



**SUPPLEMENTAL SITE INVESTIGATION
WORK PLAN
SOIL GAS SAMPLING AND ANALYSIS
FORMER TIDEWATER FACILITY
PROVIDENCE, RHODE ISLAND**

PREPARED FOR:
RIDEM
Providence, Rhode Island

PREPARED BY:
GZA GeoEnvironmental, Inc.
Providence, Rhode Island

May 2013
File No. 43654.00

May 2, 2013
File No. 05.0043654.00

Via E-Mail and U.S. Mail



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Mr. Joseph Martella
Rhode Island Department of Environmental Management (RIDEM)
Office of Waste Management
235 Promenade Street
Providence, Rhode Island 02908

Re: Supplemental Site Investigation Work Plan
Soil Gas Sampling and Analysis
Former Tidewater Facility
Pawtucket, Rhode Island

Dear Mr. Martella:

On behalf of the Narragansett Electric Company d/b/a National Grid (National Grid), GZA GeoEnvironmental, Inc. (GZA) is pleased to present to the Rhode Island Department of Environmental Management (RIDEM) the attached *Supplemental Site Investigation Work Plan (SSIWP)* for your review. Per your request, this *SSIWP* describes a proposed program designed to evaluate soil gas quality at the Tidewater Site.

Please feel free to contact either of the undersigned or Michele Leone at 781-907-3651 should you have any questions.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink, appearing to read 'Margaret S. Kilpatrick'.

Margaret S. Kilpatrick, P.E.
Senior Project Manager

A handwritten signature in blue ink, appearing to read 'James J. Clark'.

James J. Clark, P.E.
Principal

MSK/JJC:tja

Attachment: *SSIWP* – Soil Gas Sampling and Analysis

cc: Elizabeth Stone, RIDEM
Michele Leone, National Grid

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1.00 INTRODUCTION



On behalf of The Narragansett Electric Company, d/b/a National Grid (National Grid), GZA GeoEnvironmental Inc. (GZA) has prepared this *Supplemental Site Investigation Work Plan (SSIWP)* describing proposed soil gas sampling and analyses to be performed at the former Tidewater facility located at the terminus of Tidewater and Merry Streets in Pawtucket, Rhode Island (herein referred to as the Site). Figure 1 presents a *Site Locus Plan*.

The Site is located on the west side of the Seekonk River and is bound to the west by residential properties, to the south and southwest by the Francis J. Varieur School and Max Read Athletic Field, and to the north by undeveloped property owned by the City of Pawtucket. It encompasses approximately 23 acres and was the location of the former Tidewater Manufactured Gas Plant (MGP) and the Pawtucket No. 1 Power Station. The Site is currently largely vacant with the exception of an active natural gas regulating station, an active switching station and electric substation, and two transmission towers owned and operated by National Grid.

The proposed soil gas investigation program described herein will serve to supplement the *Site Investigation Report (SIR)* which was completed with the submission of the *Site Investigation Data Report (SIDR)* in January 2011 and the *Remedial Alternative Evaluation* in July 2011. The *SIDR* and *Remedial Alternative Evaluation* serve to fulfill the requirements of the Rhode Island Department of Environmental Management (RIDEM) Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations–DEM-DSR-01-93), Sections 7.03, 7.04, and 7.05 for a *SIR*.

For details regarding the existing and historic Site conditions, including Site plans, previous Site investigations, hydrogeologic setting and observed impacts, please refer to reports previously submitted to the Rhode Island Department of Environmental Management (RIDEM).

Per RIDEM's request, this *SSIWP* presents a proposed soil gas sampling and analysis program designed to evaluate the quality of soil gas at the Tidewater Site. As described further herein, this program includes the collection and analysis of soil gas both in interior portions of the Site and along the western property boundary. Please note, based on our evaluation of the nature and extent of volatile constituents detected on-Site, the Site hydrogeologic setting, and current use (no occupied structures), a specific evaluation of soil gas quality was not warranted and therefore not included as part of the investigations

performed to support development of the *SIR* for the Tidewater Site. In addition, the potential migration of impacted soil gas was not identified as an exposure pathway for the Site.



2.00 EXISTING SOIL GAS QUALITY DATA

As described previously, Site soil gas sampling and analysis was not performed as part of the *SIR* based on the observed nature and extent of impacts, the hydrogeologic setting, and Site use. As documented in the *SIR*, a soil-gas survey was conducted as part of the investigation of the Francis J. Varieur School facility by Atlantic Environmental Solutions, Inc. (AES) in 1996. The survey was conducted adjacent to the school building and consisted of 28 sampling points which are shown on the attached Figure 2 and in Appendix A, as soil gas sampling locations SG-1 to SG-28.

Soil-gas samples were collected at a depth of approximately 3 to 4 feet below ground surface via the advancement of soil-gas sampling points. Soil-gas samples were analyzed in the field for benzene, toluene, ethylbenzene and xylenes (BTEX) using a Photovac 10S Plus portable gas chromatograph. Standards and blank samples (approximately 10 percent of the total samples) were also analyzed for quality assurance/quality control (QA/QC) purposes during the survey. The analytical results included as Appendix A

A present results of this survey. There were no BTEX compounds detected. Two samples, TW-SG-22 and TW-SG-25, indicated possible low levels of trichloroethane (TCE). Subsequent re-sampling and re-analysis confirmed the presence of this non-target analyte. TCE is not a constituent associated with former MGP or petroleum storage facilities or with current National Grid operations.

Following an initial review of the soil gas survey data, it was determined that indoor air quality monitoring for TCE would be implemented at the Francis J. Varieur School. The air monitoring program consisted of the collection of five samples inside the school on August 28, 1996. Sample locations included the cafeteria, the kindergarten classroom, the mechanical room, the library, and Room 13. All five samples were non-detect for TCE at a detection limit of 0.8 mg/m^3 . These analytical results are also included in Appendix A.

3.00 PROPOSED SCOPE OF WORK



This section presents the proposed scope of investigations designed to evaluate the quality of soil gas within certain interior portions and proximate to the western property line of the Tidewater Site. A total of 23 sampling locations are proposed (SG-100 to SG-113 and SG-200 to SG-208, see Figure 2). The SG-100 series is located along the western Site perimeter and the SG-200 series is located within interior portions of the Site. The proposed interior sampling points are located proximate to areas where elevated levels of volatile constituents were detected in soil and/or groundwater during previous explorations and are designed to evaluate worse case soil gas conditions. The SG-100 series locations are designed to assess the quality of soil gas proximate to the Site property boundary. As described further below and in the attached Table 1, certain soil gas sampling locations were specifically selected to evaluate the quality of soil gas proximate to existing subsurface utility lines. Proposed soil gas sampling locations are depicted on the attached Figure 2.

Fieldwork associated with this exploration program will be completed consistent with a *Health and Safety Plan (HASP)* prepared for the project.

The following sections present the proposed scope of these soil gas investigations.

CRMC Permitting

A portion of the proposed investigation locations are within 200-feet of the coastal feature, and as such, are subject to the jurisdiction of the Coastal Resource Management Council (CRMC). GZA will prepare a CRMC permit application package associated with completion of the proposed exploration program. Due to the relatively non-invasive nature of the work, we have assumed that completion of the proposed subsurface exploration program will fall under a “Finding of No Significant Impact” (FONSI).

Coordination with the City of Pawtucket

As shown on Figure 2, two sampling probes (SG-112 and SG-113) are located on City of Pawtucket property (A.P. 65B Lot 648) directly proximate to the Max Read Field. This work will require access coordination with the City of Pawtucket.

Soil Gas Probe Installations

Twenty three (23) soil gas probes will be installed at the locations shown on Figure 2. The location rationale and proposed depth of each probe are summarized in Table 1.



Fourteen (14) soil gas probes (SG-100 through SG-113) will be installed proximate to the western Site boundary and nine (9) probes (SG-200 through SG-208) will be installed within interior Site areas. SG-200 is located in the former North Fill Area proximate to monitoring well MW-310 where benzene and naphthalene have been detected at concentrations in excess of the GB Groundwater Objectives. Similarly, SG-201 through SG-206, which are located in the Former Gas Plant Area, are proximate to groundwater monitoring wells where benzene and naphthalene have been detected at concentrations in excess of the GB Groundwater Objectives. Five (5) probes (SG-103, SG-109, SG-113, SG-207, and SG-208) are specifically located proximate to utility lines which extend through the Site (the Narragansett Bay Commission (NBC) Combined Sewer Overflow, City of Pawtucket Storm Drain, the NBC Sanitary Sewer force main and the National Grid Underground Electric service). In addition, three (3) probes (SG-102, SG-103 and SG-105) are located proximate to the Pawtucket Water Supply Board (PWSB) 12" city water main.

Anticipated soil gas sampling depths are summarized in Table 1. The general approach for the interior sampling locations where the water table is encountered approximately 4 to 7 feet below grade will be to collect soil gas from approximately one foot above the natural water table. In addition, at location SG-203, soil gas samples will be collected at multiple depths within the vadose zone in an effort to assess volatile compound degradation rates. At this locations it is anticipated that 3 soil gas samples, each separated by approximately one foot vertically will be collected and analyzed. At the Site boundary locations where the depth to groundwater is anticipated to range from approximately 15 to 25 feet below grade, soil gas samples will be collected at two depths, approximately one foot above the water table and approximately 5 feet below grade.

Prior to installation, an area reconnaissance will be performed to confirm rig access and assess underground utility locations. In addition, DigSafe will be contacted consistent with Rhode Island state law. Certain locations and terminus depths may require field adjustments based on access restrictions, the presence of utilities, and/or subsurface obstructions or drilling refusal.

The soil gas probes will be installed using direct push technology (Geoprobe® rig and /or hand operated vibratory drilling equipment). As described further herein, this installation approach will significantly minimize subsurface disturbance. At each location, a specially designed, stainless steel vapor sampling tip will be advanced to the desired depth (AMS Dedicated Tip, Geoprobe® Implant, or equal). At certain locations it may be necessary to advance a pilot hole to facilitate installation of the soil gas sampling tip and tubing. Fluoropolymer tubing (1/4" O.D.) will be connected to each tip and extended to the ground surface to allow for the collection of a soil gas sample. Filter sand will be placed in the annular space around the vapor sampling tip to one foot above the tip. The



sand and tip will then be sealed with a 2-foot thick layer of hydrated bentonite to prevent short circuiting. The remainder of the borehole will be backfilled with sand. A small diameter road box will be placed over each probe to protect the sample tubing and sealed at the surface with a 1-foot thick plug of Portland cement. Alternatively, certain probes may be finished with an approximately 2 feet tall steel standpipe. A typical detail of the proposed soil vapor collection probe for both the interior and perimeter locations is provided on the attached Figure 3.

As indicated above, the use of vibratory direct push techniques to install the probes will significantly limit subsurface disturbance. No significant soil cuttings or wash waters are expected.

Soil Vapor Sampling and Analysis Procedures

After installation, each soil gas probe will be allowed to equilibrate for at least 2 to 3 hours prior to sample collection. At least 3 times the volume of the tubing will be extracted from the probe using an air pump prior to sample collection. Well purging and sampling will be performed at a flow rate of approximately 200 milliliters per minute to limit the potential for short-circuiting. During purging, soil gas will be collected into Tedlar bags for Total Volatile Organic Compounds (TVOCs) and oxygen screening using a MiniRAE 5-Gas meter equipped with a 10.6 eV lamp for TVOCs screening. Soil gas samples will be collected from each probe using 2.7 L Summa canisters and submitted to the laboratory for low level VOC analysis via EPA Method TO-15, plus naphthalene.

The soil gas samples will be transported under chain-of-custody protocol to a qualified laboratory.

Meteorological conditions (barometric pressure, temperature and rainfall) will be recorded and documented during the sampling event.

To assess potential laboratory induced contamination, the qualified laboratory will prepare and analyze three Trip Blanks for the sampling round. Trip Blanks follow the sample containers, and subsequently the collected samples, through the monitoring process and can be used to assess the presence of non-Site related contaminants that may be introduced from the environment during the sampling and transportation process.

Two to three field duplicate samples will also be collected and analyzed to evaluate the reproducibility of the sampling methods.

Environmental Monitoring and Health and Safety Procedures



As described above, the vibratory direct push installation technique significantly limits subsurface disturbance during probe installation. Unlike other drilling techniques, direct push does not produce excess soils because the probe is pushed into the ground with no augering. Given this limited subsurface disturbance, the likelihood of dust and VOC generation above background levels is extremely limited; therefore, adherence to all the provisions outlined in the April 2011 Air Quality Monitoring Program (AQMP) is not warranted for this work. Specifically, real time monitoring for benzene and the second tier time integrated air quality sampling and analysis described in the AQMP are not warranted. Real time air quality monitoring will be performed using hand held instruments generally consistent with the first tier monitoring described in the AQMP and our *Site Specific Health and Safety Plan (HASP)*. This monitoring will include TVOCs and dust in both the worker breathing zone and work zone perimeter. TVOCs will be monitored using a hand held photoionization detector equipped with a 10.6 eV lamp. Particulate dust will be monitored using a DustTrak. The work zone perimeter action limit for TVOCs and dust will be set at 0.1 ppmv and 150 $\mu\text{g}/\text{m}^3$, respectively, which are consistent with the Site perimeter action limits established in the AQMP. The air monitoring data will be posted to the bulletin boards at the end Tidewater Street and Bowles Court.

Data Summary Report

A report will be prepared and submitted to RIDEM approximately three weeks following receipt of the laboratory data. This report will include text describing the work completed, a figure showing the soil gas probe locations, a tabular summary of the soil gas analytical data, soil gas probe installation logs, and laboratory reports.

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TABLE

TABLE 1
Summary of Soil Gas Probe Installation Details
Former Tidewater Facility
Pawtucket, Rhode Island

Proposed Soil Gas Probe ID	Proposed Soil Gas Probe Designation	Anticipated Depth to Water (Seasonal High Groundwater Table) (feet bgs)	Proposed Sampling (feet bgs)	Rationale for Location
SG-100	Perimeter	23	5 feet bgs and 22 feet bgs	Perimeter sampling, approximately 40 feet from MW-206 (nearest monitoring well), approximately 200 lateral feet from International Charter School, approximately 130 lateral feet from the nearest residence (21 Winter Street)
SG-101	Perimeter	18	5 feet bgs and 17 feet bgs	Perimeter sampling, approximately 20 feet from MW-7 (nearest monitoring well), approximately 110 lateral feet from International Charter School, approximately 210 lateral feet from the nearest residence (21 Winter Street)
SG-102	Perimeter	18	5 feet bgs and 17 feet bgs	Perimeter sampling, approximately 130 feet from MW-7 (nearest monitoring well), approximately 100 lateral feet from International Charter School, proximate to 12" Pawtucket Water Supply Board (PWSB) water line, approximately 180 lateral feet from the nearest residence (132 Tidewater Street)
SG-103	Perimeter	17	5 feet bgs and 16 feet bgs	Perimeter sampling, approximately 180 feet from MW-208 (nearest monitoring well), proximate to Narragansett Bay Commission (NBC) 34" Combined Sewer Overflow (CSO) line, proximate to 12" PWSB water line, approximately 100 lateral feet from the nearest residence (220 Taft Street - Apartments)
SG-104	Perimeter	20	5 feet bgs and 19 feet bgs	Perimeter sampling, approximately 160 feet from MW-208 (nearest monitoring well), approximately 130 lateral feet from the nearest residence (220 Taft Street - Apartments)
SG-105	Perimeter	20	5 feet bgs and 19 feet bgs	Perimeter sampling, approximately 215 feet from MW-209 (nearest monitoring well), proximate to 12" PWSB water line, approximately 115 lateral feet from the nearest residence (9 Thornton Street)
SG-106	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 270 feet from MW-109 (nearest monitoring well), approximately 15 feet from the nearest residence (14 Thornton Street)
SG-107	Perimeter	18	5 feet bgs and 17 feet bgs	Perimeter sampling, approximately 160 feet from MW-109 (nearest monitoring well), approximately 60 feet from the nearest residence (14 Thornton Street)

TABLE 1
Summary of Soil Gas Probe Installation Details
Former Tidewater Facility
Pawtucket, Rhode Island

Proposed Soil Gas Probe ID	Proposed Soil Gas Probe Designation	Anticipated Depth to Water (Seasonal High Groundwater Table) (feet bgs)	Proposed Sampling (feet bgs)	Rationale for Location
SG-108	Perimeter	15	5 feet bgs and 14 feet bgs	Perimeter sampling, approximately 190 feet from MW-316 (nearest monitoring well), approximately 50 feet from the nearest residence (22 Thornton Street)
SG-109	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 190 feet from MW-316 (nearest monitoring well), proximate to the City of Pawtucket Drainage Line, proximate to the National Grid Underground Electric service, approximately 40 feet from the nearest residence (22 Thornton Street)
SG-110	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 140 feet from MW-316 (nearest monitoring well), approximately 170 feet from the Francis Varieur Elementary School, approximately 200 feet from the nearest residence (25 Thornton Street)
SG-111	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 140 feet from MW-317 (nearest monitoring well), approximately 210 feet from the Francis Varieur Elementary School, more than 300 feet to the nearest residence
SG-112	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 100 feet from MW-107 (nearest monitoring well), approximately 460 feet from the Francis Varieur Elementary School, more than 300 feet to the nearest residence. This perimeter location is located on property owned by the City of Pawtucket.
SG-113	Perimeter	25	5 feet bgs and 24 feet bgs	Perimeter sampling, approximately 110 feet from MW-334 (nearest monitoring well), proximate to NBC 48" sanitary sewer force main, approximately 660 feet from the Francis Varieur Elementary School, more than 300 feet to the nearest residence. This perimeter location is located on property owned by the City of Pawtucket.
SG-200	Interior	5	4 feet bgs	Interior sampling, approximately 20 feet from MW-310 and 110 feet from MW-311 (both monitoring wells have GB Groundwater Exceedances of benzene and/or naphthalene)

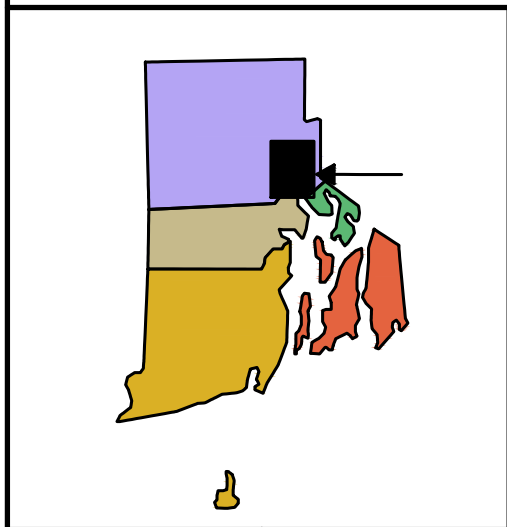
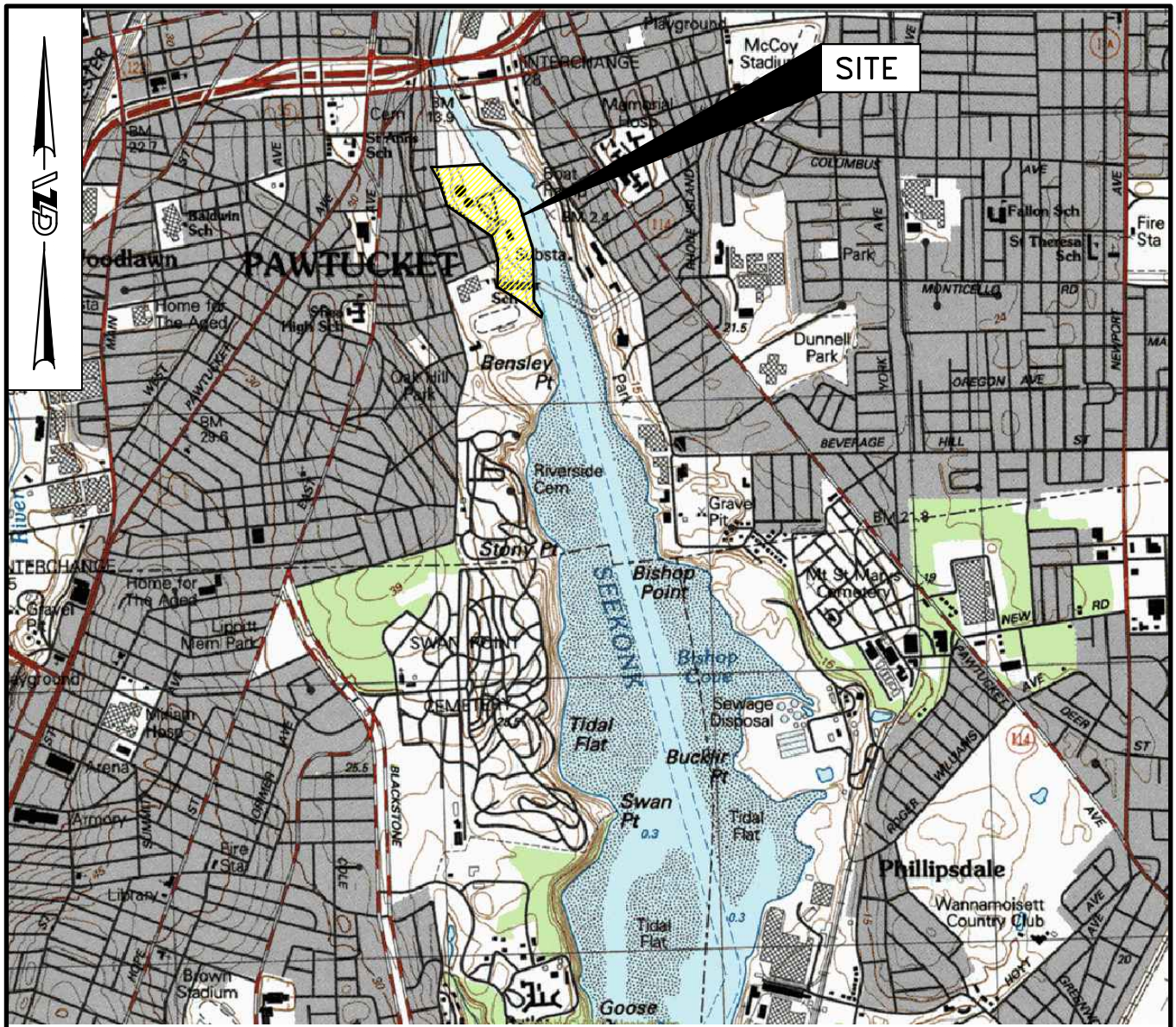
TABLE 1
Summary of Soil Gas Probe Installation Details
Former Tidewater Facility
Pawtucket, Rhode Island

Proposed Soil Gas Probe ID	Proposed Soil Gas Probe Designation	Anticipated Depth to Water (Seasonal High Groundwater Table) (feet bgs)	Proposed Sampling (feet bgs)	Rationale for Location
SG-201	Interior	4	3 feet bgs	Interior sampling, approximately 50 feet from MW-339 and 55 feet from MW-341 (both monitoring wells have GB Groundwater Exceedances of naphthalene)
SG-202	Interior	6	5 feet bgs	Interior sampling, approximately 10 feet from MW-210 and 70 feet from MW-335 (both monitoring wells have GB Groundwater Exceedances of benzene, ethylbenzene and/or naphthalene)
SG-203	Interior	5	2 feet bgs, 3 feet bgs, 4 feet bgs	Interior sampling, approximately 10 feet from MW-312 and 80 feet from MW-303 (both monitoring wells have GB Groundwater Exceedances of benzene, ethylbenzene and/or naphthalene)
SG-204	Interior	3	2 feet bgs	Interior sampling, approximately 10 feet from MW-303 and 70 feet from MW-333 (both monitoring wells have GB Groundwater Exceedances of benzene, ethylbenzene and/or naphthalene)
SG-205	Interior	7	6 feet bgs	Interior sampling, approximately 20 feet from MW-313 and 20 feet from MW-333 (both monitoring wells have GB Groundwater Exceedances of benzene, ethylbenzene and/or naphthalene)
SG-206	Interior	7	6 feet bgs	Interior sampling, approximately 20 feet from MW-326 and 60 feet from MW-313 (both monitoring wells have GB Groundwater Exceedances of benzene, ethylbenzene and/or naphthalene)
SG-207	Interior	10	9 feet bgs	Interior sampling, proximate to the City of Pawtucket Drainage Line
SG-208	Interior	8	7 feet bgs	Interior sampling, proximate to NBC 34" CSO line

Notes:

- Probes will be installed via direct push drilling techniques (i.e. Geoprobe rig and /or hand operated vibratory drilling equipment).
- It is anticipated that two soil gas samples will be collected from each perimeter soil gas probe sampling location, one from 5 feet below ground surface and one from approximately 1 foot above the anticipated seasonal high groundwater table.
- It is anticipated that one soil gas sample will be collected from each interior soil gas probe sampling location, from approximately 1 foot above the anticipated seasonal high groundwater table, with the exception of SG-203, where three soil gas samples will be collected, from approximately 1 foot above the anticipated seasonal high groundwater table, two sample each a foot higher than the last.
- Anticipated sampling depths may require field modification due to conditions encountered during probe installation.
- Soil gas samples collected will be analyzed for VOCs and naphthalene via EPA Method TO-15

FIGURES

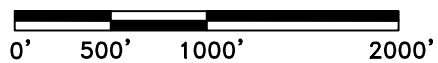


BASE MAP FROM THE FOLLOWING USGS QUADRANGLE MAP:
PROVIDENCE, RI (2001)

DIGITAL TOPOGRAPHIC MAPS PROVIDED BY MAPTECH, INC.

CONTOUR ELEVATIONS REFERENCE NGVD 29,
 CONTOURS ARE SHOWN IN METERS ABOVE NGVD AT 3 METER INTERVALS

APPROXIMATE SCALE IN FEET



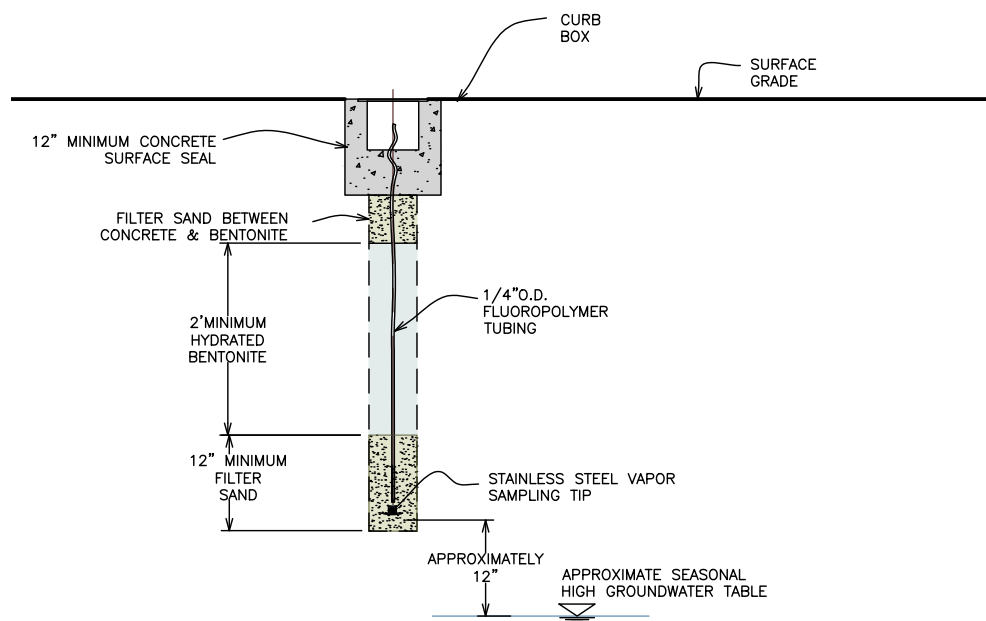
TIDEWATER FACILITY

PAWTUCKET, RHODE ISLAND

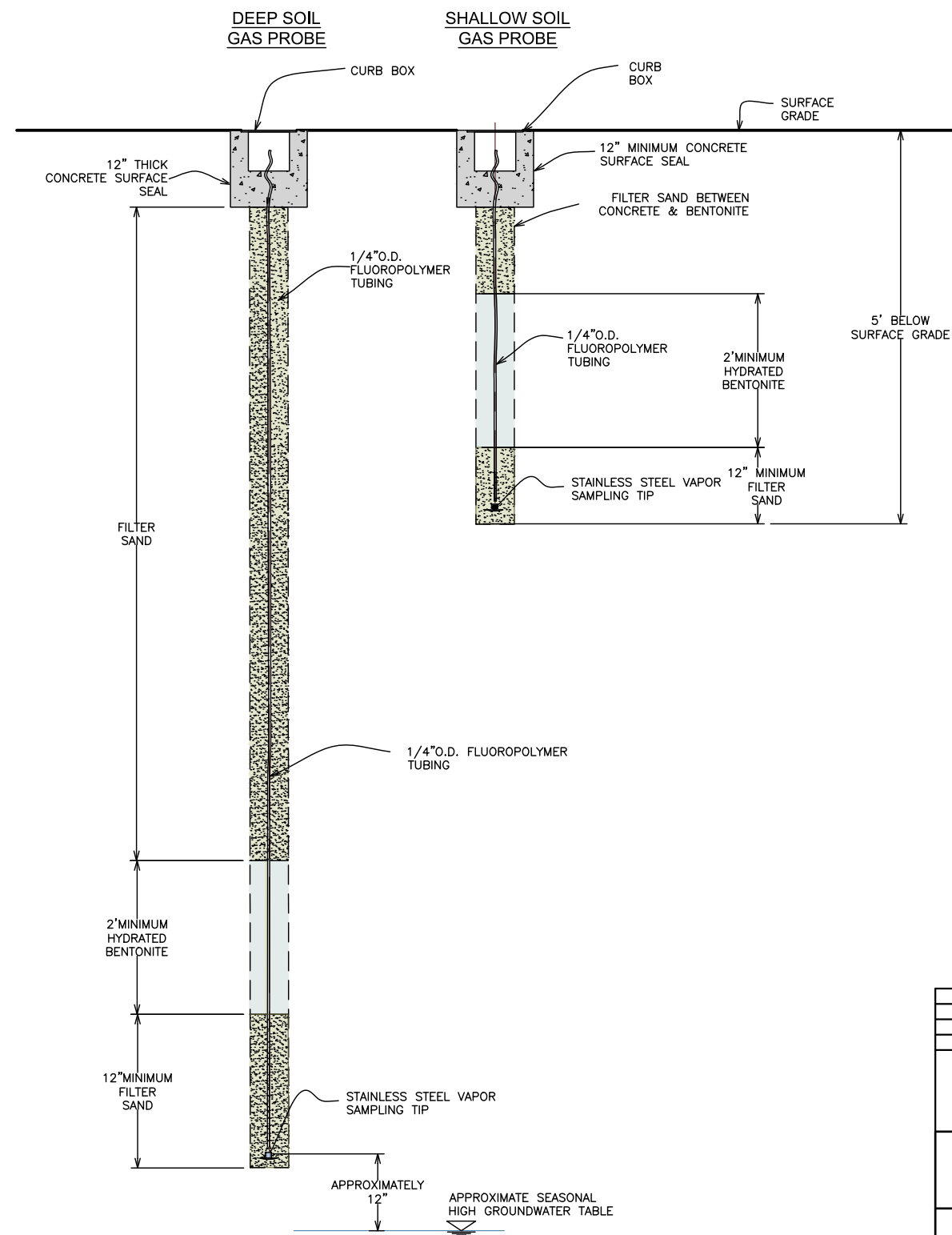
LOCUS PLAN

APRIL 2013

FIGURE NO. 1



TYPICAL INTERIOR SOIL GAS PROBE DETAIL (SG-200 SERIES)
N.T.S.

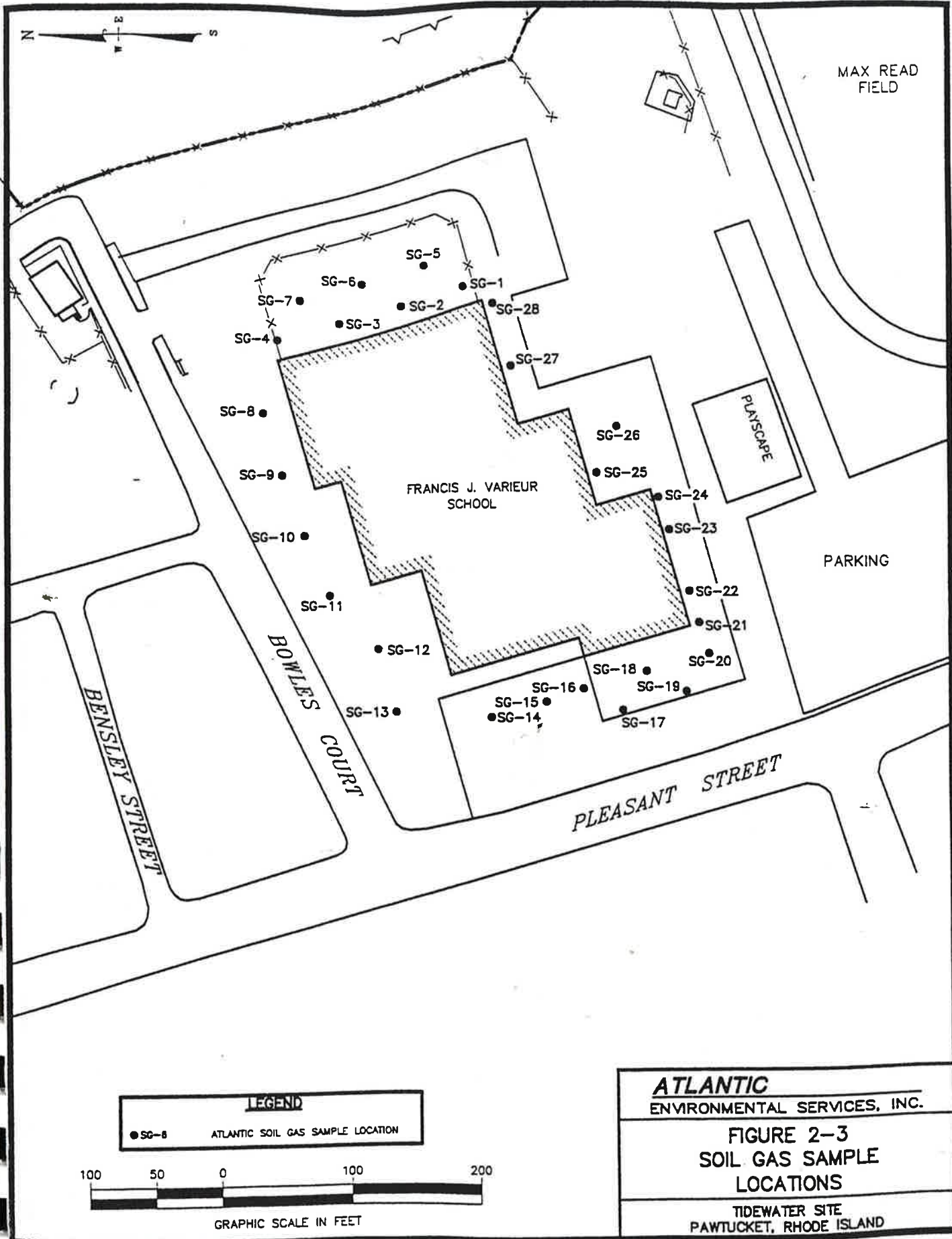


(TYPICAL PERIMETER SOIL GAS PROBE DETAIL [SG-100 SERIES])
N.T.S.

NO.	ISSUE/DESCRIPTION	BY	DATE
<p>THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY NATIONAL GRID OR THE NATIONAL GRID'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA AND NATIONAL GRID. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA AND NATIONAL GRID, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA AND NATIONAL GRID.</p>			
<p>FORMER TIDEWATER FACILITY PAWTUCKET, RHODE ISLAND</p>			
<p>SUPPLEMENTAL SITE INVESTIGATION WORK PLAN SOIL GAS MONITORING PROBE DETAILS</p>			
<p>PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists www.gza.com</p>		<p>PREPARED FOR: NATIONAL GRID</p>	
<p>PROJ MGR: MSK</p>	<p>REVIEWED BY: MSK</p>	<p>CHECKED BY: JJC</p>	<p>FIGURE 3 SHEET NO. 3 OF 3</p>
<p>DESIGNED BY: SN</p>	<p>DRAWN BY: CRB</p>	<p>SCALE: AS NOTED</p>	
<p>DATE: APRIL, 2013</p>	<p>PROJECT NO. 43654.00</p>	<p>REVISION NO.</p>	

APPENDIX A

1996 AES SOIL GAS SAMPLING RESULTS





R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

R.I. Analytical Laboratories, Inc.
Attn: Mr. Steve McDonagh
41 Illinois Avenue
Warwick, RI 02888

DATE RECEIVED: 08/29/96
DATE REPORTED: 08/30/96
P.O. #:
INVOICE #: A5259

DESCRIPTION: Five (5) air samples collected 8/28/96 @
Varieur School, Pawtucket, RI

Subject sample, collected by RIAL personnel, has been analyzed by
our laboratory with the following results:


SAMPLE ID	TRICHLOROETHYLENE	DETECTION LIMIT
Cafeteria	ND	0.8
Kindergarden	ND	0.8
Mechanical Room	ND	0.8
Library	ND	0.8
Room 13	ND	0.8

Results reported in mg/m³

Reference: NIOSH Manual of analytical Methods, U.S. Department of
Health and Human Services, 3rd., February 1984.
Method 1022

If you have any questions regarding this work, or if we may be
of further assistance, please contact us.

Approved by:


James E. Mich
Vice President
eam:kah


Kellie Mulligan
Quality Control Coordinator