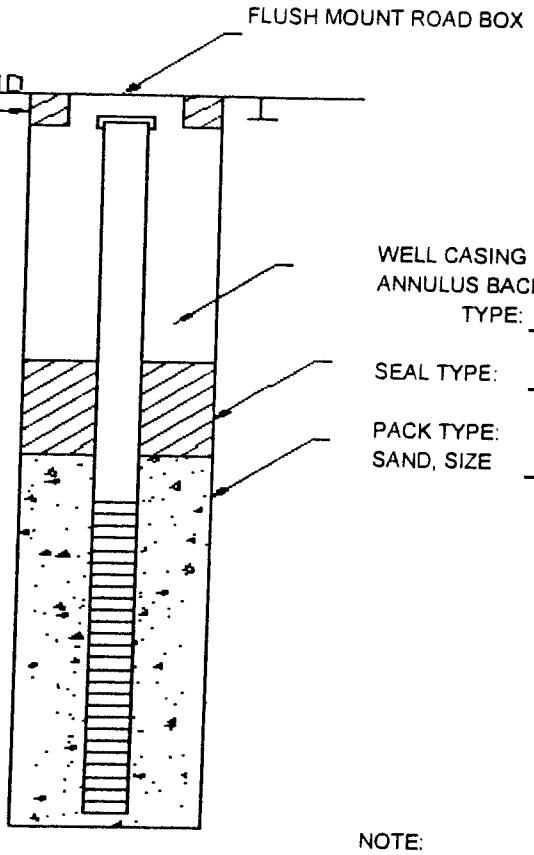
Stantec

OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME: WARD STREET RI
PROJECT NUMBER: 1405205
CLIENT: Germanow-Simon
LOCATION: Rochester, NY

HOLE DESIGNATION: MW-32
DATE COMPLETED: 6-10-05
DRILLING METHOD: Geoprobe
SUPERVISOR: P.Smith



SURFACE SEAL TYPE: Concrete

TOP OF SEAL @ 2.0 ft

BOTTOM OF SEAL @ 5.0 ft

TOP OF SCREEN @ 6.0 ft

BOTTOM OF SCREEN @ 16.0 ft

BOTTOM OF HOLE @ 16.0 ft

WELL CASING ANNULUS BACKFILL TYPE: Portland

SEAL TYPE: Bentonite

PACK TYPE: SAND, SIZE: Quartzite

NOTE:
ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 10.0 ft SCREEN DIAMETER 1.0 in. SCREEN SLOT SIZE: .010

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 1.0 in

HOLE DIAMETER: 2 inch

Stantec

85 Metro Park
Rochester, NY 14623
(716) 475-1440

Test Boring No.: B-105

Project:	Ward Street	Drill Contractor:	Nothnagle	Start Date:	2/24/2005
Project #:	190500014	Driller:	Steve	Completion Date:	2/24/2005
Client:	Germanow Simon	Elevation:		Drilling Method:	Geoprobe
Location:	See Figure	Weather:	Interior	Supervisor:	D. Gnage

	SAMPLE				Soil Information / Remarks	
0	PID	Rec.	No.	Depth		
	428/0.3				Concrete floor	0.5'
		3.2	1	0.5-4	Brown fine to medium SAND, some Silt, trace fine Gravel, brick and cinder, dry **(FILL)**	2.0'
					Gray, sandy, SILT, some cinder, little clay, moist to dry, odor **(FILL)**	4.3'
	19.8/0.7	4.0	2	4-8	Brown/light brown, fine SAND, little Silt, fine to coarse Gravel, moist to dry **(FILL)** @ 7' moist @ 7.8, 0.2' cinder and pyrite seem	8.0'
5						
	3.7/0.2	3.6	3	8-12	Brown fine Sand, some Silt, moist to wet **(Upper Till)**	11.0'
					Brown/red brown, fine SAND, little Silt, fine to coarse Gravel, moist to wet	
	4.1/0.7	2.2	4	12-16	same **(Lower Till)**	
10						
15						
	1.7/0.7	1.0	5	16-18	same except dry	
	2.8/0.7	1.0	6	18-20	same except moist, gray brown	
20					**Boring terminated at 20.0 ft. bgs**	20.0'

Notes:

1. PID Model Mini-Rae 2000 with 10.6eV lamp.

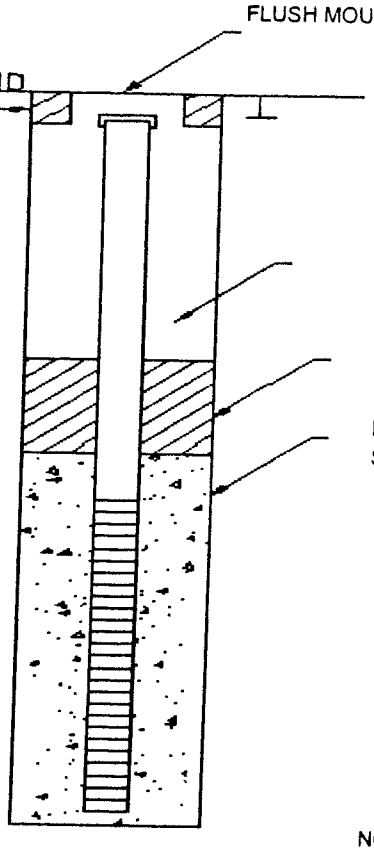
Stantec

OVERBURDEN MONITORING WELL

DESIGN DETAILS

PROJECT NAME: WARD STREET RI
PROJECT NUMBER: 1405205
CLIENT: Germanow-Simon
LOCATION: Rochester, NY

HOLE DESIGNATION: MW-105
DATE COMPLETED: 2-24-05
DRILLING METHOD: Geoprobe
SUPERVISOR: P.Smith



SURFACE SEAL TYPE: Concrete

TOP OF SEAL @ 1.0 ft

BOTTOM OF SEAL @ 1.4 ft

TOP OF SCREEN @ 9.9 ft

BOTTOM OF SCREEN @ 19.9 ft

BOTTOM OF HOLE @ 20.0 ft

WELL CASING ANNULUS BACKFILL TYPE: Portland

SEAL TYPE: Bentonite

PACK TYPE: SAND, SIZE: Quartzite

NOTE:
ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)

SCREEN TYPE: CONTINUOUS SLOT ____ PERFORATED X LOUVRE ____ OTHER ____

SCREEN MATERIAL: STAINLESS STEEL ____ PVC X OTHER ____

SCREEN LENGTH: 10.0 ft SCREEN DIAMETER 1.0 in. SCREEN SLOT SIZE: .010

WELL CASING MATERIAL: PVC WELL CASING DIAMETER: 1.0 in

HOLE DIAMETER: 2 inch

Appendix B

Department of **Environmental Services**
Monroe County, New York

Maggie Brooks
County Executive

John E. Graham, P.E.
Director

Initial Sewer Use Permit Instructions

Please provide all requested information accurately. The Sewer Use Permit is a legal document. Any name or address change will require a new Initial Sewer Use Permit. An officer of the company must sign the permit or designate someone else the responsibility by attachment letter with the permit package. The permit application refers to sections of the Sewer Use Law, which is available in the "Related Documents" section of this Web page.

Pure Waters, under Section 57 of the Worker's Compensation Law and Section 220 - Subdivision 8 of the Disability Benefits Law, is required to have on file proof that your company has workers compensation and disability benefits for your employees. A form from your insurance carrier stating such coverage will thus be required before your permit can be processed.

Initial permit fee of $40.00 should be made payable to Director of Finance, County of Monroe. All copies of the application, the form from your insurance carrier, and the check should be mailed to:

Division of Pure Waters
Industrial Waste Control Section
444 E. Henrietta Road, Bldg. 15
Rochester, New York 14620

If you have any questions regarding the permit, please call the Industrial Waste Control Section at 760-7600 option 4.

APPLICATION FOR PERMIT TO DISCHARGE
INTO PURE WATERS SEWER SYSTEM OR TRIBUTARY

1. Name of Applicant: Germanow-Simon Corporation
Company or Individual

2. Address of Applicant: 408 St. Paul Street
Rochester, NY 14601

3. Location of Property: Same

4. Ownership of Property: Name/Address if different than above: Same

5. Number of sewer connections requiring license/permit: 1

6. Type of activity producing wastes requiring license or permit pursuant to Sewer Use Law of Monroe County: Environmental remediation

7. Department of Health or of New York State Permit # (if any): NA

8. Number of Attachments: 3

Exhibit "A"

Exhibit "B"

Exhibit "C"

Exhibit "D": NA

Note: 1. Fill in all spaces. Mark, "NA" in appropriate space, if not applicable.

2. Refer to page 1a of this document for descriptions of Exhibits A, B and D. Refer to page 1b for Exhibit C.

444 E. Henrietta Rd., Bldg. 15 • Rochester, New York 14620-4630
(585) 760-7600 Option 4 • *fax:* (585) 324-1213 • *www.monroecounty.gov*

SUMMARY OF INDUSTRIAL WASTE CHARACTERISTICS
Exhibit C

Firm: Germanow-Simon Corporation

Address: 408 St. Paul Street

Industrial Waste Characteristics and Quantity

Characteristics	Unit	Avg.	Minimum	Maximum
Volume (Gal. or CF/month)				
Temperature (F or C)				
pH				
Biochemical Oxygen Demand (mg/L or lbs/mil. gal.)				
Chlorine Demand (mg/L or lbs/mil. gal.)				
Suspended Solids (mg/L or lbs/mil. gal.)				
Phosphate or Phosphorus (mg/L or lbs/mil. gal.)				

SUBSTANCES UNDER ARTICLES IV, V, VI, VII OF SEWER USE LAW

(List item and concentration (or volume) under appropriate heading. If none, so state.)

1. Unpolluted waters (Sect. 4.1) _____

2. Prohibited Materials (Sect. 4.2) _____

3. Certain materials and/or characteristics (Sect. 4.3) _____

4. Toxic Substances (Sect. 5.1, 5.2) _____

5. Pathogenic Bacteria (Sect. 5.1) _____

6. Radioactive Wastes (Sect. 6.2) _____

7. Sewage Wastes (Sect. 7.1, 7.2) _____

444 E. Henrietta Rd., Bldg. 15 • Rochester, New York 14620-4630
(585) 760-7600 Option 4 • *fax:* (585) 324-1213 • *www.monroecounty.gov*

ATTACHMENTS TO ACCOMPANY APPLICATION

1. A plot or tape location map of the property showing accurately the size and location of all sewer and drainage connections to the sewerage system, all pretreatment devices and all manholes or other accessible sampling points. Each sewer or drain connection shown on drawing shall be designated by an identification number. The plot or tape location map shall be attached as Exhibit "A".

2. A complete schedule of all process waters and industrial wastes produced or expected to be produced at said property, including a description of the character of each waste, the daily volume and whether the flow is continuous or intermittent. The schedule shall be attached as Exhibit "B".

3. A summary of the total wastewater characteristics to be received from the applicant shall be submitted in proper for as Exhibit "C".

4. Additional information requested by the Director of Pure Waters shall be prepared as Exhibit "D" and be attached to the application as required.

Company Representative Signature

Andrew Germanow
Print Name

President
Title

Phone Number (585) 232-1441, ext. 254

Person to be contacted for inspection and/or emergency purposes including phone number

Michael P. Storonsky, Stantec
Print Name

Phone number (585) 413-5620

Page 1c

INITIAL SEWER USE PERMIT

County of Monroe Pure Waters District No. _____ Permit No: _____

Expires: _____

Fee: $40.00

Firm Name Germanow-Simon Corporation

Address 408 St. Paul Street

Rochester, NY 14601

Type of Business or Service Scientific Instrument Manufacturing

I. The above-named applicant is permitted to discharge wastes into the Pure Waters Sewer system or Tributary thereto as applied for by an application dated _____ and verified by the applicant except the Director of Pure Waters requires the following terms and conditions to govern the permitted discharge:

A. _____

B. _____

C. _____

II. The applicant further agrees to:

1. Accept and abide by all provisions of the Sewer Use Law of Monroe County and of all pertinent rules or regulations now in force or shall be adopted in the future.

2. Notify the Director of Pure Waters in writing of any revision to the plant sewer system or any change in industrial wastes discharge to the public sewers listed in Exhibit "B". The latter encompasses either (1) an increase or decrease in average daily volume or strength of wastes listed in Exhibit "B" or (2) new wastes that were not listed in Exhibit "B".

3. Furnish the Director of Pure Waters upon request any additional information related to the installation or use of sewer or drain for which this permit is sought.

4. Operate and maintain any waste pretreatment facilities, as may be required as a condition of the acceptance into the public sewer of the industrial wastes involved, in an efficient manner at all times, and at no expense to the County.

5. Cooperate with the Director of Pure Waters or his representatives in their inspecting, sampling, and study of wastes, or the facilities provided for pretreatment.

6. Notify the Director of Pure Waters immediately of any accident, negligence, breakdown of pretreatment equipment, or other occurrence that occasions discharge to the public sewers of any wastes or process waters not covered by this permit.

Applicant's Signature _____ Date _____

Applicant's Title President

Emergency Contact Michael Storonsky Phone (585) 413-5620

Permit Approved by _____ Date _____

Director of Pure Waters

Appendix C

ENVIRONMENTAL EASEMENT

THIS INDENTURE made this 14 day of November, 2006, between **GERMANOW-SIMON CORPORATION** having an office at 408 St. Paul Street, Rochester, New York 14605 (the "Grantor"), and **THE PEOPLE OF THE STATE OF NEW YORK** (the "Grantee", or "State" as the context requires), acting through their Commissioner of the Department of Environmental Conservation (the "Commissioner", or "NYSDEC" or "Department" as the context requires) with its headquarters located at 625 Broadway, Albany, New York 12233,

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to encourage the remediation of abandoned and likely contaminated properties ("brownfield sites") that threaten the health and vitality of the communities they burden while at the same time ensuring the protection of public health and the environment; and

WHEREAS, the Legislature of the State of New York has declared that it is in the public interest to establish within the Department a statutory environmental remediation program that includes the use of environmental easements as an enforceable means of ensuring the performance of operation, maintenance, and/or monitoring requirements and of ensuring the potential restriction of future uses of the land, when an environmental remediation project leaves residual contamination at levels that have been determined to be safe for a specific use, but not all uses, or which includes engineered structures that must be maintained or protected against damage to perform properly and be effective, or which requires groundwater use or soil management restrictions; and

WHEREAS, the Legislature of the State of New York has declared that environmental easement shall mean an interest in real property, created under and subject to the provisions of Article 71, Title 36 of the New York State Environmental Conservation Law ("ECL") which contains a use restriction and/or a prohibition on the use of land in a manner inconsistent with engineering controls which are intended to ensure the long term effectiveness of a brownfield site remedial program and/or eliminate potential exposure pathways to hazardous waste or petroleum; and;

WHEREAS, Grantor, is the owner of real property located in the City of Rochester, Monroe County, New York known and designated on the tax map as follows:

Tax Map Number	Address
106 62-01-021	19-23 Emmett Street
106 62-01-029	398-402 St. Paul Street
106 62-01-031	384 St. Paul Street
106 62-01-032	376-378 St. Paul Street
106 62-01-028	408 St. Paul Street
106 62-01-030	388-392 St. Paul Street

being the same as that property conveyed to Grantor by deed on December 19, 2005, and recorded in the Land Records of the Monroe County Clerk at Liber 10235, Page 660 and 666 of Deeds, and hereinafter more fully described in Schedule A attached hereto and made a part hereof (the " Controlled Property"); and;

WHEREAS, the Commissioner does hereby acknowledge that the Department accepts this Environmental Easement in order to ensure the protection of human health and the environment and to achieve the requirements for remediation established at this Controlled Property until such time as this Environmental Easement is extinguished pursuant to ECL Article 71, Title 36;and

NOW THEREFORE, in consideration of the covenants and mutual promises contained herein and the terms and conditions of Brownfield Cleanup Agreement Index # B8-0566-99-10, Grantor grants, conveys and releases to Grantee a permanent Environmental Easement pursuant to Article 71, Title 36 of the ECL in, on, over, under, and upon the Controlled Property as more fully described herein ("Environmental Easement").

1. **Purposes.** Grantor and Grantee acknowledge that the Purposes of this Environmental Easement are: to convey to Grantee real property rights and interests that will run with the land in perpetuity in order to provide an effective and enforceable means of encouraging the reuse and redevelopment of this Controlled Property at a level that has been determined to be safe for a specific use while ensuring the performance of operation, maintenance, and/or monitoring requirements; and to ensure the potential restriction of future uses of the land that are inconsistent with the above-stated purpose.

2. **Institutional and Engineering Controls.** The following controls apply to the use of the Controlled Property, run with the land, are binding on the Grantor and the Grantor's successors and assigns, and are enforceable in law or equity against any owner of the Controlled Property, any lessees, and any person using the Controlled Property:

A. The Controlled Property may be used for any commercial or industrial use as long as the following long-term engineering controls are employed. The following engineering controls, which were placed on the Controlled Property as shown in the Figure EN-3, entitled "Site Plan of Extraction Well Layout – Building B Annex," prepared by Stantec Consulting Services Inc., dated October 2006, and Figure EN-4, entitled "Site Plan of Extraction Well Layout – Lilac Laundry Area," prepared by Stantec Consulting Services Inc., dated October 2006, both attached as Schedule B, and which commenced full-scale operation on October 6, 2006:

(i) A multi-phase vacuum extraction system ("MPVE") will be operated on-site beneath, and off-site in front of, the Building B Annex as illustrated in attached Figure EN-3, and on-site beneath the former Lilac Laundry area as illustrated in attached Figure EN-4, until the remedial requirements are achieved to the satisfaction of the Department.

(ii) In order to eliminate potential for soil vapor intrusion into the Building B Annex, the sub-slab depressurization ("SSD") system, which is comprised of horizontal screens placed beneath the Building B Annex floor that will be connected to a radon mitigation blower/fan located along the outer wall of the Building B Annex as illustrated in attached Figure EN-3, and will be operated after the MPVE system is shut down, including after the MPVE system is demobilized from the Controlled Property.

(iii) Grantor must maintain the impervious surfaces (primarily asphalt and concrete) covering the soils beneath the Building B Annex and its adjoining parking lot to the west as illustrated in attached Figure EN-3 and the former Lilac Laundry Area as illustrated in attached Figure EN-4 until the NYSDEC is satisfied that such impervious surfaces no longer need be maintained.

(iv) The prior approval of the NYSDEC and the City of Rochester must be obtained before Grantor implements any activity at the Controlled Property which breaches the impervious surfaces (primarily asphalt and concrete) or disturbs the soils beneath the Building B Annex and its adjoining parking lot to the west as illustrated in attached Figure EN-3 and/or the former Lilac Laundry Area as illustrated in attached Figure EN-4, and any such activity must be implemented in accordance with any Department-approved plan for the performance of long term management of remaining contaminants at the Controlled Property, including operation, maintenance, and/or monitoring requirements ("Site Management Plan").

(v) The prior approval of the NYSDEC must be obtained before the groundwater underlying the Controlled Property may be used for any purpose.

B. The Controlled Property may not be used for a higher level of use than the institutional control described in paragraph A above, such as unrestricted or restricted residential use, and the engineering control described in subparagraph A(ii) above may not be discontinued without an amendment or extinguishment of this Environmental Easement.

C. Grantor covenants and agrees that, until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:

This property is subject to an environmental easement held by the New York State Department of Environmental

Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.

D. Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.

E. Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the institutional and engineering controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.

3. Right to Enter and Inspect. Grantee, its agents, employees, or other representatives of the State may enter and inspect the Controlled Property in a reasonable manner and at reasonable times to assure compliance with the above-stated restrictions.

4. Reserved Grantor's Rights. Grantor reserves for itself, its assigns, representatives, and successors in interest with respect to the Property, all rights as fee owner of the Controlled Property, including:

A. Use of the Controlled Property for all purposes not inconsistent with, or limited by, the terms of this Environmental Easement;

B. The right to give, sell, assign, or otherwise transfer the underlying fee interest to the Controlled Property by operation of law, by deed, or by indenture, subject and subordinate to this Environmental Easement;

5. Enforcement

A. This Environmental Easement is enforceable in law or equity in perpetuity by Grantor, Grantee, or any affected local government, as defined in ECL Section 71-3603, against the owner of the Controlled Property, any lessees, and any person using the land. Enforcement shall not be defeated because of any subsequent adverse possession, laches, estoppel, or waiver. It is not a defense in any action to enforce this Environmental Easement that: it is not appurtenant to an interest in real property; it is not of a character that has been recognized traditionally at common law; it imposes a negative burden; it imposes affirmative obligations upon the owner of any interest in the burdened property; the benefit does not touch or concern real property; there is no privity of estate or of contract; or it imposes an unreasonable restraint on alienation.

B. If any person intentionally violates this Environmental Easement, the Grantee may revoke the Certificate of Completion provided under ECL Article 27, Title 14, or the Satisfactory Completion of Project provided under ECL Article 56, Title 5 with respect to the Controlled Property.

C. Grantee shall notify Grantor of a breach or suspected breach of any of the terms of this Environmental Easement. Such notice shall set forth how Grantor can cure such breach or suspected breach and give Grantor a reasonable amount of time from the date of receipt of notice in which to cure. At the expiration of such period of time to cure, or any extensions granted by Grantee, the Grantee shall notify Grantor of any failure to adequately cure the breach or suspected breach. Grantor shall then have a reasonable amount of time from receipt of such notice to cure. At the expiration of said second period, Grantee may commence any proceedings and take any other appropriate action reasonably necessary to remedy any breach of this Environmental Easement in accordance with applicable law to require compliance with the terms of this Environmental Easement.

D. The failure of Grantee to enforce any of the terms contained herein shall not be deemed a waiver of any such term nor bar its enforcement rights in the event of a subsequent breach of or noncompliance with any of the terms of this Environmental easement.

6. Notice. Whenever notice to the State (other than the annual certification) or approval from the State is required, the Party providing such notice or seeking such approval shall identify the Controlled Property by referencing its County tax map number, or the Liber and Page or computerized system tracking/ identification number, and address correspondence to:

Division of Environmental Enforcement
Office of General Counsel
New York State Department of Environmental Conservation
625 Broadway
Albany New York 12233-5500

Such correspondence shall be delivered by hand, or by registered mail or by certified mail and return receipt requested. The Parties may provide for other means of receiving and communicating notices and responses to requests for approval.

7. Recordation. Grantor shall record this instrument, within thirty (30) days of execution of this instrument by the Commissioner or her/his authorized representative in the office of the recording officer for the county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.

8. Amendment. This Environmental Easement may be amended only by an amendment executed by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Controlled Property is situated in the manner prescribed by Article 9 of the Real Property Law.

9. **Extinguishment.** This Environmental Easement may be extinguished only by a release by the Commissioner of the New York State Department of Environmental Conservation and filed with the office of the recording officer for the county or counties where the Property is situated in the manner prescribed by Article 9 of the Real Property Law.

10. **Joint Obligation.** If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

IN WITNESS WHEREOF, Grantor has caused this instrument to be signed in its name.

GERMANOW-SIMON CORPORATION

By: _____
Andrew Germanow
Title: President of Germanow-Simon Corporation

Date: November 14, 2006

THIS ENVIRONMENTAL EASEMENT IS HEREBY ACCEPTED BY THE PEOPLE OF THE STATE OF NEW YORK, Acting By and Through the Department of Environmental Conservation

By: _____
Denise M. Sheehan, Commissioner

Grantor's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF MONROE)

On the 14th day of November, in the year 2006, before me, the undersigned, personally appeared Andrew Germanow, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public - State of New York

CATHERINE L. STAUDMYER
Notary Public, State of New York
No. 01ST6068068
Qualified in Monroe County
Commission Expires Dec. 24, 2009

Grantee's Acknowledgment

STATE OF NEW YORK)
) ss:
COUNTY OF ALBANY)

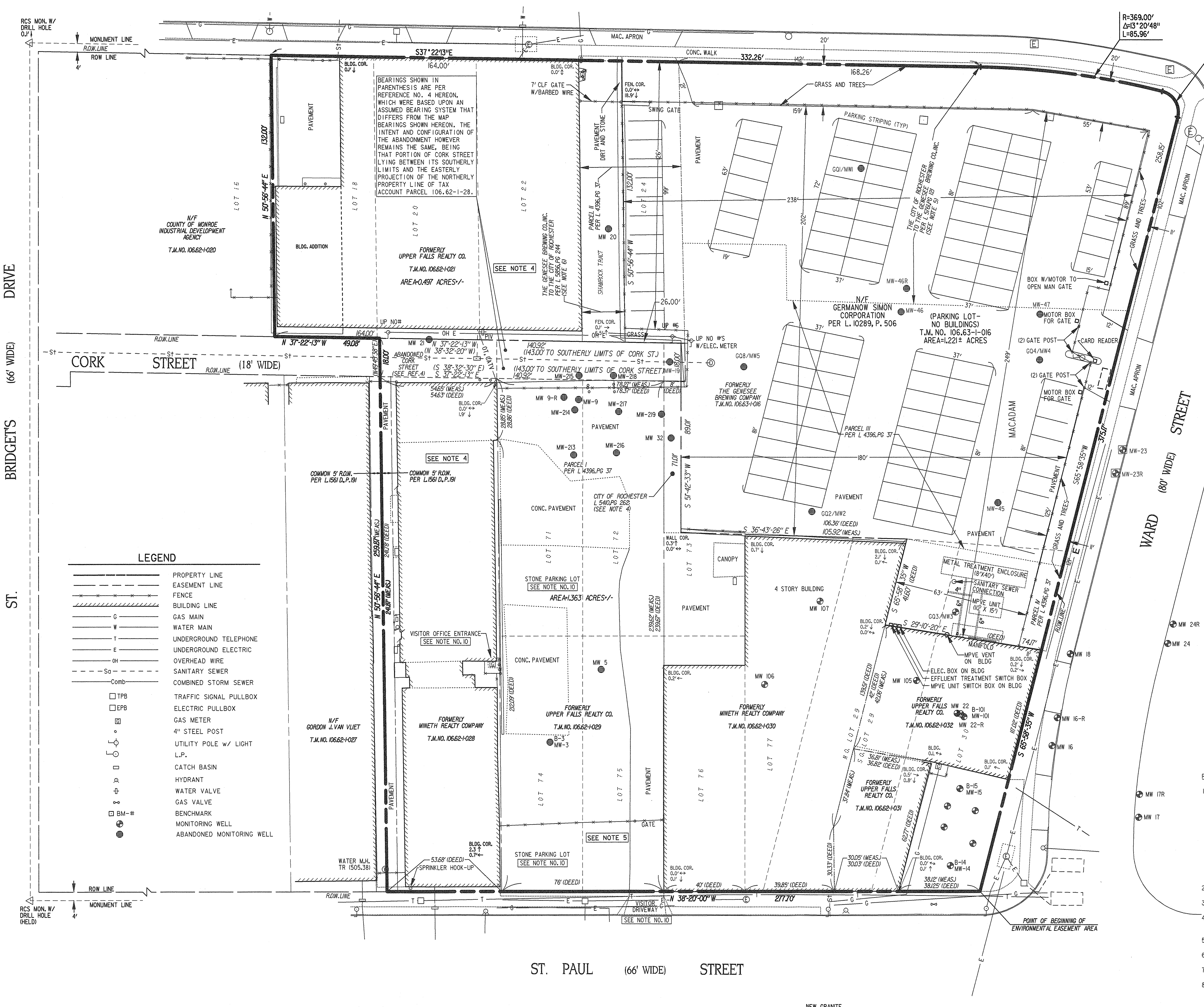
On the _____ day of _____, in the year 2006, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/ executed the same in his/her/ capacity as Commissioner of the State of New York Department of Environmental Conservation, and that by his/her/ signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public - State of New York

Appendix D

ENVIRONMENTAL EASEMENT DESCRIPTION
N.Y.S. BROWNFIELD CLEANUP PROGRAM
WARD ST. SITE, NO. C828117 & 8-28 WARD ST. SITE, NO. C828136

THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS EASEMENT ARE SET FORTH IN THE SITE MANAGEMENT PLANS (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NEW YORK, 12233 OR AT DERWEB@GW.DEC.STATE.NY.US.



THIS PROPERTY IS SUBJECT TO AN ENVIRONMENTAL EASEMENT HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PURSUANT TO TITLE 36 OF ARTICLE 71 OF THE NEW YORK ENVIRONMENTAL CONSERVATION LAW.

LANDS DESIGNATED AS TAX MAP PARCELS: 106.62-1-028, BEING 408 ST. PAUL STREET; 106.62-1-029, BEING 398-402 ST. PAUL STREET; 106.62-1-030, BEING 388-392 ST. PAUL STREET; 106.62-1-031, BEING 384 ST. PAUL STREET; 106.62-1-032 BEING 376-378 ST. PAUL STREET; 106.62-1-021 BEING 19-23 EMMETT STREET; 106.63-1-016 BEING 8-28 WARD STREET, AND 106.62-1-057 BEING 25 CORK STREET.

ENVIRONMENTAL EASEMENT AREA:

LANDS COMPRISING N.Y.S. BROWNFIELD CLEANUP PROGRAM WARD STREET SITE NO. C828117 & 8-28 WARD STREET SITE NO. C828136.

DESCRIPTION OF LANDS DESIGNATED AS TAX MAP PARCELS: 106.62-1-028, BEING 408 ST. PAUL STREET; 106.62-1-029, BEING 398-402 ST. PAUL STREET; 106.62-1-030, BEING 388-392 ST. PAUL STREET; 106.62-1-031, BEING 384 ST. PAUL STREET; 106.62-1-032 BEING 376-378 ST. PAUL STREET; 106.62-1-021 BEING 19-23 EMMETT STREET; 106.63-1-016 BEING 8-28 WARD STREET, AND 106.62-1-057 BEING 25 CORK STREET.

All that tract or parcel of land containing 3.081 acres, more or less, situate in the City of Rochester, County of Monroe, State of New York, all as shown on a map entitled "Germanow-Simon, ALTA/ACSM Land Title Survey" prepared by Stantec Consulting Services, Inc., dated November 9, 2011, having Drawing No. 190500014 V-3 and being more particularly bounded and described as follows:

Beginning at a point on the southeasterly right-of-way line of St. Paul Street (66 feet wide), said point being at the intersection with the northeasterly right-of-way line of Ward Street (80' wide); thence

1. N 38°20'00" W, along said southeasterly right-of-way line, a distance of 277.70 feet to a point of intersection with the common line dividing lands now or formerly of Gordon J. Van Vliet (Tax Map No. 106.62-1-027) to the northwest and lands formerly of Mineth Realty Company (Tax 106.62-1-028) to the southeast; thence

2. N 50°56'44" E, along said common line, a distance of 241.87 feet to a point of intersection with the northwesterly right-of-way line of Cork Street (18 feet wide); thence

3. N 50°56'44" E, along the southeasterly end of remaining Cork Street, the southeasterly portion of which was abandoned per City of Rochester Ordinance No. 2011-275, a distance of 18.00 feet; thence

4. N 37°22'13" W, along the remaining existing right-of-way line of Cork Street, a distance of 49.08 feet to a point of intersection with the common line dividing lands of the County of Monroe Industrial Development Agency (Tax Map No. 106.62-1-020) on the northwest and the former lands of Upper Falls Realty Co. (Tax Map No. 106.62-1-021) on the southeast; thence

5. N 50°56'44" E, along said common line, a distance of 132.00 feet to a point on the northwesterly right-of-way line of Emmett Street (62 feet wide), thence

6. S 37°22'13" E, along the said northwesterly right-of-way line of Emmett Street, a distance of 332.26 feet to a point of curvature; thence

7. Southeasterly, continuing along the said northwesterly right-of-way line of Emmett Street, along a curve to the right, having a radius of 369.00 feet, through a central angle of 13°20'48", a distance of 85.96 feet to a point of compound curvature; thence

8. Southeasterly, continuing along the said northwesterly right-of-way line of Emmett Street, along a curve to the right, having a radius of 10.00 feet, through a central angle of 90°00'00", a distance of 15.71 feet to a point of tangency on the aforementioned northeasterly right-of-way line of Ward Street; thence

9. S 65°58'35" W, along the said northeasterly right-of-way line, a distance of 375.17 feet to the Point of Beginning.

NOTES:

1. THE HORIZONTAL DATUM SHOWN HEREON IS TIED TO THE CITY OF ROCHESTER SURVEY DATUM.
2. THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO RTS MONUMENT LOCATED ON THE WESTERLY SIDE OF ST. PAUL STREET AT THE EXTENSION OF THE SOUTHERLY R.O.W. OF GORHAM STREET, ELEVATION = 499.93'.
3. UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM FIELD LOCATIONS AND/OR UTILITY COMPANY RECORD PLANS. GAS AND ELECTRIC UTILITY PLANS WERE NOT AVAILABLE AT THE TIME OF MAPPING. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOULD BE STAKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.
4. PROPERTIES IDENTIFIED WITH TAX MAP NO. 106.62-1-021 AND NO. 106.62-1-028 ARE SUBJECT TO AN EASEMENT TO ROCHESTER GAS AND ELECTRIC CORPORATION TO ERECT AND MAINTAIN A 2" STEAM LINE PER LIBER 1439 OF DEEDS AT PAGE 25.
5. PROPERTY IDENTIFIED WITH TAX MAP NO. 106.62-1-029 SUBJECT TO ACCESS RIGHTS OF GERMANOW-SIMON MACHINE COMPANY INC. TO USE LOADING DOCK (NO LIBER AVAILABLE.)
6. THE GENESEE BREWING CO., INC. TO THE CITY OF ROCHESTER PER LIBER 5410, PG 262 CONVEYANCE IS MADE AND ACCEPTED SUBJECT TO ALL EASEMENTS, COVENANTS AND RESTRICTIONS OF RECORD, AND TO RIGHTS OF GERMANON-SIMON MACHINE, INC., IF ANY, TO USE A PORTION OF THIS PARCEL FOR ACCESS TO GRANTOR'S LOADING DOCK ON LOTS 76 AND 77, TOGETHER WITH ALL ITS RIGHT, TITLE AND INTEREST IN AND TO ANY STREETS OR ALLEYS ADJOINING OR ABUTTING THEREON.
7. CONVEYANCE PER ORDINANCE NO. 79-269 ADOPTED BY THE COUNCIL OF THE CITY OF ROCHESTER ON JUNE 12, 1979. SEE COVENANTS AND CONDITIONS THEREIN.
8. CONVEYANCE PER ORDINANCE NO. 80-156 APPROVED BY THE COUNCIL OF THE CITY OF ROCHESTER ON JULY 2, 1980.
9. SURFACE AREAS:
   CALCULATED AREA OF PAVED SURFACES ----------------------- 127,089±SQ.FT. (2.918±AC.)
   CALCULATED AREA OF VEGETATIVE COVERS AND GRASSED AREAS--- 7,098± SQ.FT. (0.163± AC.)
   TOTAL SITE (ENVIRONMENTAL EASEMENT) AREA----------------- 134,187±SQ.FT. (3.081±AC.)
10. ENVIRONMENTAL EASEMENT'S GRANT OF ACCESS TO GRANTEE AND ITS AGENTS, EMPLOYEES AND REPRESENTATIVES MAY BE OBTAINED VIA THE DESIGNATED STONE PARKING LOT, WHICH IS ACCESSIBLE FROM ST. PAUL STREET, AND THE VISITORS OFFICE ENTRANCE.

REFERENCES:

1. THE FOLLOWING TITLE ABSTRACTS WERE USED TO HELP ESTABLISH THE BOUNDARY:
   1) MONROE TITLE INSURANCE CORPORATION TITLE ABSTRACT NO. 71750A, DATED MARCH 9, 1998.
   2) ABSTRACT TITLE & MORTGAGE CORPORATION TITLE ABSTRACT NO. 5409A, LAST DATED OCTOBER 1, 1936.
   3) MONROE ABSTRACT & TITLE CORPORATION TITLE ABSTRACT NO. 48836, DATED AUGUST 23, 1966.
   4) MONROE ABSTRACT & TITLE CORPORATION TITLE ABSTRACT NO. 68654, LAST DATED MAY 22, 1967.
   5) ROCHESTER TITLE INSURANCE COMPANY TITLE ABSTRACT NO. 473, LAST DATED DECEMBER 18, 1930.
   6) MONROE ABSTRACT & TITLE CORPORATION TITLE ABSTRACT NO. 77615-1, DATED OCTOBER 28, 1965.
   7) MONROE ABSTRACT & TITLE CORPORATION TITLE ABSTRACT NO. 63007, LAST DATED DECEMBER 22, 1967.
   8) MONROE ABSTRACT & TITLE CORPORATION TITLE ABSTRACT NO. 62107, LAST DATED NOVEMBER 9, 1971.
   9) ABSTRACT TITLE & MORTGAGE CORPORATION TITLE ABSTRACT NO. 5560A, LAST DATED NOVEMBER 20, 1945.
   10) MONROE TITLE INSURANCE CORPORATION TITLE ABSTRACT NO. 128434, DATED JULY 3, 2008.
   11) CHICAGO TITLE INSURANCE COMPANY, TITLE INSURANCE COMMITMENT NO. 1216-40313, DATED MARCH 09, 2012
2. LIBER 9116 OF DEEDS AT PAGE 277.
3. LIBER 9116 OF DEEDS AT PAGE 284.
4. CITY OF ROCHESTER CERTIFIED ORDINANCE NO. 2011-275, APPROVED AUGUST 17, 2011, ABANDONMENT OF A PORTION OF CORK STREET. ABANDONED PER LIBER 11098 DEEDS, PAGE 83.
5. LIBER 10235 DEEDS; PAGE 666
6. LIBER 10235 DEEDS; PAGE 660
7. LIBER 10289 DEEDS; PAGE 506
8. LIBER 11098 DEEDS, PAGE 83

CERTIFICATION:

WE, STANTEC CONSULTING SERVICES INC., CERTIFY TO THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH THEIR COMMISSIONER OF THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION; GERMANOW-SIMON CORPORATION (FEE); MONROE COUNTY INDUSTRIAL DEVELOPMENT AGENCY (LESSEE); CHICAGO TITLE INSURANCE COMPANY: THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 4, 7(A), 8, 9, 10, 11(A), 13, 14, AND 16 OF TABLE A THEREOF. FIELD WORK WAS COMPLETED ON AUGUST 23, 2011.

BY: Robert A. Vento DATE: 8/1/12
ROBERT A. VENTO, N.Y.S.P.L.S. NO. 49701

No.	REVISIONS	DATE	BY
6			
5			
4			
3			
2	DESIGNATED MONITORING WELLS AS ABANDONED	12/9/11	MJG
1	ADDED REFERENCE BEARNGS TO ABANDONMENT PARCEL	12/9/11	MJG
0			

PROJECT ENGINEER/ARCHITECT R. VENTO
PROJECT MANAGER M. STORONSKY
DRAWN BY M. GRASSO
SCALE 1" = 20'
FIRST ISSUE DATE 11/09/2011

Stantec
61 Commercial Street
Rochester, N.Y. 14614
Tel:(585) 475-1440
Fax:(585) 272-1814
www.stantec.com

PROJECT GERMANOW-SIMON N.Y.S BROWNFIELD CLEANUP PROGRAM WARD STREET SITE NO. C828117 & 8-28 WARD STREET SITE NO. C828136 COUNTY OF MONROE, STATE OF NEW YORK

TITLE OF DRAWING ENVIRONMENTAL EASEMENT & A.L.T.A./A.C.S.M. LAND TITLE SURVEY

PROJECT NO. 190500014

DRAWING NO. V-3