NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management
625 Broadway, 12th Floor, Albany, NY 12233-7012
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August 24, 2023

David Glass
TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, NY 10018

RE: WA Approval Letter
Contract/WA No.: D009812-37
Site Name: Solvent Finishers
Site No.: 130172
Work Element: Remedial Design

Dear David:

The New York State Department of Environmental Conservation's Division of Environmental Remediation (DER) hereby approves the enclosed Scope of Work (Schedule 1) and related Budget (Schedule 2.11s) for the above referenced work assignment (WA) for a total not to exceed amount of $1,089,605.

Your firm may now submit a request for reimbursement for work completed to date under this WA, in accordance with the contract requirements.

If you have any questions regarding the WA, please contact the Project Manager, Alexander Klein, by phone at (518) 402-9374 or by email at Alexander.Klein@dec.ny.gov.

Sincerely,

David Gardner, P.E.
Chief, Contracts and Payments Section
Bureau of Program Management
Division of Environmental Remediation

Enclosure

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August 4, 2023

VIA ELECTRONIC MAIL

Ms. Dana Nieder, Contract Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts and Payment Section
625 Broadway, 12th Floor
Albany, New York 12233-7012

Re: Standby Engineering Contract
Work Assignment No. D009812-37
Solvent Finishers – Site No. 130172
TRC Project No. 545267.0000.0000

Dear Ms. Nieder:

Enclosed please find a work assignment (WA) package, including a proposed scope of work, cost estimate, work assignment package checklist, and subcontractor documentation for the Solvent Finishers Site for your review. In accordance with the work assignment issuance/notice to proceed (WAI/NTP) letter dated April 24, 2023, and subsequent communications with the NYSDEC, the proposed scope of work consists of the following tasks:

- Task 1 – Preliminary Activities
- Task 2 – Field Activities
- Task 3 – Reporting

The scope of work presented in Schedule 1 provides a description of each proposed task. A proposed milestone schedule is also provided in Schedule 1. The estimated costs to complete the work (i.e., Schedule 2.11s) are provided in Schedule 2. The work assignment package checklist and subcontractor procurement documentation are presented in Schedule 3.

As shown on the Schedule 2.11s, the proposed budget for the work assignment is $1,089,605. This estimate is $263,805 higher than the estimate of $825,800 in the WAI/NTP letter. Presented below are changes to the Scope of Work, which were made in consultation with the NYSDEC:

- Elimination of remedial design and bid phase services.
- Elimination of two off-site multi-level groundwater monitoring wells.
- Replacement of a single on-site groundwater monitoring well (to be constructed with 2-inch diameter polyvinyl chloride [PVC] well screen and casing to 500 feet below ground surface) with a multi-level well

(to be constructed with 2.5-inch diameter PVC casing and stainless-steel well screens to a maximum depth of 550 feet below ground surface).

- Addition of vertical groundwater profiling during monitoring well installation.
- Addition of bench-scale laboratory column testing.

Also included in the budget are labor and expense rate adjustments and consumer price index (CPI) adjustments (the WAI/NTP includes 3%, the work assignment package includes 11.31% for labor and 10.24% for Standby subcontractor unit pricing).

As indicated on the project schedule, it is anticipated that the work assignment will be completed approximately 11 months (July 2024) from approval of the work assignment package.

Please do not hesitate to contact us if you have any questions or comments.

Sincerely,
TRC Engineers, Inc.

James J. Magda, P.G.
Contract Manager
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Daniel Warren
Senior Project Manager
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DWarren@TRCcompanies.com

cc: A. Klein (NYSDEC)
MWBE Unit (NYSDEC)
SDVOB Unit (NYSDEC)
D. Glass (TRC)
C. Guder (TRC)

SCHEDULE 1

SCOPE OF WORK

SOLVENT FINISHERS

WA NO: D009812-37

REMEDIAL DESIGN

SCHEDULE 1 – SCOPE OF WORK

SOLVENT FINISHERS
WA NO. D009812-37
REMEDIAL DESIGN
AUGUST 2023

The New York State Department of Environmental Conservation (NYSDEC or the "Department") Division of Environmental Remediation (DER) has issued Work Assignment (WA) No. 37 under Standby Engineering Contract D009812 for the Solvent Finishers site (the "Site") (NYSDEC Site No. 130172), an approximately 3.8-acre property located at 601 Cantiague Rock Road in Jericho, New York. The Site is located north of the Sylvania Corning Plant/Former Sylvania Electric Products Facility and New Cassel/Hicksville Groundwater Contamination Superfund Site.

This WA Scope of Work (SOW) has been prepared in accordance with the April 24, 2023, WA Issuance/Notice to Proceed (WAI/NTP) letter, ongoing collaboration with the NYSDEC Project Manager, and in consideration of prior and ongoing environmental investigation results. A schedule is provided at the end of this SOW and includes anticipated milestone dates for the completion of each WA task.

TRC will complete the scope of work in accordance with Standby Engineering Contract D009812, 6 NYCRR Part 375 – Environmental Remediation Programs, NYSDEC DER-10 – Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10), the Health and Safety Plan (HASP), Community Air Monitoring Plan (CAMP), Field Activities Plan (FAP), and Quality Assurance Project Plan (QAPP). TRC will collect and arrange for analysis of Quality Assurance/Quality Control (QA/QC) samples in accordance with the QAPP for Standby Engineering Contract D009812. TRC will implement the CAMP during ground intrusive activities in accordance with the New York State Department of Health (NYSDOH) requirements (NYSDEC DER-10, Appendix 1A) and HASP. Additionally, this WA has been prepared with the expectation that TRC will subcontract laboratory services.

TRC will identify and, as feasible and appropriate, implement green remediation and climate change guidance as described in NYSDEC DER-31 - Green Remediation (DER-31) and CP-49 - Climate Change and DEC Action (CP-49), including, but not limited to, using local staff and subcontractors, grouping site tasks, using green products, minimizing waste generation, recycling, reducing vehicle/equipment idling, using renewable energy, and tracking and reporting green and sustainable metrics.

The work assignment tasks, based on the NYSDEC April 2023 WAI/NTP letter and subsequent correspondence with the NYSDEC Project Manager, are listed below and described in detail on the following pages:

- Task 1 – Preliminary Activities
- Task 2 – Field Activities

- Task 3 – Reporting

1.0 Task 1 – Preliminary Activities

1.1 Work Assignment Package

Under this task TRC will review project documents provided by the NYSDEC and available via download from the DECinfo Locator. The intent of the file review is to obtain an understanding of existing conditions and historic operations to assist with implementation of the work assignment.

TRC will prepare the WA Package, including a cover letter, Schedule 1 – Scope of Work, Schedule 2 – Schedule 2.11s, and Schedule 3 – Work Assignment Package Checklist and Subcontractor Procurement Documentation. The complete WA Package will be delivered to the NYSDEC Contract Manager and Project Manager for review and approval. TRC will review comments provided by the NYSDEC and revise the WA Package (as necessary). The WA Package will be assembled into a single PDF document prior to submission to the Contracts and Payment Section.

2.0 Task 2 – Field Activities

Under this task, TRC will perform the following scope of services:

2.1 Groundwater Sampling of Existing Wells

One round of groundwater samples will be collected from existing wells sampled by TRC in 2017 (MW-3 through MW-6, MW-224, MW-225, SF-MW-1 through SF-MW-12, SF-MW-101ML through SF-MW-107ML, SF-ISCO-PT-01, SF-ISCO-PT-02ML, SF-EISB-PT-01, SF-EISB-PT-02ML, SF-EISB-PT-03 and SF-EISB-PT-04), MW-209-530 and MW-212-580.

Groundwater monitoring wells SF-MW-1 through SF-MW-7 consist of clusters of up to 11 individual monitoring wells each. Groundwater samples will be collected from three monitoring wells at each location, as indicated in the table below.

Well ID	Mid-Point of Screen Intervals (feet bgs)	Planned Sample Collection Depth (feet bgs)
SF-MW-1	95.5, 105.5, 115.5, 125.5, 135.5, 145.5	105.5. 125.5, 145.5
SF-MW-2	89.5, 99.5, 109.5, 119.5, 129.5, 139.5, 159.5, 179.5, 199.5, 209.5, 219.5	99.5, 119.5, 219.5
SF-MW-3	90.5, 100.5, 110.5, 120.5, 130.5, 140.5, 160.5, 180.5, 200.5, 210.5, 220.5	100.5, 120.5, 220.5
SF-MW-4	84.5, 94.5, 104.5, 114.5, 124.5, 134.5, 154.5, 174.5, 194.5, 201.5, 214.5	134.5, 201.5, 214.5
SF-MW-5	84.5, 94.5, 104.5, 114.5, 124.5, 134.5, 154.5, 174.5, 194.5, 204.5, 214.5	134.5, 154.5, 214.5
SF-MW-6	79.5, 99.5, 119.5, 139.5, 159.5, 169.5, 179.5, 189.5, 199.5, 209.5, 219.5	139.5 ,169.5, 219.5
SF-MW-7	99.5, 119.5, 139.5, 159.5, 179.5, 199.5, 209.5, 219.5, 229.5, 239.5, 249.5	99.5, 219.5, 249.5

bgs – below ground surface

Groundwater monitoring wells SF-MW-8 through SF-MW-12, SF-MW-101ML through SF-MW-107ML, SF-ISCO-PT-02ML, and SF-EISB-PT-02ML consist of clusters of up to four individual monitoring wells each. Groundwater samples will be collected from each monitoring well at each location.

Groundwater samples will be submitted for laboratory analysis for Target Compound List (TCL) volatile organic compounds (VOCs) +10 Tentatively Identified Compounds (TICs). The groundwater samples collected from the four monitoring wells at location SF-MW-101ML will also be analyzed for TOD, OAD, total organic carbon (TOC), total buffer demand, acidity/alkalinity, and sulfate. Groundwater samples will be collected using low flow procedures. Field parameters, including water level, pH, oxidation reduction potential (ORP), dissolved oxygen (DO), turbidity and temperature, will be measured at the time of sample collection.

Upon collection, the samples will be placed into an iced cooler for delivery under chain-of-custody procedures to the laboratory. Quality control samples, including matrix spike and matrix spike duplicates will be collected at a minimum frequency of one per twenty samples and analyzed for VOCs. Trip blanks will be included in each cooler shipped to the laboratory containing samples for VOC analysis. Category B data deliverable packages and EDDs in EQuIS format will be furnished by the laboratory.

TRC will submit an interim email report to NYSDEC presenting the results of the groundwater sampling.

TRC will collect and submit for analysis groundwater samples from a total of 75 wells under this task. The cost estimate for this task is based on a 20-day sampling event utilizing two TRC staff.

2.2 Well Installation

Access Coordination

TRC will conduct one Site visit under this task to examine the physical features, topography and access associated with the Site and surrounding properties. During the Site visit, coordinates of pertinent on-Site features such as monitoring, air sparge (AS), and soil vapor extraction (SVE) wells, and AS/SVE system nested influence monitoring points (NIMPs), will be confirmed via global positioning system (GPS) survey. In addition, accessibility and GPS coordinates of proposed monitoring well locations will be confirmed.

Mobilization

TRC will prepare for and coordinate field work with the laboratories, utility surveyor, drilling subcontractor, land surveyor, and the investigation derived waste (IDW) disposal subcontractor under this task. TRC will assist the Department with acquiring the necessary access required from property owner(s) to implement field activities. However, TRC's cost estimate does not include time for property access negotiations since it is expected this will be completed by the Department.

TRC will confirm that the selected subcontractors obtain permits and approvals required for performing the investigation (as applicable). TRC will also prepare the site-specific HASP.

Utility Survey

Prior to intrusive activities, a private utility surveyor, under subcontract to TRC, will be retained to clear proposed drilling locations of underground utilities and structures. The utility survey will be performed as follows:

- Within approximately one week of drilling, the utility surveyor will clear an area up to 20 feet by 20 feet around each proposed soil boring/monitoring well location for underground utilities and other obstructions using a complement of surface geophysical methods that will include an electroconductivity meter and/or ground-penetrating radar. TRC will discuss any required soil boring repositioning, due to identified subsurface utilities/structures/anomalies, with the NYSDEC Project Manager prior to installation. It is anticipated that minor offsets (25 feet or less) will not require prior notification/approval.

- Subsurface structures/utilities detected in the project area will be identified on the ground surface with spray paint and/or closely spaced color-coded flagging. Results of the utility survey will be reviewed in the field between TRC and the utility surveyor the same day the service is provided. Results will also be summarized by the utility surveyor in a brief utility survey report at the conclusion of survey work and submitted to TRC. The utility survey report will include maps showing the locations and types of subsurface features identified, to the extent that information is acquired.

- TRC will confirm that the drilling subcontractor has contacted UDig NY, or the appropriate utility locating service; received/reviewed utility confirmation receipts; and, verified public utility mark-outs prior to intrusive work. The findings from the utility survey will supplement the findings from the UDig NY notifications requested by the driller.

Well Installation

One groundwater monitoring well cluster (SF-MW-201ML), consisting of three (3) monitoring wells, will be installed on-Site and one groundwater monitoring well cluster (SF-MW-202ML), consisting of three (3) monitoring wells, will be installed off-Site at the eastern end of Holly Lane. Proposed monitoring well locations are presented on **Figures 1 and 2.** However, locations may be adjusted, in consultation with the Department, following review of the utility survey. As during the Pre-Design Investigation, drilling activities may be completed following a 10-day on, including weekend days, 4-day off schedule.

Monitoring wells will be installed utilizing sonic drilling methods with 7, 8, and 10-inch outer casings and 6-inch diameter samplers. Construction details for the monitoring well clusters are provided in the table below. Final determination of depths for the deepest wells in monitoring well clusters SF-MW-201ML and SF-MW-202ML will be completed based on the depth of the clay surface, and in consultation with the Department.

Well ID	Well Details (Estimated)							
	Total Borehole Depth (feet)[1]	Sampler Dia. (inch)	Outer Casing Dia. (inch)	Well Dia. (inch)	Well Screen Interval (feet bgs)	Sump Interval (feet bgs)	Well Material	
							Casing	Screen/ Sump
SF-MW-201ML	550							
A		6	10	2.5	410 to 430	None	Sch 80 PVC	Sch 304 SS
B		6	8	2.5	460 to 480	None	Sch 80 PVC	Sch 304 SS
C		6	7	2.5	528 to 548[2]	548 to 550	Sch 80 PVC	Sch 304 SS
SF-MW-202ML	500							
A		6	10	2	365 to 385	None	Sch 80 PVC	Sch 80 PVC
B		6	8	2	390 to 410	None	Sch 80 PVC	Sch 80 PVC
C		6	7	2	480 to 500[2]	None	Sch 80 PVC	Sch 80 PVC

Notes:
[1] Borings will be terminated approximately 2 feet below the surface of the clay to enable collection of soil samples representative of the upper 18 inches of the clay..
[2] Estimated, deepest well screen will be completed directly above the surface of clay layer. Well screen length will be 20 feet.
PVC – Polyvinyl chloride
SS – Stainless steel

At each monitoring well cluster location, the boring will be advanced to the termination depth of the deepest well with 7-inch diameter casing and soil samples will be collected with a 6-inch diameter sampler in 10-

foot lengths from ground surface to the surface of the underlying clay layer. Soil samples will be screened for VOCs using a PID, inspected for indications of contamination (e.g., staining, odors, etc.) and characterized using the Unified Soil Classification System (USCS). The results of field screening and inspection will be recorded in the field logbook.

Three monitoring wells will be installed in each borehole as described in the table above. Wire-wrapped stainless steel well screens will be installed at SF-MW-201ML. No. 10-slot Schedule 80 PVC well screens will be installed at SF-MW-202ML. The borehole annulus for each well will be backfilled with No. 2 sand to 2 feet above the well screen. A 1-foot thick (minimum) layer of choker sand (No. 00) will be placed directly above the filter pack of each well. An approximately 2-foot-thick hydrated bentonite seal will be placed directly above the choker sand. The borehole annulus for each well will be backfilled with No. 2 sand to 10 feet above the bentonite seal. Larger diameter "over-ride" casing will then be installed to the bottom depth of the next (shallower) well and the natural formation will be allowed to collapse around the well clusters as the casing is retracted. If the natural formation does not collapse, No. 2 sand will be added as needed to achieve target depths. An approximately 2-foot-thick hydrated bentonite seal will be placed at the surface of the water table at each location, and the remaining annular space above the seal will be grouted to the ground surface. Each well will be completed with a flush-mount protective steel manhole and lid in a concrete pad.

The cost estimate for this task is based on 45 drilling days for drilling, installation, and development.

Soil Profiling

TRC will select soil samples exhibiting PID measurements greater than 50 ppm for laboratory analysis of TCL VOCs and TOC at a frequency not to exceed one sample per 25-foot vertical interval and biased to the highest PID readings. Additionally, soil samples will be selected for laboratory analysis as follows:

- SF-MW-201ML: soil samples will be submitted for laboratory analysis of TOD, OAD, TOC, total buffer demand and soil characteristics (grain size, bulk density and permeability) at approximately every 50 vertical feet of the saturated zone. Soil samples collected from the top 2 feet of the underlying clay and from 2 to 4 feet into the clay will be submitted to the laboratory for analysis of TCL VOCs, TOC, TOD, OAD, total buffer demand, and soil characteristics (grain size, bulk density and permeability).

- SF-MW-202ML: soil samples collected from the top 2 feet of the underlying clay and from 2 to 4 feet into the clay will be submitted to the laboratory for analysis of TCL VOCs and soil characteristics (TOC, grain size, bulk density and permeability).

TRC, in consultation with the Department, may alter intervals selected for analysis based on field observations.

TRC will collect soil samples with dedicated laboratory-provided containers and samples will be transported to the laboratories under chain-of-custody protocols. QA/QC samples (matrix spike, matrix spike duplicate, field duplicate, and equipment blank) will be collected at a frequency of 1 per 20 samples and analyzed for VOCs only.

Groundwater Vertical Profiling

During advancement of the soil boring for each monitoring well cluster, field-filtered groundwater samples will be collected with a push-ahead vertical groundwater profiling tool and submitted for laboratory analysis of TCL VOCs +10 TICs. At SF-MW-201ML groundwater samples will be collected every 50 feet (approximate), starting at the water table (approximately 85 feet bgs) to a maximum depth of 550 bgs. Additional groundwater volume, representing every 100-foot vertical interval, will be collected utilizing the sonic push-ahead method to supply the groundwater required for the column tests described below. At SF-MW-202ML groundwater samples will be collected every 50 feet (approximate), starting at approximately -100 feet North American Vertical Datum of 1988 (NAVD88) (approximately 250 feet bgs) to a maximum depth of 500 bgs. Each groundwater sample interval will be purged for a maximum of one hour prior to sample collection. During purging, TRC will monitor and record groundwater parameters including temperature, specific conductance, pH, ORP, DO, and turbidity. If turbidity cannot be reduced to less 50 nephelometric units during purging, in-line filters will be utilized to minimize turbidity prior to sample collection.

TRC will collect groundwater samples with dedicated laboratory-provided containers and samples will be transported to the laboratories under chain-of-custody protocols. QA/QC samples (matrix spike, matrix spike duplicate, field duplicate, and equipment blank) will be collected at a frequency of 1 per 20 samples and analyzed for VOCs only. Additionally, one trip blank will be submitted for analysis of VOCs per cooler containing groundwater samples to be analyzed for VOCs.

Well Development

At least 24 hours after installation, each newly installed well will be developed by airlifting techniques. Development will be considered complete when either turbidity is below 50 nephelometric turbidity units (NTUs), the well purges dry, or three well volumes have been removed, whichever occurs first.

Groundwater Sampling of New Wells

One round of groundwater samples will be collected from the monitoring wells installed under this task. TRC will collect groundwater samples with dedicated laboratory-provided containers and samples will be transported to the laboratory under chain-of-custody protocols. Groundwater samples will be analyzed for TCL VOCs +10 TICs via USEPA Method 8260. QA/QC samples (matrix spike, matrix spike duplicate, field duplicate, and equipment blank) will be collected at a frequency of 1 per 20 samples and analyzed for VOCs. Additionally, one trip blank will be submitted for analysis of VOCs per cooler containing

groundwater samples to be analyzed for VOCs. In addition, the groundwater samples collected from the nested wells at SF-MW-201ML will be analyzed for TOC, TOD, OAD, total buffer demand, acidity/alkalinity and sulfate.

A synoptic water level measurement event of new and existing wells sampled under Task 2 will be performed. The new and existing monitoring wells will be gauged for total well depth, depth to water, and if present, depth to non-aqueous phase liquid (NAPL). Depth to water measurements will be used to prepare groundwater surface elevation contour maps.

Land Survey

A land survey will be completed following the installation of the new wells. Property boundaries shown on the survey will be approximate, based on tax maps and not a certified boundary survey. The survey will include:

- Newly installed groundwater monitoring wells (location, ground surface elevation, top of outer casing and top of riser elevation).
- Approximate topography and physical features will be mapped using available imagery in the public domain.

2.3 Bench-Scale Column Tests

During the installation of SF-MW-201ML, soil samples from the following (approximate) vertical intervals (VIs) of the saturated zone will be submitted for bench-scale column tests:

- VI-1: 80 to 200 feet bgs;
- VI-2: 200 to 300 feet bgs;
- VI-3: 300 to 400 feet bgs;
- VI-4: 400 to 500 feet bgs; and
- VI-5: 500 to 550 feet bgs.

The column tests will evaluate in-situ chemical oxidation (ISCO) reagent transport simulating high-volume injection and reagent behavior. Based on the results of previous bench-scale and injection pilot testing performed by TRC at the Site, the column tests will be conducted with activated persulfate at multiple loading volumes. The results of the column tests will provide ranges for amendment retardation factors, amendment loss rate, activation loss rate, and reaction loss rate, which are needed for ISCO design. Costs to complete up to five column tests are included in this WA.

2.4 Investigation Derived Waste (IDW)

Investigation-derived waste, including used plastic sheeting, personal protective equipment (PPE), sampling equipment (e.g., tubing, scoops, gloves, rope, etc.), soil cuttings, drilling fluids, development

water, purge water and decontamination wastewater will be containerized in 55-gallon drums at each well location, and transported daily and staged on pallets at a location at the Solvent Finishers Site. The drum staging area will be secured with gated and locked temporary fencing.

Waste resulting from investigation activities will be removed and disposed at appropriate facilities. The waste will be sampled, profiled, and disposed of off-Site following the completion of the well installation and sampling activities. Disposable PPE and sampling equipment will be transported off-Site for disposal as solid waste, unless grossly contaminated. The cost estimate is based on disposal of up to 30 drums of hazardous liquid waste, 65 drums of non-hazardous liquid waste, 10 drums of hazardous solid waste, 45 drums of non-hazardous solid waste, 5 empty drums, and 10 drums of municipal-type solid waste.

2.5 Data Validation

Data Usability Summary Reports (DUSRs) for laboratory results of VOCs only will be prepared by an independent data validator under subcontract to TRC in accordance with NYSDEC DER-10, Appendix 2B "Guidance for Data Deliverables and the Development of DUSRs." Laboratory results of VOC analyses performed as part of bench-scale testing will not be validated.

3.0 Task 3 – Reporting

3.1 Preparation of Data Summary Report

TRC will prepare a Data Summary Report that documents the work performed, observations recorded, data collected, findings, and conclusions. The report will include:

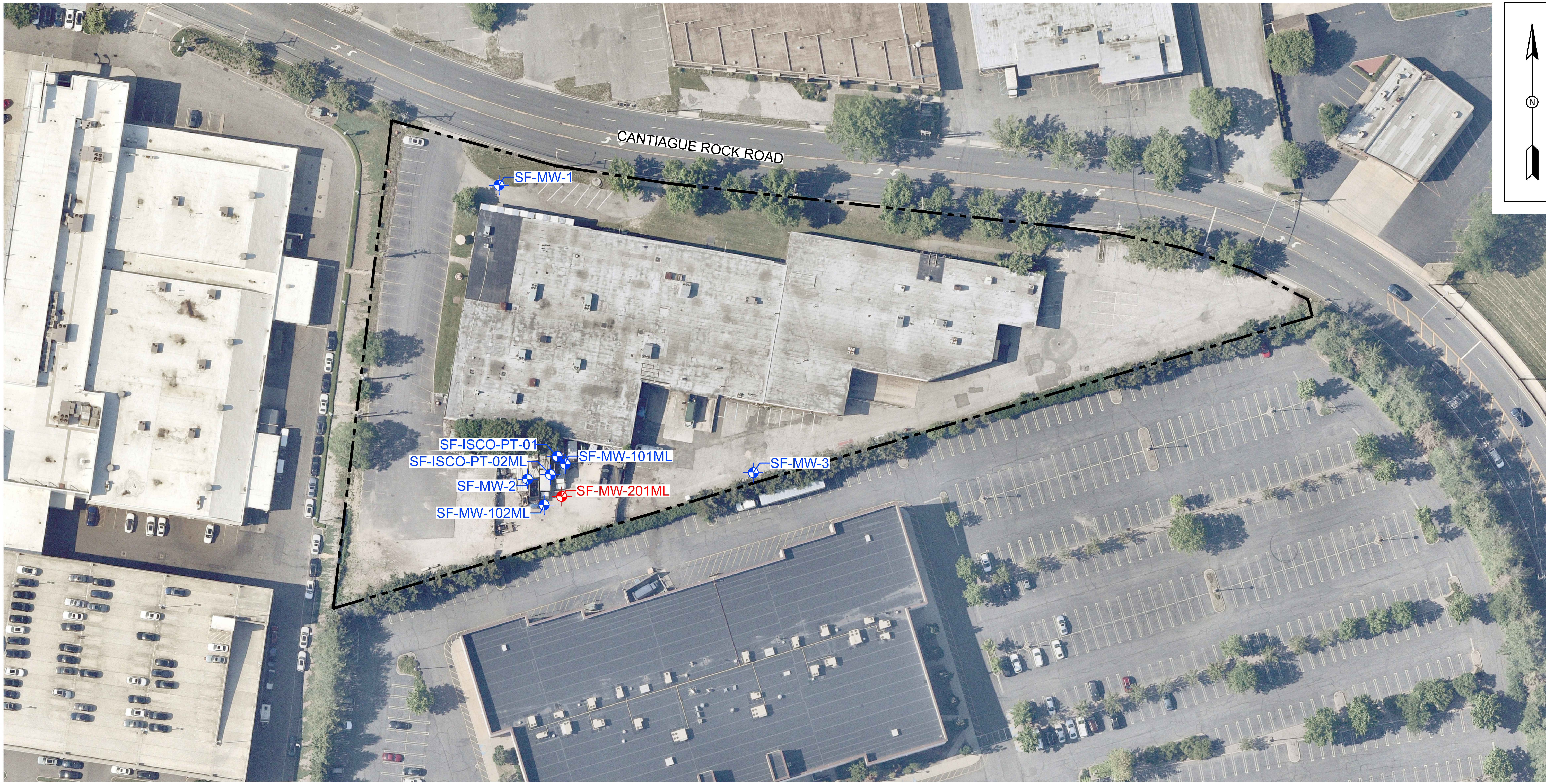
- A description of field activities completed.
- Results of laboratory analyses and column tests.
- DUSRs.
- Relevant data and findings included in recent investigation reports for the Sylvania Corning Plant/Former Sylvania Electric Products Facility and New Cassel/Hicksville Groundwater Contamination Superfund Site.
- Updated figures and cross-sections from the Pre-Design Investigation Report, previously prepared by TRC.
- Conclusions and recommendations for next steps, as appropriate.

4.0 Project Schedule

Presented below is a milestone schedule for implementation of each of the tasks described above. The schedule will be updated periodically, and progress will be summarized in the regular monthly project progress reports during project implementation.

Task No.	Task Description	Estimated Completion Date[1]
1	***Preliminary Activities***	
	Work Assignment Package	August 2023
2	***Field Activities***	
	Groundwater Sampling of Existing Wells[2]	October 2023
	Well Installation and Development[3]	February 2024
	Groundwater Sampling of New Wells[2]	March 2024
	IDW Management	March 2024
	Data Validation[4]	May 2024
	Bench-Scale Column Tests	May 2024
3	***Reporting***	
	Data Summary Report	July 2024

[1]Based on a work assignment approval date of August 25, 2023.
[2]Does not include receipt of analytical laboratory data packages.
[3]Land surveying is included as part of this task. Estimated completion date is based on communications with drilling subcontractor. Drilling subcontractor has indicated a potential start date of December 2023.
[4]Based on a maximum laboratory turnaround time of 30 calendar days for complete and accurate ASP Category B laboratory analytical data packages.



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- SF-MW-### — ON-SITE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- SF-MW-201ML — PROPOSED ON-SITE MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED MAY 26, 2023.

0 80' 160'

SCALE: 1" = 80'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS - SITE NO. 130172
601 CANTIAGUE ROCK ROAD
WESTBURY, NY

TITLE:
PROPOSED ON-SITE WELL INSTALLATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	545267.0000.0000
CHECKED BY:	J. BOCHNER	FIGURE 1	
APPROVED BY:	D. WARREN		
DATE:	AUGUST 2023		

TRC
1430 Broadway,10th Floor
New York, NY 10018
Phone: 212.221.7822
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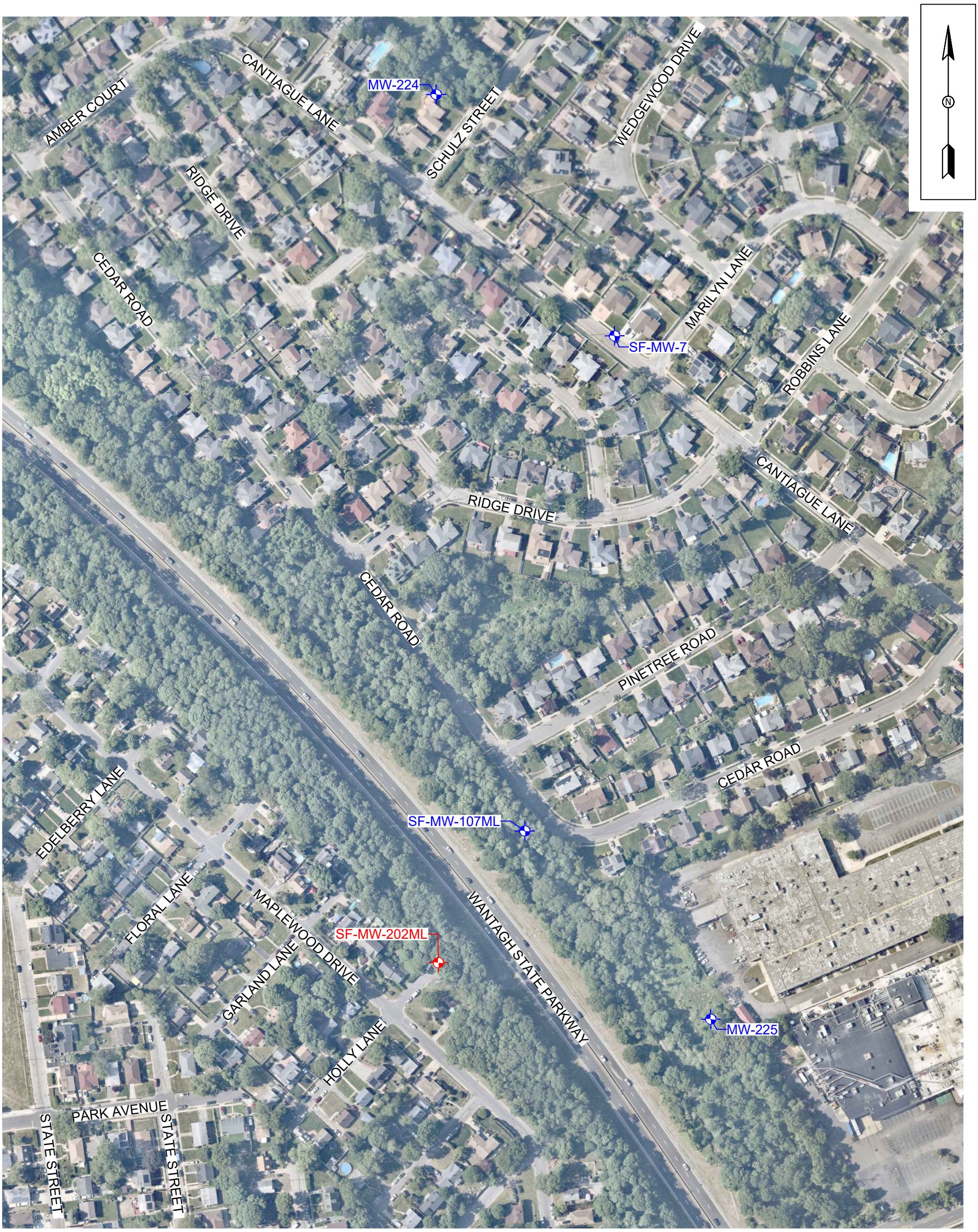
FILE NO.: Fig 1 - Prop. On-Site Well Install. Plan (SF).dwg



LEGEND (SYMBOLS NOT TO SCALE):

- SITE BOUNDARY
- SF-MW-###, MW-### — MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- SF-MW-202ML — PROPOSED MONITORING WELL LOCATION AND IDENTIFICATION NUMBER

NOTES:

1. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND BOUNDARIES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
2. BASEMAP IMAGERY SOURCED FROM NEARMAP DATED MAY 26, 2023.

0 200' 400'

SCALE: 1" = 200'
SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS - SITE NO. 130172
601 CANTIAGUE ROCK ROAD
WESTBURY, NY

TITLE:
PROPOSED OFF-SITE WELL INSTALLATION PLAN

DRAWN BY:	H. DELGADO	PROJ NO.:	545267.0000.0000
CHECKED BY:	J. BOCHNER		
APPROVED BY:	D. WARREN		**FIGURE 2**
DATE:	AUGUST 2023		

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FILE NO.: Fig 2 - Prop. Off-Site Well Install. Plan (SF).dwg

SCHEDULE 2

SCHEDULE 2.11s

SOLVENT FINISHERS

WA NO: D009812-37

REMEDIAL DESIGN

Schedule 2.11(a)

Summary of Work Assignment Price
Solvent Finishers
Contract/WA No. D009812-37

	Price
1) Direct Salary Costs (Schedules 2.10(a) and 2.11(b))	$111,249
2) Indirect Costs (Schedule 2.10(e))	$182,904
3) Direct Non-Salary Costs (Schedules 2.10(b)(c)(d) and 2.11(c))	$82,003

Unit Price/Lump-Sum Subcontract Costs (Schedule 2.11(d))

Name of Subcontractor	Services To Be Performed	Subcontract Price
i) Eurofins Environment Testing	Laboratory Services	$17,453
ii) ALS Group USA, Corporation	Laboratory Services	$946
iii) Cascade Drilling, L.P.	Drilling Services	$521,967
iv) Greenstar Environmental Solutions, LLC (WBE)	Utility Locating Services	$1,950
v) Bethlehem Land Surveying, PLLC (SDVOB)	Land Surveying Services	$2,420
vi) Vali-Data of WNY (WBE)	Data Validation	$4,550
vii) AARCO Environmental Services Corporation	Investigation-Derived Waste Management	$39,340
viii) Terra Systems, Inc.	Bench-Scale Column Testing	$70,000

4) Total Unit Price/Lump-Sum Subcontracts	$658,626
5) Subcontract Management Fee	$32,762
6) Total Subcontract Costs (Lines 4 + 5)	$691,388
7) Fixed Fee (Schedule 2.10(f))	$22,061
8) Total Work Assignment Price (Lines 1 + 2 + 3 + 6 + 7)	$1,089,605

Schedule 2.11(b)

Direct Labor Hours
Solvent Finishers
Contract/WA No. D009812-37

Labor Classification	IX		VIII		VII		VI		V		IV		III		II		I		Total Hours	Total Costs
Year: 2023	Hours	$86.75	Hours	$86.75	Hours	$80.54	Hours	$64.50	Hours	$49.51	Hours	$41.99	Hours	$35.24	Hours	$27.38	Hours			
Task 1 - Direct Labor	4.0	$347.00	10.0	$867.50	115.0	$9,262.10		$0.00	40.0	$1,980.40	60.0	$2,519.40	55.0	$1,938.20		$0.00		$0.00	284.0	$16,914.60
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	4.0	$109.52		$0.00	4.0	$109.52
Task 2 - Direct Labor	2.0	$173.50	22.0	$1,908.50	46.0	$3,704.84	45.0	$2,902.50	100.0	$4,951.00	236.0	$9,909.64	235.0	$8,281.40		$0.00		$0.00	686.0	$31,831.38
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	20.0	$547.60		$0.00	20.0	$547.60
Task 3 - Direct Labor	2.0	$173.50	4.0	$347.00	8.0	$644.32		$0.00	10.0	$495.10	32.0	$1,343.68		$0.00		$0.00		$0.00	56.0	$3,003.60
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00
Subtotal Hours	8.0		36.0		169.0		45.0		150.0		328.0		290.0		24.0		0.0		1,050.0	
Subtotal Cost Year: 2023		$694.00		$3,123.00		$13,611.26		$2,902.50		$7,426.50		$13,772.72		$10,219.60		$657.12		$0.00		$52,406.70
Labor Classification	IX		VIII		VII		VI		V		IV		III		II		I		Total Hours	Total Costs
Year: 2024	Hours	$89.35	Hours	$89.35	Hours	$82.96	Hours	$66.44	Hours	$51.00	Hours	$43.25	Hours	$36.30	Hours	$28.20	Hours			
Task 1 - Direct Labor		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00
Task 2 - Direct Labor	2.0	$178.70	34.0	$3,037.90	72.0	$5,973.12	91	$6,046.04	116.0	$5,916.00	417.0	$18,035.25	127	$4,610.10		$0.00		$0.00	859.0	$43,797.11
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00
Task 3 - Direct Labor	6.0	$536.10	6.0	$536.10	32.0	$2,654.72		$0.00	65.0	$3,315.00	172.0	$7,439.00		$0.00		$0.00		$0.00	281.0	$14,480.92
- Administrative		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00		$0.00	20.0	$564.00		$0.00	20.0	$564.00
Subtotal Hours	8.0		40.0		104.0		91.0		181.0		589.0		127.0		20.0		0.0		1,160.0	
Subtotal Cost Year: 2024		$714.80		$3,574.00		$8,627.84		$6,046.04		$9,231.00		$25,474.25		$4,610.10		$564.00		$0.00		$58,842.03
Total Administrative	0.0	$0.00	0.0	$0.00	0.0	$0.00	0.0	$0.00	0.0	$0.00	0.0	$0.00	0.0	$0.00	44.0	$1,221.12	0.0	$0.00	44.0	$1,221.12
Total All Hours		16.0		76.0		273.0		136.0		331.0		917.0		417.0		44.0		0.0		2,210.0
Total All Cost		$1,408.80		$6,697.00		$22,239.10		$8,948.54		$16,657.50		$39,246.97		$14,829.70		$1,221.12		$0.00		$111,248.73

Schedule 2.11(c)

Direct Non-Salary Costs
(Includes Equipment and Consumables)
Solvent Finishers
Contract/WA No. D009812-37

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
A)	**Non-Salary Costs**				
B)	**Equipment and Consumables**				
Task 2- Field Activities					
1)	CAMP Equipment (2 sets)	$ 3,375.14	Month	2	$ 6,750.28
2)	CAMP Equipment (2 sets)	$ 1,128.26	Week	1	$ 1,128.26
3)	Photoionization Detector - 11.7 eV (PID)	$ 791.35	Month	2	$ 1,582.70
4)	Horiba U-52	$ 765.98	Month	2	$ 1,531.96
5)	Photoionization Detector - 11.7 eV (PID)	$ 245.39	Week	5	$ 1,226.95
6)	QED Bladder Pump - 1.75" OD	$ 136.07	Week	4	$ 544.28
7)	LDPE QED Bladder Kit	$ 38.52	Each	22	$ 847.44
8)	LDPE QED Bladder Pump Tubing	$ 0.98	Each	2,500	$ 2,450.00
9)	QED Bladder Pump Controller	$ 271.43	Week	4	$ 1,085.72
10)	Carbon Dioxide Tank	$ 14.74	Week	4	$ 58.96
11)	Carbon Dioxide Tank Refill	$ 42.65	Each	5	$ 213.25
12)	Hydrolift Pump	$ 306.98	Week	4	$ 1,227.92
13)	LDPE Hydrolift Tubing - 500 Feet	$ 154.93	Each	8	$ 1,239.44
14)	Micro-Flo Footvalve - Stainless Steel	$ 24.04	Each	6	$ 144.24
15)	Generator (2 Units)	$ 246.08	Week	4	$ 984.32
16)	Grundfos Pump	$ 191.92	Week	4	$ 767.68
17)	Grundfos Controller	$ 150.46	Week	4	$ 601.84
18)	Grundfos Tubing	$ 154.93	Each	27	$ 4,183.11
19)	Compressor and Marine Battery	$ 313.82	Week	5	$ 1,569.10
20)	Geotech Bladder Pump	$ 136.07	Week	5	$ 680.35
21)	Geotech Bladder Pump DropTube Assembly	$ 36.68	Week	5	$ 183.40
22)	Geotech Bladder Pump Controller	$ 121.67	Week	5	$ 608.35
23)	LDPE Geotech Bladder Kit	$ 38.52	Each	25	$ 963.00
24)	LDPE Geotech Bladder Pump Tubing	$ 1.20	Per Foot	2,500	$ 3,000.00
25)	Horiba U-52	$ 271.43	Week	6	$ 1,628.58
26)	Oil/Water Interface Probe - 1,000 Feet	$ 127.15	Week	5	$ 635.75
27)	Oil/Water Interface Probe - 1,000 Feet	$ 47.30	Day	2	$ 94.60
28)	Skinny Water Level Meter - 300 feet	$ 127.15	Week	4	$ 508.60
29)	Skinny Water Level Meter - 300 feet	$ 47.30	Day	2	$ 94.60
30)	Open-Top 55-Gallon Drum	$ 90.30	Each	20	$ 1,806.00
31)	0.45 Micron Inline Filter	$ 21.76	Each	25	$ 544.00
32)	Nylon twine - 600 feet	$ 43.52	Each	20	$ 870.40
33)	5-Gallon Bucket with Lid	$ 8.49	Each	10	$ 84.90
34)	Deionized Water - 10 Liters	$ 51.14	Each	27	$ 1,380.78
35)	Powder-Free Nitrile Gloves	$ 24.48	Each	16	$ 391.68
36)	Sample Shipping to Geotechnical Laboratory	$ 150.00	Per Sample	2	$ 300.00
37)	Sample Shipping to Treatability Laboratory	$ 500.00	Per Sample	12	$ 6,000.00
38)	Sample Packaging Materials	$ 25.00	Per Sample	12	$ 300.00
39)	Misc. (Field Supplies, Plastic Bags, Ice, etc.)	$ 100.00	Day	68	$ 6,800.00
40)	Fencing Rental	$ 400.00	Month	5	$ 2,000.00
				Subtotal	**$ 57,012.44**
C)	**Miscellaneous (Lodging, Meals, and Transportation)**				
Task 2- Field Activities					
1)	Tolls	$ 25.00	Day	20	$ 500.00
2)	Rental Car	$ 465.00	Week	13	$ 6,045.00
3)	Rental Car	$ 95.00	Day	22	$ 2,090.00
4)	Fuel for Rental Car	$ 40.00	Day	39	$ 1,560.00
5)	Mileage (Personal Vehicle - 2023)	$ 0.655	Mile	2,810	$ 1,840.55
6)	Rental Van	$ 500.00	Week	4	$ 2,000.00
7)	Rental Van	$ 100.00	Day	3	$ 300.00
8)	Fuel for Rental Van	$ 25.00	Day	23	$ 575.00
9)	Lodging (GSA 2024, Nassau County)	$ 150.00	Day	45	$ 6,750.00
10)	Per Diem (GSA 2024, Nassau County)	$ 74.00	Day	45	$ 3,330.00
				Subtotal	**$ 24,990.55**

TOTAL DIRECT NON-SALARY COSTS $ 82,002.99

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Eurofins Environment Testing	Laboratory Services	$17,452.65	$872.63

Item		Method No.	Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities						
1)	TCL Volatiles +10 - Non-Aqueous	8260D	$ 60.00	Each	27	$ 1,620.00
2)	Total Organic Carbon - Non-Aqueous	415.1	$ 53.00	Each	23	$ 1,219.00
3)	TCL Volatiles +10 - Aqueous	8260D	$ 60.00	Each	155	$ 9,300.00
4)	Acidity - Aqueous	SM 2310B	$ 9.00	Each	7	$ 63.00
5)	Alkalinity - Aqueous	SM 2320B	$ 9.00	Each	7	$ 63.00
6)	Sulfate - Aqueous	300	$ 10.00	Each	7	$ 70.00
7)	Total Organic Carbon - Aqueous	415.1	$ 22.00	Each	7	$ 154.00
8)	pH - Non-Aqueous	9040C	$ 6.00	Each	3	$ 18.00
9)	Toxicity Characteristic Leaching Procedure (TCLP) - Non-Aqueous	1311	$ 471.50	Each	3	$ 1,414.50
10)	pH - Aqueous	9040C	$ 6.00	Each	4	$ 24.00
11)	Toxicity Characteristic Leaching Procedure (TCLP) - Aqueous	1311	$ 471.50	Each	4	$ 1,886.00
					Subtotal	**$ 15,831.50**

Subtotal Subcontract Price	**$ 15,831.50**
CPI Adjustment Fee Jan. 2023 (10.24%)	**$ 1,621.15**
Adjusted Subtotal Subcontract Price	**$ 17,452.65**
Subcontract Management Fee	**$ 872.63**
TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 18,325.28**

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
ALS Group USA, Corporation	Laboratory Services	$945.98	$0.00

Item		Method No.	Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities						
1)	Grain Size*	ASTM D422-63	$ 117.33	Each	2	$ 234.66
2)	Bulk Density*	D5057-90	$ 47.33	Each	2	$ 94.66
3)	Permeability*	ASTM D2434	$ 308.33	Each	2	$ 616.66
					Subtotal	**$ 945.98**

Subtotal Subcontract Price	**$ 945.98**
CPI Adjustment Fee Jan. 2023 (10.24%)	**$ -**
Adjusted Subtotal Subcontract Price	**$ 945.98**
Subtotal Subcontract Management Fee	**$ -**
TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 945.98**

Notes:
* Non-escalated.

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Cascade Drilling, L.P.	Drilling Services	$521,967.13	$26,098.36

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities					
1A)	Mobilization/Demobilization, including Site Setup, Site Breakdown, Cleanup, Repair, Initial and Final Equipment Decontamination, Travel, Lodging, Meals and Labor*	$ 59,650.00	Lump Sum	1	$ 59,650.00
1B)	Construction and Removal of Decontamination Pad	$ 543.75	Lump Sum	1	$ 543.75
1C)	Well/Boring Setup	$ 190.31	Each	2	$ 380.62
1D)	Road Opening Permit*	$ 560.00	0	1	$ 560.00
2F) (1B)	Sonic Drilling (0 to 50 FT), 8-IN OD Casing	$ 65.25	Linear Foot	100	$ 6,525.00
2F) (1C)	Sonic Drilling (0 to 50 FT), 10-IN OD Casing	$ 87.00	Linear Foot	100	$ 8,700.00
2F) (2B)	Sonic Drilling (50 to 100 FT), 8-IN OD Casing	$ 65.25	Linear Foot	100	$ 6,525.00
2F) (2C)	Sonic Drilling (50 to 100 FT), 10-IN OD Casing	$ 87.00	Linear Foot	100	$ 8,700.00
2F) (3B)	Sonic Drilling (100 to 200 FT), 8-IN OD Casing	$ 81.56	Linear Foot	200	$ 16,312.00
2F) (3C)	Sonic Drilling (100 to 200 FT), 10-IN OD Casing	$ 108.75	Linear Foot	200	$ 21,750.00
2F) (4B)	Sonic Drilling (Greater than 200 FT), 8-IN OD Casing	$ 108.75	Linear Foot	490	$ 53,287.50
2F) (4C)	Sonic Drilling (Greater than 200 FT), 10-IN OD Casing	$ 135.94	Linear Foot	415	$ 56,415.10
6B) (1B)	Sonic Core Borehole Sampling (0 to 50 FT), 6-IN OD	$ 10.88	Per Sample	10	$ 108.80
6B) (2B)	Sonic Core Borehole Sampling (50 to 100 FT), 6-IN OD	$ 10.88	Per Sample	10	$ 108.80
6B) (2B)	Sonic Core Borehole Sampling (100 to 200 FT), 6-IN OD	$ 10.88	Per Sample	20	$ 217.60
6B) (2B)	Sonic Core Borehole Sampling (Greater than 200 FT), 6-IN OD	$ 10.88	Per Sample	65	$ 707.20
6D) (2)	Groundwater Sampling (Screen Point Sampler or Equivalent), 50 to 100 feet in depth	$ 407.81	Per Sample	2	$ 815.62
6D) (3)	Groundwater Sampling (Screen Point Sampler or Equivalent), 100 to 200 feet in depth	$ 489.38	Per Sample	3	$ 1,468.14
6D) (4)	Groundwater Sampling (Screen Point Sampler or Equivalent), Greater than 200 feet in depth	$ 652.50	Per Sample	18	$ 11,745.00
9B) (1)	Well Riser, Schedule 80 PVC, 2.5-IN ID	$ 8.70	Per Foot	1400	$ 12,180.00
10)	Well Screen Sand Pack Material (No. 00 to No. 2 Size Sand)	$ 32.63	Per Bag (50 lbs)	180	$ 5,873.40
11A)	Bentonite Pellets	$ 108.75	Per 5-Gallon Pail	11	$ 1,196.25
12B)	Grout, Portland Cement - Type II	$ 32.63	Per Bag (94 lbs)	30	$ 978.90
14C)	Keyed Alike Locks (Protective Covers)	$ 16.31	Per Lock	6	$ 97.86
15A)	Empty, DOT-approved, 55-gal Steel Open-top Drums	$ 87.00	Per 55-Gallon Drum	145	$ 12,615.00
15B)	Filling, Moving (within 0.25 mile of Drill Site) and Staging of 55-gal Drums (Containing Drill Cuttings, Drilling Fluids, Purge Water, Development Water, Decontamination Water, and/or Disposal PPE, Sampling Equipment, and Polyethylene Sheeting) on Pallets	$ 353.44	Per Day	15	$ 5,301.60
15C)	Move Filled Drums to Secondary Location within 1 Mile of Drill Site (May Include Emptying Drums into Larger Container to be Provided by Others)	$ 353.44	Per Day	12	$ 4,241.28
16C)	Well Development, Air Lifting	$ 353.44	Per Hour	24	$ 8,482.56
20B)	Site Restoration: Topsoil	$ 92.44	Cubic Yard	4	$ 369.76
20C)	Site Restoration: Grass Seeding	$ 5.44	Square Yard	30	$ 163.20
20D)	Site Restoration: Asphalt Repair/Patch	$ 32.63	Per Bag (60 lbs)	10	$ 326.30
22)	Standby Time (Labor & Equipment)	$ 570.94	Per Hour	10	$ 5,709.40
24A) (1A)	Sonic Drilling (0 to 50 FT), 7-IN OD Casing*	$ 68.00	Linear Foot	100	$ 6,800.00
24A) (2A)	Sonic Drilling (50 to 100 FT), 7-IN OD Casing*	$ 78.00	Linear Foot	100	$ 7,800.00
24A) (3A)	Sonic Drilling (100 to 200 FT), 7-IN OD Casing*	$ 88.00	Linear Foot	200	$ 17,600.00

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
24A) (4A)	Sonic Drilling (Greater than 200 FT), 7-IN OD Casing*	$ 98.00	Linear Foot	650	$ 63,700.00
24B) (1)	Well Riser, Schedule 80 PVC, 2-IN ID*	$ 6.70	Per Foot	1235	$ 8,274.50
24C) (1)	Well Screen, Schedule 80 PVC, 2-IN ID*	$ 15.60	Per Foot	60	$ 936.00
24D) (1)	Well Screen, Stainless Steel, Schedule 5, Type 304 2.5-IN ID*	$ 89.00	Per Foot	60	$ 5,340.00
24E)	Water Hauling (When On-Site Water is Insufficient/Unavailable; Provide an Additional Laborer, excluding Driller/Helper and Vehicle with Min. 500-gal Capacity to Supply Potable Water, including the Cost of any Required Permit and/or Water Meter)*	$ 18,567.00	Lump Sum	1	$ 18,567.00
24F)	Flush-to-grade Protective Steel Cover (with Drain Hole, including Frame and Lid, Set in 2FTX2FT Concrete Pad Extending at Least 6 IN BGS), 12-IN ID*	$ 990.00	Each	2	$ 1,980.00
24G)	Prevailing Wage Escalation*	$ 185.00	Per Day	45	$ 8,325.00
24H)	Lexan Liner Sampling (5-Foot Length)*	$ 1,400.00	Each	32	$ 44,800.00
				Subtotal	**$ 496,178.14**

Subtotal Subcontract Price	**$ 496,178.14**
CPI Adjustment Fee Jan. 2023 (10.24%)	**$ 25,788.99**
Adjusted Subtotal Subcontract Price	**$ 521,967.13**
Subcontract Management Fee	**$ 26,098.36**
TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 548,065.49**

Notes:
* Non-escalated.
The unit pricing shown above is from TRC's Standby Drilling Services contract with Cascade Drilling, L.P., where applicable.
Item numbers are per TRC's Subcontract for Standby Drilling Services, where applicable.
Water hauling services (Item No. 24E) were bid as lump sum, instead of utilizing the Standby Drilling Services daily contract rate, to control costs. Utilization of the daily contract rate would have resulted in greater cost.

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Greenstar Environmental Solutions, LLC (WBE)	Utility Locating Services	$ 1,950.00	$ 97.50

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities					
1)	Utility Locating Services	$ 1,750.00	Lump Sum	1	$ 1,750.00
2)	Utility Survey Report	$ 200.00	Each	1	$ 200.00
				Subtotal	**$ 1,950.00**
				Subtotal Subcontract Price	**$ 1,950.00**
				Subcontract Management Fee	**$ 97.50**
				TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 2,047.50**

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Bethlehem Land Surveying, PLLC (SDVOB)	Land Surveying Services	$2,420.00	$0.00

Item	Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities				
1) Land Surveying Services	$ 2,420.00	Lump Sum	1	$ 2,420.00
			Subtotal	**$ 2,420.00**
			Subtotal Subcontract Price	**$ 2,420.00**
			Subcontract Management Fee	**$ -**
			TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 2,420.00**

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Vali-Data of WNY (WBE)	Data Validation	$4,550.00	$227.50

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities					
Solid and Aqueous Environmental Sample Matrices					
1)	TCL VOCs + 10 TICs - Solid	$ 25.00	Each	27	$ 675.00
2)	DUSR and EQuiS EDD Update	$ -	Each	8	$ -
3)	Laboratory Coordination Exceeding 1-Hour per SDG	$ -	Hour	8	$ -
4)	TCL VOCs + 10 TICs - Aqueous	$ 25.00	Each	155	$ 3,875.00
5)	DUSR and EQuiS EDD Update	$ -	Each	30	$ -
6)	Laboratory Coordination Exceeding 1-Hour per SDG	$ -	Hour	30	$ -
				Subtotal	**$ 4,550.00**

Subtotal Subcontract Price	**$ 4,550.00**
Subcontract Management Fee	**$ 227.50**
TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 4,777.50**

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
AARCO Environmental Services Corporation	Investigation-Derived Waste Management	$39,340.00	$1,967.00

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities					
1)	Drum Pickup and Transportation Fee (up to 20 Drums per Pickup)	$ 800.00	Per Event	9	$ 7,200.00
2)	Disposal of Empty Drums	$ 25.00	Empty 55-Gallon Drum	5	$ 125.00
3)	Disposal of Municipal-Type Solid IDW	$ 89.00	Full 55-Gallon Drum	10	$ 890.00
4)	Disposal of Hazardous Solid IDW	$ 650.00	Full 55-Gallon Drum	10	$ 6,500.00
5)	Disposal of Non-Hazardous Solid IDW	$ 89.00	Full 55-Gallon Drum	45	$ 4,005.00
6)	Disposal of Hazardous Liquid IDW	$ 475.00	Full 55-Gallon Drum	30	$ 14,250.00
7)	Disposal of Non-Hazardous Liquid IDW	$ 98.00	Full 55-Gallon Drum	65	$ 6,370.00
				Subtotal	**$ 39,340.00**
				Subtotal Subcontract Price	**$ 39,340.00**
				Subcontract Management Fee	**$ 1,967.00**
				TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 41,307.00**

Schedule 2.11(d)

Unit Price/Lump-Sum Subcontracts
Solvent Finishers
Contract/WA No. D009812-37

Name of Subcontractor	Services to be Performed	Subcontract Price	Management Fee
Terra Systems, Inc.	Bench-Scale Column Testing	$70,000.00	$3,500.00

Item		Max. Reimbursement Rate	Unit	Est. No. of Units	Total Estimated Cost
Task 2- Field Activities					
1)	Grain Size via Method ASTM D6913 or D7928 - Non-Aqueous	$ 136.40	Per Sample	7	$ 954.80
2)	Bulk Density via Method ASTM D7263 - Non-Aqueous	$ 27.50	Per Sample	7	$ 192.50
3)	Permeability - Non-Aqueous	$ 643.50	Per Sample	7	$ 4,504.50
4)	48-Hour Total Oxidant Demand - Non-Aqueous	$ 175.00	Per Sample	7	$ 1,225.00
5)	Total Alkaline Buffer Demand - Non-Aqueous	$ -	Per Sample	7	$ -
6)	48-Hour Total Oxidant Demand - Aqueous	$ 175.00	Per Sample	7	$ 1,225.00
7)	Total Alkaline Buffer Demand - Aqueous	$ -	Per Sample	7	$ -
8)	Sample Receipt and Management	$ 11,545.40	Lump Sum	1	$ 11,545.40
9)	Baseline Analysis	$ 5,690.80	Lump Sum	1	$ 5,690.80
10)	Batch Bottle Tests	$ 15,662.00	Lump Sum	1	$ 15,662.00
11)	Column Tests	$ 24,840.00	Lump Sum	1	$ 24,840.00
12)	Treatability Testing Report	$ 4,160.00	Each	1	$ 4,160.00
				Subtotal	**$ 70,000.00**
				Subtotal Subcontract Price	**$ 70,000.00**
				Subcontract Management Fee	**$ 3,500.00**
				TOTAL UNIT PRICE/LUMP-SUM SUBCONTRACTS	**$ 73,500.00**

Note:
Item No. 8 includes costs for receipt, inspection, inventory, and processing of bench-scale test samples; collection and preparation of samples for baseline laboratory analyses; and compositing samples for batch bottle tests and column tests.

Schedule 2.11(e) - Summary
Monthly Cost Control Report
Summary of Fiscal Information

Engineer:	TRC Engineers, Inc.	Contract No.:	D009812
Work Assignment No.:	D009812-37	Date Prepared:	August 4, 2023
Project Name:	Solvent Finishers	Billing Period:	
Task #/Name:	All Tasks	Invoice No.:	
Complete:	0%	CAP No.:	

	A	B	C	D	E	F	G
Expenditure Category	Costs Claimed This Period	Paid to Date	Total Costs Paid To Date (A+B)	Estimated Costs to Completion	Estimated Total Work Assignment Price (C+D)	Approved Budget	Estimated Under/Over (F-E)
1. Direct Salary Costs						$111,249	
2. Indirect Costs (164.41%)						$182,904	
3. Subtotal Direct Salary Costs and Indirect Costs						$294,153	
4. Travel						$24,991	
5. Other Non-Salary Costs						$57,012	
6. Subtotal Direct Non-Salary Costs						$82,003	
7. Subcontractors						$658,626	
7a. Subcontract Management Fee						$32,762	
8. Total Work Assignment Cost						$1,067,544	
9. Fixed Fee (7.5%)						$22,061	
10. Total Work Assignment Price						$1,089,605	

Schedule 2.11(e)
Monthly Cost Control Report
Summary of Fiscal Information

Engineer:	TRC Engineers, Inc.	Contract No.:	D009812
Work Assignment No.:	D009812-37	Date Prepared:	August 4, 2023
Project Name:	Solvent Finishers	Billing Period:	
Task #/Name:	Task 1- Preliminary Activities	Invoice No.:	
Complete:	0%	CAP No.:	

	A	B	C	D	E	F	G
Expenditure Category	Costs Claimed This Period	Paid to Date	Total Costs Paid To Date (A+B)	Estimated Costs to Completion	Estimated Total Work Assignment Price (C+D)	Approved Budget	Estimated Under/Over (F-E)
1. Direct Salary Costs						$17,024	
2. Indirect Costs (164.41%)						$27,989	
3. Subtotal Direct Salary Costs and Indirect Costs						$45,013	
4. Travel						$0	
5. Other Non-Salary Costs						$0	
6. Subtotal Direct Non-Salary Costs						$0	
7. Subcontractors						$0	
7a. Subcontract Management Fee						$0	
8. Total Work Assignment Cost						$45,013	
9. Fixed Fee (7.5%)						$3,376	
10. Total Work Assignment Price						$48,389	

Schedule 2.11(e)
Monthly Cost Control Report
Summary of Fiscal Information

Engineer:	TRC Engineers, Inc.	Contract No.:	D009812
Work Assignment No.:	D009812-37	Date Prepared:	August 4, 2023
Project Name:	Solvent Finishers	Billing Period:	
Task #/Name:	Task 2- Field Activities	Invoice No.:	
Complete:	0%	CAP No.:	

	A	B	C	D	E	F	G
Expenditure Category	Costs Claimed This Period	Paid to Date	Total Costs Paid To Date (A+B)	Estimated Costs to Completion	Estimated Total Work Assignment Price (C+D)	Approved Budget	Estimated Under/Over (F-E)
1. Direct Salary Costs						$76,176	
2. Indirect Costs (164.41%)						$125,241	
3. Subtotal Direct Salary Costs and Indirect Costs						$201,417	
4. Travel						$24,991	
5. Other Non-Salary Costs						$57,012	
6. Subtotal Direct Non-Salary Costs						$82,003	
7. Subcontractors						$658,626	
7a. Subcontract Management Fee						$32,762	
8. Total Work Assignment Cost						$974,808	
9. Fixed Fee (7.5%)						$15,106	
10. Total Work Assignment Price						$989,914	

Schedule 2.11(e)
Monthly Cost Control Report
Summary of Fiscal Information

Engineer:	TRC Engineers, Inc.	Contract No.:	D009812
Work Assignment No.:	D009812-37	Date Prepared:	August 4, 2023
Project Name:	Solvent Finishers	Billing Period:	
Task #/Name:	Task 3- Reporting	Invoice No.:	
Complete:	0%	CAP No.:	

	A	B	C	D	E	F	G
Expenditure Category	Costs Claimed This Period	Paid to Date	Total Costs Paid To Date (A+B)	Estimated Costs to Completion	Estimated Total Work Assignment Price (C+D)	Approved Budget	Estimated Under/Over (F-E)
1. Direct Salary Costs						$18,049	
2. Indirect Costs (164.41%)						$29,674	
3. Subtotal Direct Salary Costs and Indirect Costs						$47,723	
4. Travel						$0	
5. Other Non-Salary Costs						$0	
6. Subtotal Direct Non-Salary Costs						$0	
7. Subcontractors						$0	
7a. Subcontract Management Fee						$0	
8. Total Work Assignment Cost						$47,723	
9. Fixed Fee (7.5%)						$3,579	
10. Total Work Assignment Price						$51,302	

Schedule 2.11(f)
Monthly Cost Control Report
Summary of Labor Hours
(Expended to Date/Estimated to Completion)

Engineer: TRC Engineers, Inc.
Work Assignment No.: D009812-37
Project Name: Solvent Finishers
Task #/Name: All Tasks
Complete: 0%

Contract No.: D009812
Date Prepared: August 4, 2023
Billing Period:
Invoice No.:
CAP No.:

NSPE Labor Classification	IX		VIII		VII		VI		V		IV		III		II		I		Total No. of Direct Labor Hours	
	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.	Exp.	Est.
Task 1		4.0		10.0		115.0		0.0		40.0		60.0		55.0		4.0		0.0		288.0
Task 2		4.0		56.0		118.0		136.0		216.0		653.0		362.0		20.0		0.0		1,565.0
Task 3		8.0		10.0		40.0		0.0		75.0		204.0		0.0		20.0		0.0		357.0
Total Hours		16.0		76.0		273.0		136.0		331.0		917.0		417.0		44.0		0.0		2,210.0

SCHEDULE 3

WORK ASSIGNMENT PACKAGE CHECKLIST

AND

SUBCONTRACTOR DOCUMENTATION

SOLVENT FINISHERS

WA NO: D009812-37

REMEDIAL DESIGN

New York State Department of Environmental Conservation - Division of Environmental Remediation

Standby Engineering Contract Work Assignment Package Checklist

Contracts D009803 - D009812

Contractor Name: TRC Engineers, Inc. **Date: 8/4/2023**

WA No. and Name: D009812-37: Solvent Finishers **Reviewer: J. Magda**

1	**Work Assignment Package**	**Yes**	**No**	**Comments**
	Includes cover letter, Scope of Work (Schedule 1), Budget (Schedule 2.11(a)-(f)), relevant subcontractor documentation, and completed WA package checklist.	X		
2	**Cover Letter**			
	Provides explanation for significant differences (±20%) between costing tool report and the SOW & budget submitted.	X		
	For amendments, provides an explanation of changes in SOW and/or budget by task.			NA
	For amendments, includes total dollar value of amendment being requested.			NA
3	**Schedule 1 (Scope of Work)**			
	Includes breakdown of tasks; may include bulleted subtasks.	X		
	Tasks in SOW match tasks in the Schedule 2.11s.	X		
	Includes schedule for completion of all tasks.	X		
	Duration of work does not exceed 24 months; work subsequent to that should be part of an amendment or new WA.	X		
	For amendments, includes new and previous tasks for a comprehensive SOW.			NA
4	**Schedule 2.11(a) - Summary of Work Assignment Price**			
	Rates for indirect costs and fixed fee match contract rates.	X		
	Numbers are rounded (no cents) and add up correctly.	X		
5	**Schedule 2.11(a) Supplemental 1 - (Used for amendments only)**			
	Existing price column matches costs of the current approved budget.			NA
	Revised price column matches costs on Schedule 2.11(a).			NA
6	**Schedule 2.11(a) Supplemental 2 - (Used for amendments only)**			
	Existing price column matches the task budgets of the current approved budget.			NA
	Revised price column matches the task budgets in the Schedule 2.11(e)s.			NA
7	**Schedule 2.11(b) - Direct Labor Costs**			
	Average reimbursement rates are used for each year. Future years escalate 3%.	X		
	Hours are segregated by year.	X		
	Total cost for each NSPE level is shown.	X		
	Total direct labor cost matches amount on Schedule 2.11(a).	X		
	The Principal's (NSPE IX) labor hours are < 2% of total WA hours.	X		
	Administrative labor hours are reasonable, i.e., < 4% of total WA hours; justification is provided for any exceedance.	X		
	Total labor hours match hours on Schedule 2.11(f).	X		

8	**Schedule 2.11(c) - Direct Non-Salary Costs (Equipment/Consumables/Misc.)**	**Yes**	**No**	**Comments**
	Rates listed in Schedule 2.11(c) are allowable and consistent with contract. Rates for consultant-owned equipment have been approved by Contracts and Payments Section.	X		
	Quotes are included for any non-contract items (including equipment purchases and rentals, excluding air fare) with unit prices greater than $1,000.			NA
	Site-dedicated equipment is identified as such and meets the requirements above.			NA
	Appropriate lodging/per diem/mileage rates are used.	X		
	Total of direct non-salary costs matches the amount on Schedule 2.11(a).	X		
9	**Schedule 2.11(d) - Unit Price Subcontracts**			
	Acceptable quotes are provided for non-standby subcontracts > $1K. If insufficient number of quotes are obtained, an explanation and at least one comparable quote are provided.	X		
	Standby Drillers/Geoprobe - Quotes from all standbys are provided; declinations have been provided. Correct unit costs are used; CPI increase (shown as line item) applies only to contract items. Quotes are comparable (quantities and items) and lowest total quote has been selected.	X		Memorandum describing procurement process is included in Schedule 3.
	Standby Labs/Data Validators (rotate use) - Correct unit costs are used; CPI increase (shown as line item) applies only to contract items.	X		
	MBE/WBE/DBE/SDVOB - For work < $10K, cost reasonableness is shown by providing a comparable quote; if quote is unavailable, attempts to obtain the quote are documented and an engineer's estimate or other cost comparison is provided.	X		
	Single Source - At least one comparable quote is provided to show cost reasonableness; explanation provided describes necessity of particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).			NA
	Sole Source - At least one comparable quote is provided to show cost reasonableness; explanation provided describes necessity of specific vendor usage (e.g., trademarked or proprietary product and/or service). Comparison to a different item/method that wouldn't be as effective and/or achieve the desired result is acceptable.			NA
	Placeholders are used only for non-standby subcontractors and are justified.			NA
	Cost reasonableness of placeholder subcontractors are documented by an engineer's estimate or other cost comparison.			NA
	Correct contract management fee is calculated only on non-professional unit price subs >$10K and M/W/DBE & SDVOB firms from $1. Management fee is not allowed on any firms with professional certification (e.g., engineering, architectural, surveying).	X		
	Completed Subcontract Solicitation Record and Certification form(s) are provided.	X		
	Total subcontract costs match the amounts on Schedule 2.11(a).	X		
10	**Schedule 2.11(e) - Cost Control Report**			
	Individual 2.11(e)s total 2.11(e) Summary; all numbers are rounded (no cents).	X		
	Schedule (e) Summary costs match the amounts on Schedule 2.11(a).	X		
11	**Schedule 2.11(e) Supplemental - Cost Control Report (Subcontractors)**			
	This Schedule will only be submitted in CAPs - do not submit in 2.11s package.			

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130712

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☑ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☐ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Eurofins Environment Testing	(732) 549-3900	8/4/23	$17,452.65

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Eurofins Environment Testing

Name of Subcontractor

rev 9/27/2021

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☑ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☐ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
ALS Group USA, Corporation	(585) 288-5380	7/5/23	$945.98

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

ALS Group USA, Corporation

Name of Subcontractor

rev 9/27/2021

ALS Group USA, Corp.
1565 Jefferson Rd. Bld 300 Ste 360
Rochester, NY 14623
T +1 585 288 5380

Quote

7/5/23 | Solvent Finishers | ALS Project Manager: Chad Whelton

Client/Point of Contact

Dan Warren
TRC Companies
dwarren@trccompanies.com
917.232.9837

Quote# R-0156-GL-23

Quote valid for 90 days.

Description

NYSDEC Contract Stand-by project located in Jericho, NY. Analytical will be performed by ALS-Holland, MI

Pricing

Please find our cost proposal below which is based on the scope of work provided. Pricing includes sample containers, labels, coolers, chain of custody forms, 24/7 results access via Webtrieve™. Standard turnaround time (TAT) is in business days (BD).

117.33

47.33

Parameter	Method	Matrix	Qty.	TAT	Unit $	Ext. $	
Grain Size	ASTM D422-63	Soil	2 ~~1~~	10BD	~~$109~~	$ ~~109~~	234.66
Bulk Density	D5057-90	Soil	2 ~~1~~	10BD	~~$39~~	$ ~~39~~	94.66
Permeability*	ASTM D2434	Soil	2 ~~1~~	10BD	~~$300~~	$ ~~300~~	616.66
ALS Sustainability Fee (per SDG)						$ ~~50~~	
Total						**$ ~~498~~**	945.98

*=Subcontracted to SAECO in Tucson, AZ. **5000g of material is required for analysis.**

308.33

Rush TAT & Deliverables		
5BD TAT	1.25x	25%
3BD TAT	1.50x	50%
2BD TAT	1.75x	75%
1BD TAT	2.00x	100%
Same Day TAT	3.00x	200%

ALS Group USA, Corp.
1565 Jefferson Rd. Bld 300 Ste 360
Rochester, NY 14623
T +1 585 288 5380

Notes:

- Rush TAT availability dependent on lab capacity. Please provide advance notice when rush requests will be received by the laboratory.
- By submitting samples to ALS relating to this quote you are accepting ALS terms and conditions.
- If this quote number is not referenced on the Chain of Custody pricing will default to pricing from ALS standard price list.

Work Commencement and Commercial Terms

Thank you for your interest in our services. Please contact me should you require any further details or clarification on the items listed above.

Thank you,

Gregory LaForce

Gregory LaForce
Technical Sales Representative
Gregg.LaForce@ALSglobal.com
Cell: 585-622-2631
Office: 585-672-7464
Main: 585-288-5380

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☑ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Greenstar Environmental Solutions, LLC (WBE)	(917) 655-5123	7/10/23	$1,952.00
Clean Globe Environmental	(888) 454-5923	7/13/23	$1,820.00

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Greenstar Environmental Solutions, LLC (WBE)

Name of Subcontractor

rev 9/27/2021

Warren, Daniel

From: Warren, Daniel
Sent: Saturday, July 8, 2023 9:29 AM
To: afiorentine@cg-env.com; kweyer@cg-env.com
Cc: Magda, Jim; Bochner, Jordan
Subject: NYSDEC Solvent Finishers | Utility Locating - Request for Pricing
Attachments: SF-Figures 1 and 2.pdf; D009812 - TRC Generic Terms and Conditions.pdf; SF - Utility Locating Quotation Request_CGE.pdf

Kelly/Tony,

TRC Engineers, Inc. (TRC) is requesting that your firm provide a price quotation for utility locating services in support of subsurface investigation activities at, and near, the Solvent Finishers Site located at 601 Cantiague Rock Road in Jericho, NY (the Site, see attached **Figure 1**). Please note that the work is being performed under TRC's Standby Engineering Services Contract No. D009812 (the Prime Agreement) with the New York State Department of Environmental Conservation (the Department or NYSDEC).

The utility surveyor will be required to survey a 20-foot radius around two proposed monitoring well cluster locations as shown on **Figures 1 and 2** using, at a minimum, both Ground Penetrating Radar (GPR) and Electro-Magnetic/Radio Frequency (EM/RF) Pipe, as well as Cable and Box locators. It is anticipated that the utility survey will occur during summer 2023 (or later).

All structures/utilities detected in the project area shall be identified on the ground surface with spray paint and/or closely spaced, color-coded flagging. Results of the utility survey shall be reviewed in the field between TRC and the utility surveyor on the same day the service is provided. Results shall also be summarized in a brief utility survey report, which shall be prepared by the utility surveyor and submitted to TRC within 5 business days of completion of field activities. The utility survey report shall include a map showing the locations and types of subsurface features identified.
The selected utility surveyor shall be required to enter into an agreement with TRC for this project and will be required to accept the terms and conditions of the agreement (attached) and provide TRC with the proper insurance documentation, including General Liability and Worker's Compensation insurance naming TRC Engineers, Inc., the State of New York, and the New York State Department of Environmental Conservation, each as Additionally Insured Parties.

Please provide a lump-sum cost for the utility locating survey and reporting work. **Please note that costs associated with this project shall be based on prevailing wages, and your proposed lump-sum cost shall be all-inclusive (including all applicable taxes and fees)**. Note that New York State, and NYSDEC, are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption. Please use the attached cost spreadsheet when submitting your cost. TRC also requests that you provide with your response an estimated number of field days, including the anticipated number of hours per day, required to complete the work. The work shall be completed continuously as one single event, without interruption.

We ask for receipt of your response by **Thursday, July 13, 2023.** Please provide a response, even if you are not interested in providing a quote for the work.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
UTILITY LOCATING SERVICES
COST COMPARISON SUMMARY

	ITEM DESCRIPTION	UNIT	QUANTITY	CLEAN GLOBE ENVIRONMENTAL, LLC		GREENSTAR ENVIRONMENTAL SOLUTIONS, LLC (WBE)	
				UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST
1	UTILITY LOCATING SERVICES	LUMP SUM	1	$ 1,155.00	$ 1,155.00	$ 1,750.00	$ 1,750.00
2	UTILITY SURVEY REPORT	EACH	1	$ 665.00	$ 665.00	$ 200.00	$ 200.00
				TOTAL:	**$ 1,820.00**	**TOTAL:**	**$ 1,950.00**

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
UTILITY LOCATING SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	UNIT	QUANTITY	GREENSTAR ENVIRONMENTAL SOLUTIONS, LLC (WBE)	
				UNIT COST (1)	EXTENDED COST
1	UTILITY LOCATING SERVICES	LUMP SUM	1	$1,750	$1,750
2	UTILITY SURVEY REPORT	EACH	1	$200	$200

Total: $1,950.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

AUTHORIZED REPRESENTATIVE: Peter Nimmer

SIGNATURE: Peter Nimmer

DATE SUBMITTED: 7/10/2023

ESTIMATED NUMBER OF FIELD DAYS/HOURS PER DAY: 8 hrs/day

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
UTILITY LOCATING SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	UNIT	QUANTITY	CLEAN GLOBE ENVIRONMENTAL, LLC	
				UNIT COST (1)	EXTENDED COST
1	UTILITY LOCATING SERVICES	LUMP SUM	1	$1155	$1155
2	UTILITY SURVEY REPORT	EACH	1	$665	$665

Total: $1,820.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

AUTHORIZED REPRESENTATIVE: Kelly A. Weyer, Project Manager; Geologist

SIGNATURE: Kelly A Weyer

DATE SUBMITTED: July 13, 2023

ESTIMATED NUMBER OF FIELD DAYS/HOURS PER DAY: 1 DAY, 4-6 HOURS ESTIMATED FOR THIS INVESTIGATION

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☑ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☐ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Cascade Drilling, L.P.	(978) 495-6808	7/24/23	$521,967.13
AARCO Environmental Services, Corp.	(516) 315-2262	7/10/23	Declined to bid.

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Cascade Drilling, L.P.

Name of Subcontractor

rev 9/27/2021

1430 Broadway, 10th Floor
New York, NY 10018

T 212.221.7822
TRCcompanies.com

Memorandum

To: Ms. Dana Nieder, Contract Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts and Payment Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

From: James Magda, P.G.

Subject: Solvent Finishers – Site No. 130172
Standby Subcontracting to Cascade Drilling, L.P.

Date: August 4, 2023

cc: J. Thompson – NYSDEC
D. Glass, D. Warren, B. Lazar – TRC

TRC Engineers, Inc. (TRC) will be completing an investigation in connection with the Solvent Finishers Site under New York State Department of Environmental Conservation (NYSDEC or the Department) Work Assignment No. D009812-37 to support a future remedial design that will likely include in-situ chemical oxidation (ISCO) injections. Soil borings and groundwater monitoring wells will be installed to depths up to 550 feet below ground surface (bgs) utilizing sonic drilling methods. Additionally, depth-discrete soil and groundwater samples will be collected throughout the saturated interval during drilling for monitoring well installation.

In 2020 TRC entered into Standby Drilling Services subcontractor agreements with seven firms: AARCO Environmental Services Corporation (AARCO); Aztech Environmental Technologies, Inc. (now Labella Associates), Cascade Drilling, L.P. (Cascade); Land, Air, Water Environmental Services, Inc. (LAWES); Nothnagle Drilling, Inc. (Nothnagle); Parratt-Wolff, Inc. (Parratt-Wolff), and Summit Drilling (Summit). Only two of TRC's Standby Drilling subcontractors, AARCO and Cascade, have approved pricing for all of the required contract items to complete the scope of work for the Solvent Finishers site. LAWES and Nothnagle did not provide pricing for sonic drilling. Contract items, which are required to complete the scope of work, that the other three drilling subcontractors did not provide pricing for are summarized below:

<u>Labella Associates</u>

- Item 2F (1C) – Drilling, Sonic Drilling, 0 to 50 Feet in Depth, 10-inch Outer Diameter Casing
- Item 2F (2C) – Drilling, Sonic Drilling, 50 to 100 Feet in Depth, 10-inch Outer Diameter Casing
- Item 2F (3C) – Drilling, Sonic Drilling, 100 to 200 Feet in Depth, 10-inch Outer Diameter Casing
- Item 2F (4C) – Drilling, Sonic Drilling, Greater than 200 Feet in Depth, 10-inch Outer Diameter Casing
- Item 6D (4) – Groundwater Sampling (Screen Point Sampler or Equivalent), Greater than 200 Feet in Depth

Parratt-Wolff

- Item 2F (4B) – Drilling, Sonic Drilling, Greater than 200 Feet in Depth, 8-inch Outer Diameter Casing
- Item 2F (4C) – Drilling, Sonic Drilling, Greater than 200 Feet in Depth, 10-inch Outer Diameter Casing
- Item 6B (4B) – Borehole Sampling, Sonic Core Sampling, Greater than 200 Feet in Depth, 6-inch Outer Diameter Casing

Summit Drilling

- Item 2F (4C) – Drilling, Sonic Drilling, Greater than 200 Feet in Depth, 10-inch Outer Diameter Casing
- Item 6B (4B) – Borehole Sampling, Sonic Core Sampling, Greater than 200 Feet in Depth, 6-inch Outer Diameter Casing

TRC solicited pricing from AARCO and Cascade. TRC received a bid from Cascade and a declination from AARCO indicating they do not have the equipment necessary to complete the scope of work.

The drilling labor and equipment required to complete the scope of work is highly specialized and qualified firms are limited. As such, TRC recommends subcontracting this work to a drilling firm with experience completing similar scopes of work to the anticipated depths in similar geological formations. TRC previously successfully subcontracted Cascade to install soil borings and groundwater monitoring wells at, and near, the Solvent Finishers site in 2017, under Work Assignment D007862-32, and is confident in their ability (i.e., experience, qualifications, equipment and resources) to complete the work. As such, TRC is requesting authorization to utilize Cascade to complete the drilling scope of work.

Attached to this memorandum are the bid and declination received from Cascade and AARCO, respectively.

Warren, Daniel

From: Warren, Daniel
Sent: Friday, June 30, 2023 11:17 AM
To: Rob Danckert (RDanckert@cascade-env.com)
Cc: Magda, Jim; Bochner, Jordan
Subject: NYSDEC Solvent Finishers | Sonic Drilling - Request for Pricing
Attachments: SF-Sonic Drilling_Request for Price Quotation.pdf; SF-Figures 1 and 2.pdf; D009812 - Exhibit A - Drilling Specifications R03.pdf

Rob,

TRC Engineers, Inc. (TRC) is requesting that your firm provide a cost estimate for sonic drilling for subsurface investigation work at, and near, the Solvent Finishers site located at 601 Cantiague Rock Road in Jericho, New York (the Site, see attached **Figure 1**). Please note that the work is being performed under TRC's Standby Engineering Services Contract No. D009812 (the Prime Agreement) with the New York State Department of Environmental Conservation (the Department or NYSDEC).

In 2020, your company entered into an agreement with TRC for drilling services (the Agreement), under the Prime Agreement. As such, the work (including any non-Standby Contract items) shall be performed in accordance with the terms and conditions of the Agreement, the Prime Agreement, Technical Provisions for Standby Drilling Services, and all conditions set forth below, as well as in accordance with all applicable laws, rules, codes, regulations and orders of the State of New York and any public departments and agencies having authority over the work.

Please review the Scope of Work (SOW) below and the attached spreadsheet and confirm that you agree with the quantities and pricing shown via reply to this email. In addition, please provide a lump-sum price for mobilization/demobilization and provide costs for the additional non-Standby Contract items shown on the attached spreadsheet in your return email. Any required work not specifically identified below and on the bid sheet shall be included in the mobilization/demobilization cost. **Prevailing wages shall apply to the work. All prices shall include all costs for labor, equipment, materials, power, fuel, services, tools, supplies, installation, incidentals, insurance, approvals, permits, fees, and surcharges necessary to perform the work. In addition, all prices shall include all applicable taxes.** Note that New York State and NYSDEC are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption.

The cost to complete the work shall be based on the work being completed in Level D personal protective equipment (PPE).

The work is anticipated to be completed during Summer/Fall 2023 (or later). In your reply, please indicate your current availability during these seasons.

Scope of Work

General

- The work shall be performed under the direction of the TRC Site Manager and/or their assigned designee.
- Field work performed on-Site shall be conducted in accordance with the requirements of Occupational Safety and Health Administration (OSHA) Standards, specifically 29 CFR 1910, which specify training and medical monitoring requirements and use of personal protective equipment (PPE). The work must also comply with 29 CFR 1926, as applicable.

- Personnel performing the work shall have completed 40-hour training for Hazardous Waste Operations and Emergency Response (29 CFR 1910.120) and be current with 8-hour annual refresher training. Documentation of this training for the Subcontractor's staff working on Site, and documentation of medical monitoring, shall be provided to TRC prior to initiating field work.

- If the Subcontractor is not proposing to limit field work to weekdays the Subcontractor shall include with their bid an alternative proposed work schedule (e.g., 10 days-on/4 days-off) for approval by TRC. Field work shall be performed on consecutive normal business days during the hours of 0730 and 1700, except holidays, unless alternate hours are approved by TRC. The Subcontractor shall obtain approval of work schedule and hours from TRC prior to mobilization.

- The Subcontractor shall perform the work in accordance with current federal, state, and local laws, regulations, codes, ordinances and all other legal requirements of public authorities, which apply to the performance and safety of the work.

- The Subcontractor shall be responsible for the health and safety of their employees. The Subcontractor is responsible for the identification and protection of utilities and structures affected by the work, and, if any damage results, the Subcontractor is responsible for the repair of such utilities and structures that were damaged (if any) at no cost to TRC or the Department.

- The Subcontractor shall provide with its costs a schedule encompassing all activities required by this scope of work, including, but not limited to, start and completion dates for the following milestones:
    - Mobilization
    - Installation of each overburden well
    - Well development
    - Demobilization

- No water, electric, or sanitary services are available at the Site. The Subcontractor shall be responsible for providing potable water, as needed, in support of performing the work, and obtaining TRC approval of the water source. Subcontractor shall propose the water source for TRC's and NYSDEC's approval no less than four weeks prior to the scheduled mobilization date. TRC may collect a sample from the water source for laboratory analysis. Approval of the use of the water source may be dependent upon the analytical results.

- The Subcontractor shall be required to contact UDig NY (formerly Dig Safely New York) and non-member utilities, receive/review confirmation receipts from each utility, and verify mark-outs prior to any intrusive work. TRC will retain a third-party utility clearance firm to survey the locations of underground utilities near each proposed monitoring well location.

- The Subcontractor shall obtain, and furnish to TRC, any required permits (including Town of North Hempstead road work permits for SF-MW-202ML) prior to the start of the work. The subcontractor is responsible for identifying all required permits. The subcontractor shall make no claim for delay or payment for standby time for work stoppages caused by their failure to identify, obtain, or perform work in accordance with required permits.

- Traffic control and work zones shall be established and maintained by the Subcontractor in accordance with all laws, regulations, codes, and road work permits and the Technical Provisions for Standby Drilling Services. It is expected that advanced warning signage, shoulder tapers and work zone channels using cones/barrels, a barrier vehicle, and end-of-work-zone signage will be required.

- The Subcontractor shall be responsible for the health and safety of their employees, but all workers will have STOP WORK authority if any unsafe work is observed being performed by any party.

- A kickoff Site meeting with TRC and the Subcontractor will be mandatory and shall be scheduled prior to the mobilization.

- By submitting a bid Subcontractor acknowledges that they have sufficiently investigated the Site and investigation locations, and publicly available information regarding both, prior to bidding and are satisfied as to conditions affecting the work, including, but not limited to, restrictions to means of access, storage of equipment, availability of water and electric power, and other conditions that may affect the performance of the work. Any failure by the subcontractor to acquaint themselves with the available information and conditions shall not relieve them of responsibility for estimating properly the difficulty or cost of successfully performing the work.

- Soil boring advancement and monitoring well installation, including supporting activities, shall be completed as described below.

Task 1 – Multi-Level Groundwater Monitoring Well Installation

The work shall consist of advancing boreholes, using sonic drilling methods, and installing two groundwater monitoring well clusters (SF-MW-201ML and SF-MW-202ML) as shown on **Figures 1 and 2**. Locations may be adjusted following review of a utility locating survey, performed by others.

Monitoring wells shall be installed utilizing sonic drilling methods with 7, 8, and 10-inch diameter outer casings and 6-inch diameter samplers. The anticipated multi-level groundwater monitoring well construction details are provided below. Please note that final termination depths shall be determined in the field.

Well ID	Well Details (Estimated)								
	Total Borehole Depth (feet)[1]	Sampler Dia. (inch)	Outer Casing Dia. (inch)	Outer Casing Depth (feet bgs)	Well Dia. (inch)	Well Screen Interval (feet bgs)	Sump Interval (feet bgs)	Well Material	
								Casing	Screen/ Sump
SF-MW-201ML	550								
A		6	10	430	2.5	410 to 430	None	Sch 80 PVC	Sch 304 SS
B		6	8	480	2.5	460 to 480	None	Sch 80 PVC	Sch 304 SS
C		6	7	550	2.5	528 to 548[2]	548 to 550	Sch 80 PVC	Sch 304 SS
SF-MW-202ML	500								
A		6	10	385	2	365 to 385	None	Sch 80 PVC	Sch 80 PVC
B		6	8	410	2	390 to 410	None	Sch 80 PVC	Sch 80 PVC
C		6	7	500	2	480 to 500[2]	None	Sch 80 PVC	Sch 80 PVC

Notes:
[1] Borings will be terminated at the surface of the clay. The depth of the clay surface is unknown but is anticipated to be 550 feet bgs or less.
[2] Estimated, deepest well screen will be completed directly above the surface of clay layer. Well screen length will be 20 feet.
PVC – Polyvinyl chloride
SS – Stainless steel

Soil Sampling

At each monitoring well cluster location, the boring shall be advanced to the termination depth of the deepest well with 7-inch diameter casing and soil samples shall be collected with a 6-inch diameter sampler in 10-foot lengths from ground surface into the underlying clay layer, as directed by TRC.

Groundwater Vertical Profiling

During advancement of the soil boring for each monitoring well cluster groundwater samples shall be collected with a push-ahead vertical groundwater profiling tool. At SF-MW-201ML groundwater samples shall be collected every 50 feet (approximate), starting at the water table (approximately 85 feet bgs) to a maximum depth of 550 bgs. At SF-MW-202ML groundwater samples shall be collected every 50 feet (approximate), starting at approximately -100 feet North American Vertical Datum of 1988 (NAVD88) (approximately 250 feet bgs) to a maximum depth of 500 bgs. At the direction of TRC, each groundwater sample interval shall be purged for a maximum of one hour prior to sample collection.

Monitoring Well Installation

Three monitoring wells shall be installed in each borehole as described in the table above. Wire-wrapped stainless steel well screens shall be installed at SF-MW-201ML. No. 10-slot Schedule 80 PVC well screens shall be installed at SF-MW-202ML. The borehole annulus for each well cluster shall be backfilled with No. 2 sand to 2 feet above each well screen. A 1-foot thick (minimum) layer of choker sand (No. 00) shall be placed directly above the filter pack of each well. An approximately 2-foot-thick hydrated bentonite seal shall be placed directly above the choker sand. The borehole annulus for each well shall be backfilled with No. 2 sand to 10 feet above the bentonite seal. Larger diameter "over-ride" casing shall then be installed to the bottom depth of the next (shallower) well and the natural formation shall be allowed to collapse around the well clusters as the casing is retracted. If the natural formation does not collapse, No. 2 sand shall be added as needed to achieve target depths. An approximately 2-foot-thick hydrated bentonite seal shall be placed directly above the surface of the water table at each location, and the remaining annular space above the seal shall be grouted to the ground surface. Each well shall be completed with a flush-mount protective steel manhole and lid in a concrete pad.

Task 2 – Monitoring Well Development

At least 24 hours after completion of construction air lifting techniques shall be used to develop each newly installed monitoring well. Well development shall be considered complete when either the turbidity of the purge water from the well is below 50 nephelometric turbidity units (NTUs), the well purges dry, or three well volumes have been removed, whichever occurs first.

Task 3 – Decontamination and Investigative-Derived Waste

Decontamination

All down-hole drilling equipment shall be decontaminated prior to use at each borehole location using a pressure washer in the decontamination pad area. All wastewater shall be collected and containerized. The decontamination pad shall be constructed by the Contractor as shown in the technical specifications in the subcontract agreement with TRC. Sampling equipment (or items which cannot be safely pressure washed) shall, at a minimum, be cleaned of all foreign matter, washed with potable water and Alconox™, and rinsed with potable water between locations.

Investigative-Derived Waste

All solid and liquid investigative-derived waste, including, but not limited to, used plastic sheeting, PPE, soil cuttings, drilling fluids, development water, and decontamination wastewater shall be containerized in 55-gallon drums at each soil boring location, transported daily to a location designated by TRC at the Solvent Finishers site, and staged on pallets. ~~The drum staging area shall be secured on all sides with properly anchored and gated temporary chain link fencing (minimum height of 6 feet), provided by the Subcontractor.~~

If you have any questions or need additional information, please contact me. We ask for receipt of your response by **COB Thursday, July 13, 2023**. Pre-bid Site inspections will be arranged upon request. TRC also requests that you provide with your response an estimated number of 10-hour field days required to complete the work as well estimated volumes of liquid and solid IDW that will be generated. Please provide a response even if you are not interested in providing a quote for the work. Thank you for your attention to this matter and we look forward to hearing back from you.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
STANDBY DRILLING SERVICES
COST COMPARISON SUMMARY

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	AARCO ENVIRONMENTAL SERVICES CORPORATION		CASCADE DRILLING, L.P.	
			DECLINED TO BID		UNIT PRICE[1]	TOTAL PRICE
1. MOBILIZATION AND SETUP						
(A) MOBILIZATION/DEMOBILIZATION, INCLUDING SITE SETUP, SITE BREAKDOWN, CLEANUP, REPAIR, INITIAL AND FINAL EQUIPMENT DECONTAMINATION, TRAVEL, LODGING, MEALS AND LABOR*	LUMP SUM	1			$59,650.00	$59,650.00
(B) CONSTRUCTION AND REMOVAL OF DECONTAMINATION PAD	LUMP SUM	1			$543.75	$543.75
(C) WELL/BORING SETUP[2]	PER WELL/BORING	2			$190.31	$380.62
(D) ROAD OPENING PERMIT*	EACH	1			$560.00	$560.00
2. DRILLING[3]						
F. SONIC DRILLING						
(1) 0-50 FEET IN DEPTH						
(B) 8-INCH OD CASING	LINEAR FOOT	100			$65.25	$6,525.00
(C) 10-INCH OD CASING	LINEAR FOOT	100			$87.00	$8,700.00
(2) 50-100 FEET IN DEPTH						
(B) 8-INCH OD CASING	LINEAR FOOT	100			$65.25	$6,525.00
(C) 10-INCH OD CASING	LINEAR FOOT	100			$87.00	$8,700.00
(3) 100-200 FEET IN DEPTH						
(B) 8-INCH OD CASING	LINEAR FOOT	200			$81.56	$16,312.00
(C) 10-INCH OD CASING	LINEAR FOOT	200			$108.75	$21,750.00
(4) GREATER THAN 200 FEET IN DEPTH						
(B) 8-INCH OD CASING	LINEAR FOOT	490			$108.75	$53,287.50
(C) 10-INCH OD CASING	LINEAR FOOT	415			$135.94	$56,415.10
6. BOREHOLE SAMPLING[3]						
B. SONIC CORE SAMPLING[4]						
(1) 0-50 FEET IN DEPTH						
(B) 6-INCH OD	PER SAMPLE	10			$10.88	$108.80
(2) 50-100 FEET IN DEPTH						
(B) 6-INCH OD	PER SAMPLE	10			$10.88	$108.80
(3) 100-200 FEET IN DEPTH						
(B) 6-INCH OD	PER SAMPLE	20			$10.88	$217.60
(4) GREATER THAN 200 FEET IN DEPTH						
(B) 6-INCH OD	PER SAMPLE	65			$10.88	$707.20
D. GROUNDWATER SAMPLING (SCREEN POINT SAMPLER OR EQUIVALENT)[4,5]						
(2) 50-100 FEET IN DEPTH	PER SAMPLE	2			$407.81	$815.62
(3) 100-200 FEET IN DEPTH	PER SAMPLE	3			$489.38	$1,468.14
(4) GREATER THAN 200 FEET IN DEPTH	PER SAMPLE	18			$652.50	$11,745.00
9. WELL RISER[3]						
B. SCHEDULE 80 PVC						
(1) 2.5-INCH ID	PER FOOT	1400			$8.70	$12,180.00
10. WELL SCREEN SAND PACK MATERIAL (NO. 00 TO NO. 2 SIZE SAND)[3]	PER BAG (50 LBS)	180			$32.63	$5,873.40
11. BENTONITE[3]						
(A) PELLETS	PER 5-GALLON PAIL	11			$108.75	$1,196.25
12. GROUT[3]						
(B) PORTLAND CEMENT - TYPE II	PER BAG (94 LBS)	30			$32.63	$978.90
14. INSTALLATION OF PROTECTIVE COVERS						
C. KEYED ALIKE LOCKS	PER LOCK	6			$16.31	$97.86
15. MANAGEMENT OF INVESTIGATION DERIVED WASTE						
(A) PROVIDE EMPTY, DOT APPROVED, 55-GALLON STEEL OPEN-TOP DRUMS WITH SEALS, BUNGS, LIDS, AND BOLT RINGS	PER 55-GALLON DRUM	145			$87.00	$12,615.00
(B) FILLING, MOVING (WITHIN 0.25 MILE OF DRILL SITE) AND STAGING 55-GALLON DRUMS (DRILL CUTTINGS, DRILLING FLUIDS, PURGE WATER, DEVELOPMENT WATER, DECONTAMINATION WATER, AND/OR DISPOSABLE PPE, SAMPLING EQUIPMENT AND POLYETHYLENE SHEETING) ON PALLETS	PER HOUR	15			$353.44	$5,301.60
(C) MOVE FILLED DRUMS TO SECONDARY LOCATION WITHIN 1 MILE OF DRILL SITE (MAY INCLUDE EMPTYING DRUMS INTO LARGER CONTAINER TO BE PROVIDED BY OTHERS)	PER HOUR	12			$353.44	$4,241.28

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
STANDBY DRILLING SERVICES
COST COMPARISON SUMMARY

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	AARCO ENVIRONMENTAL SERVICES CORPORATION		CASCADE DRILLING, L.P.	
			DECLINED TO BID		UNIT PRICE[1]	TOTAL PRICE
16. WELL DEVELOPMENT						
(C) AIR LIFTING	PER HOUR	24			$353.44	$8,482.56
20. SITE RESTORATION[9]						
(B) TOPSOIL	CUBIC YARD	4			$92.44	$369.76
(C) GRASS SEEDING	SQUARE YARD	30			$5.44	$163.20
(D) ASPHALT REPAIR/PATCH	PER BAG (60 LBS)	10			$32.63	$326.30
22. STANDBY TIME (LABOR & EQUIPMENT)	PER HOUR	10			$570.94	$5,709.40
24. ADDITIONAL ACTIVITIES						
A. SONIC DRILLING						
(1) 0-50 FEET IN DEPTH						
(A) 7-INCH OD CASING*	LINEAR FOOT	100			$68.00	$6,800.00
(2) 50-100 FEET IN DEPTH						
(A) 7-INCH OD CASING*	LINEAR FOOT	100			$78.00	$7,800.00
(3) 100-200 FEET IN DEPTH						
(A) 7-INCH OD CASING*	LINEAR FOOT	200			$88.00	$17,600.00
(4) GREATER THAN 200 FEET IN DEPTH						
(A) 7-INCH OD CASING*	LINEAR FOOT	650			$98.00	$63,700.00
B. SCHEDULE 80 PVC RISER						
(1) 2-INCH ID*	PER FOOT	1235			$6.70	$8,274.50
C. SCHEDULE 80 PVC - WELL SCREEN						
(1) 2-INCH ID*	PER FOOT	60			$15.60	$936.00
D. STAINLESS STEEL, SCHEDULE 5, TYPE 304						
(1) 2.5-INCH ID*	PER FOOT	60			$89.00	$5,340.00
E. WATER HAULING AND USAGE (WHEN ON-SITE WATER IS INSUFFICIENT OR UNAVAILABLE, INCLUDING THE COST OF ANY REQUIRED PERMIT AND/OR WATER METER AND THE WATER)*	LUMP SUM	1			$18,567.00	$18,567.00
F. INSTALLATION OF FLUSH-TO-GRADE PROTECTIVE STEEL COVER (WITH DRAIN HOLE, INCLUDING FRAME AND LID, SET IN A 2-FOOT BY 2-FOOT CONCRETE PAD EXTENDING AT LEAST 6 INCHES BELOW GROUND SURFACE)						
(1) 12-INCH (MINIMUM FRAME OPENING)*	PER COVER	2			$990.00	$1,980.00
G. PREVAILING WAGE ESCALATION*	PER DAY	45			$185.00	$8,325.00
H. LEXAN LINER SAMPLING (5-FOOT LENGTH)*	EACH	32			$1,400.00	$44,800.00
		SUBTOTAL				$496,178.14
		CPI ADJUSTMENT (10.24)				$25,788.99
		TOTAL				$521,967.13

NOTES

QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

[1] UNIT PRICES MUST INCLUDE ALL LABOR, MATERIALS, POWER, EQUIPMENT, TOOLS, SUPPLIES, APPURTENANCES AND INCIDENTALS, TAXES, INSURANCE, FEES, SURCHARGES, TRAVEL, LODGING AND EXPENSES, AND OTHER COSTS, NECESSARY AND PROPER FOR THE COMPLETION OF THE WORK, AS SPECIFIED AND IN STRICT COMPLIANCE WITH THE APPLICABLE PROVISIONS OF THE AGREEMENT. LABOR RATES ARE PREVAILING WAGE. A CONSUMER PRICE INDEX ADJUSTMENT WILL BE CALCULATED EVERY JANUARY AND APPLIED TO ALL UNIT PRICES AS PER THE UNITED STATES DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS CONSUMER PRICE INDEX FOR ALL URBAN CONSUMERS (CPI-U), NEW YORK, ALL ITEMS.

[2] INCLUDES EQUIPMENT DECONTAMINATION BETWEEN EACH WELL/BORING.

[3] INCLUDES TWO PERSON CREW (DRILLER AND HELPER) AT A MINIMUM.

[4] INCLUDES DECONTAMINATION BEFORE COLLECTION OF EACH SAMPLE.

[5] INCLUDES UP TO 60 MINUTES FOR SAMPLE COLLECTION AFTER INSTALLATION OF SAMPLING EQUIPMENT.

[9] AS WITH ALL BID ITEMS, INCLUDES ALL APPLICABLE DELIVERY CHARGES.

* NOT ESCALATED.

ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	CASCADE DRILLING, L.P.	
			UNIT PRICE[1]	TOTAL PRICE
1. MOBILIZATION AND SETUP				
(A) MOBILIZATION/DEMOBILIZATION, INCLUDING SITE SETUP, SITE BREAKDOWN, CLEANUP, REPAIR, INITIAL AND FINAL EQUIPMENT DECONTAMINATION, TRAVEL, LODGING, MEALS AND LABOR*	LUMP SUM	1	$59,650.00	$59,650.00
(B) CONSTRUCTION AND REMOVAL OF DECONTAMINATION PAD	LUMP SUM	1	$543.75	$543.75
(C) WELL/BORING SETUP[2]	PER WELL/BORING	2	$190.31	$380.62
(D) ROAD OPENING PERMIT*	EACH	1	$560.00	$560.00
2. DRILLING[3]				
F. SONIC DRILLING				
(1) 0-50 FEET IN DEPTH				
(B) 8-INCH OD CASING	LINEAR FOOT	100	$65.25	$6,525.00
(C) 10-INCH OD CASING	LINEAR FOOT	100	$87.00	$8,700.00
(2) 50-100 FEET IN DEPTH				
(B) 8-INCH OD CASING	LINEAR FOOT	100	$65.25	$6,525.00
(C) 10-INCH OD CASING	LINEAR FOOT	100	$87.00	$8,700.00
(3) 100-200 FEET IN DEPTH				
(B) 8-INCH OD CASING	LINEAR FOOT	200	$81.56	$16,312.00
(C) 10-INCH OD CASING	LINEAR FOOT	200	$108.75	$21,750.00
(4) GREATER THAN 200 FEET IN DEPTH				
(B) 8-INCH OD CASING	LINEAR FOOT	490	$108.75	$53,287.50
(C) 10-INCH OD CASING	LINEAR FOOT	415	$135.94	$56,415.10
6. BOREHOLE SAMPLING[3]				
B. 6" SONIC CORE SAMPLING[4]				
(1) 0-50 FEET IN DEPTH				
(B) 6-INCH OD	PER SAMPLE	10	$10.88	$108.80
(2) 50-100 FEET IN DEPTH				
(B) 6-INCH OD	PER SAMPLE	10	$10.88	$108.80
(3) 100-200 FEET IN DEPTH				
(B) 6-INCH OD	PER SAMPLE	20	$10.88	$217.60
(4) GREATER THAN 200 FEET IN DEPTH				
(B) 6-INCH OD	PER SAMPLE	65	$10.88	$707.20
D. GROUNDWATER SAMPLING (SCREEN POINT SAMPLER OR EQUIVALENT)[4,5]				
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(3) 100-200 FEET IN DEPTH	PER SAMPLE	3	$489.38	$1,468.14
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9. WELL RISER[3]				
B. SCHEDULE 80 PVC				
(1) 2.5-INCH ID	PER FOOT	1400	$8.70	$12,180.00
10. WELL SCREEN SAND PACK MATERIAL (NO. 00 TO NO. 2 SIZE SAND)[3]	PER BAG (50 LBS)	180	$32.63	$5,873.40
11. BENTONITE[3]				
(A) PELLETS	PER 5-GALLON PAIL	11	$108.75	$1,196.25
12. GROUT[3]				
(B) PORTLAND CEMENT - TYPE II	PER BAG (94 LBS)	30	32.63 ~~$16.31~~	~~$489.30~~ 978.90
14. INSTALLATION OF PROTECTIVE COVERS				

C. KEYED ALIKE LOCKS	PER LOCK	6	$16.31	$97.86	
15. MANAGEMENT OF INVESTIGATION DERIVED WASTE					
(A) PROVIDE EMPTY, DOT APPROVED, 55-GALLON STEEL OPEN-TOP DRUMS WITH SEALS, BUNGS, LIDS, AND BOLT RINGS	PER 55-GALLON DRUM	145 ~~110~~	$87.00	~~$9,570.00~~	$12,615.00
(B) FILLING, MOVING (WITHIN 0.25 MILE OF DRILL SITE) AND STAGING 55-GALLON DRUMS (DRILL CUTTINGS, DRILLING FLUIDS, PURGE WATER, DEVELOPMENT WATER, DECONTAMINATION WATER, AND/OR DISPOSABLE PPE, SAMPLING EQUIPMENT AND POLYETHYLENE SHEETING) ON PALLETS	PER HOUR	15	$353.44	$5,301.60	
(C) MOVE FILLED DRUMS TO SECONDARY LOCATION WITHIN 1 MILE OF DRILL SITE (MAY INCLUDE EMPTYING DRUMS INTO LARGER CONTAINER TO BE PROVIDED BY OTHERS)	PER HOUR	12	$353.44	$4,241.28	
16. WELL DEVELOPMENT					
(C) AIR LIFTING	PER HOUR	24	$353.44	$8,482.56	
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(B) TOPSOIL	CUBIC YARD	4	$92.44	$369.76	
(C) GRASS SEEDING	SQUARE YARD	30	$5.44	$163.20	
(D) ASPHALT REPAIR/PATCH	PER BAG (60 LBS)	10	$32.63	$326.30	
22. STANDBY TIME (LABOR & EQUIPMENT)	PER HOUR	10	$570.94	$5,709.40	
24. ADDITIONAL ACTIVITIES					
A. 7" SONIC DRILLING					
(1) 0-50 FEET IN DEPTH					
(A) 7-INCH OD CASING*	LINEAR FOOT	100	$68.00	$6,800.00	
(2) 50-100 FEET IN DEPTH					
(A) 7-INCH OD CASING*	LINEAR FOOT	100	$78.00	$7,800.00	
(3) 100-200 FEET IN DEPTH					
(A) 7-INCH OD CASING*	LINEAR FOOT	200	$88.00	$17,600.00	
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D. STAINLESS STEEL, SCHEDULE 5, TYPE 304					
(1) 2.5-INCH ID*	PER FOOT	60	$89.00	$5,340.00	
E. WATER HAULING AND USAGE (WHEN ON-SITE WATER IS INSUFFICIENT OR UNAVAILABLE, INCLUDING THE COST OF ANY REQUIRED PERMIT AND/OR WATER METER AND THE WATER)*	LUMP SUM	1	$18,567.00	$18,567.00	
~~F. PROPERLY ANCHORED AND GATED TEMPORARY FENCING TO SECURE DRUM STORAGE AREA*~~	~~PER MONTH~~	~~2~~	~~$3,200.00~~	~~$6,400.00~~	
F. ~~G.~~ INSTALLATION OF FLUSH-TO-GRADE PROTECTIVE STEEL COVER (WITH DRAIN HOLE, INCLUDING FRAME AND LID, SET IN A 2-FOOT BY 2-FOOT CONCRETE PAD EXTENDING AT LEAST 6 INCHES BELOW GROUND SURFACE)					
(1) 12-INCH (MINIMUM FRAME OPENING)*	PER COVER	2	$990.00	$1,980.00	
G. ~~G.~~ PREVAILING WAGE ESCALATION*	PER DAY	45 ~~37~~	$185.00	~~$6,845.00~~	8,325.00
H. ~~H.~~ LEXAN LINER SAMPLING (5-FOOT LENGTH)	EACH	32	$1,400.00	$44,800.00	
				~~$497,563.54~~	$496,178.14

NOTES

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[4] INCLUDES DECONTAMINATION BEFORE COLLECTION OF EACH SAMPLE.

[5] INCLUDES UP TO 60 MINUTES FOR SAMPLE COLLECTION AFTER INSTALLATION OF SAMPLING EQUIPMENT.

[9] AS WITH ALL BID ITEMS, INCLUDES ALL APPLICABLE DELIVERY CHARGES.

* NOT ESCALATED.

AUTHORIZED REPRESENTATIVE: Rob Danckert, PG

SIGNATURE: 

DATE SUBMITTED: 7/24/2023

ESTIMATED NUMBER OF 10-HOUR FIELD DAYS: 37

ESTIMATED VOLUME OF LIQUID IDW GENERATED: 70

ESTIMATED VOLUME OF SOLID IDW GENERATED: 40

Warren, Daniel

From: Dennis Mayer <dennism@AARCOCORP.COM>
Sent: Monday, July 10, 2023 3:23 PM
To: Warren, Daniel
Cc: Sean Tuthill; Christopher Stratton; Tara Boggs
Subject: [EXTERNAL] RE: NYSDEC Solvent Finishers | Sonic Drilling - Request for Pricing

Hey Dan,

As per our conversation earlier. We respectively decline this opportunity as we are not equipped for this scope. We look forward to other opportunities with you in the near future.

Thanks,

Dennis Mayer
Drilling Operations Manager
O: 631.586.5900 | C: 516.315.2262

From: Warren, Daniel <DWarren@trccompanies.com>
Sent: Friday, June 30, 2023 1:17 PM
To: Sean Tuthill <Seant@AARCOCORP.COM>
Cc: Tara Boggs <Taraw@AARCOCORP.COM>; Magda, Jim <JMagda@trccompanies.com>; Bochner, Jordan <JBochner@trccompanies.com>
Subject: NYSDEC Solvent Finishers | Sonic Drilling - Request for Pricing

Sean,

TRC Engineers, Inc. (TRC) is requesting that your firm provide a cost estimate for sonic drilling for subsurface investigation work at, and near, the Solvent Finishers site located at 601 Cantiague Rock Road in Jericho, New York (the Site, see attached **Figure 1**). Please note that the work is being performed under TRC's Standby Engineering Services Contract No. D009812 (the Prime Agreement) with the New York State Department of Environmental Conservation (the Department or NYSDEC).

In 2020, your company entered into an agreement with TRC for drilling services (the Agreement), under the Prime Agreement. As such, the work (including any non-Standby Contract items) shall be performed in accordance with the terms and conditions of the Agreement, the Prime Agreement, Technical Provisions for Standby Drilling Services, and all conditions set forth below, as well as in accordance with all applicable laws, rules, codes, regulations and orders of the State of New York and any public departments and agencies having authority over the work.

Please review the Scope of Work (SOW) below and the attached spreadsheet and confirm that you agree with the quantities and pricing shown via reply to this email. In addition, please provide a lump-sum price for mobilization/demobilization and provide costs for the additional non-Standby Contract items shown on the attached spreadsheet in your return email. Any required work not specifically identified below and on the bid sheet shall be included in the mobilization/demobilization cost.

Prevailing wages shall apply to the work. All prices shall include all costs for labor, equipment, materials, power, fuel, services, tools, supplies, installation, incidentals, insurance, approvals, permits, fees, and surcharges necessary to perform the work. In addition, all prices shall include all applicable taxes. Note that New York State and NYSDEC are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption.

The cost to complete the work shall be based on the work being completed in Level D personal protective equipment (PPE).

The work is anticipated to be completed during Summer/Fall 2023 (or later). In your reply, please indicate your current availability during these seasons.

Scope of Work

General

- The work shall be performed under the direction of the TRC Site Manager and/or their assigned designee.

- Field work performed on-Site shall be conducted in accordance with the requirements of Occupational Safety and Health Administration (OSHA) Standards, specifically 29 CFR 1910, which specify training and medical monitoring requirements and use of personal protective equipment (PPE). The work must also comply with 29 CFR 1926, as applicable.

- Personnel performing the work shall have completed 40-hour training for Hazardous Waste Operations and Emergency Response (29 CFR 1910.120) and be current with 8-hour annual refresher training. Documentation of this training for the Subcontractor's staff working on Site, and documentation of medical monitoring, shall be provided to TRC prior to initiating field work.

- If the Subcontractor is not proposing to limit field work to weekdays the Subcontractor shall include with their bid an alternative proposed work schedule (e.g., 10 days-on/4 days-off) for approval by TRC. Field work shall be performed on consecutive normal business days during the hours of 0730 and 1700, except holidays, unless alternate hours are approved by TRC. The Subcontractor shall obtain approval of work schedule and hours from TRC prior to mobilization.

- The Subcontractor shall perform the work in accordance with current federal, state, and local laws, regulations, codes, ordinances and all other legal requirements of public authorities, which apply to the performance and safety of the work.

- The Subcontractor shall be responsible for the health and safety of their employees. The Subcontractor is responsible for the identification and protection of utilities and structures affected by the work, and, if any damage results, the Subcontractor is responsible for the repair of such utilities and structures that were damaged (if any) at no cost to TRC or the Department.

- The Subcontractor shall provide with its costs a schedule encompassing all activities required by this scope of work, including, but not limited to, start and completion dates for the following milestones:
    - Mobilization
    - Installation of each overburden well
    - Well development
    - Demobilization

- No water, electric, or sanitary services are available at the Site. The Subcontractor shall be responsible for providing potable water, as needed, in support of performing the work, and obtaining TRC approval of the water source. Subcontractor shall propose the water source for TRC's and NYSDEC's approval no less than four weeks

prior to the scheduled mobilization date. TRC may collect a sample from the water source for laboratory analysis. Approval of the use of the water source may be dependent upon the analytical results.

- The Subcontractor shall be required to contact UDig NY (formerly Dig Safely New York) and non-member utilities, receive/review confirmation receipts from each utility, and verify mark-outs prior to any intrusive work. TRC will retain a third-party utility clearance firm to survey the locations of underground utilities near each proposed monitoring well location.

- The Subcontractor shall obtain, and furnish to TRC, any required permits (including Town of North Hempstead road work permits for SF-MW-202ML) prior to the start of the work. The subcontractor is responsible for identifying all required permits. The subcontractor shall make no claim for delay or payment for standby time for work stoppages caused by their failure to identify, obtain, or perform work in accordance with required permits.

- Traffic control and work zones shall be established and maintained by the Subcontractor in accordance with all laws, regulations, codes, and road work permits and the Technical Provisions for Standby Drilling Services. It is expected that advanced warning signage, shoulder tapers and work zone channels using cones/barrels, a barrier vehicle, and end-of-work-zone signage will be required.

- The Subcontractor shall be responsible for the health and safety of their employees, but all workers will have STOP WORK authority if any unsafe work is observed being performed by any party.

- A kickoff Site meeting with TRC and the Subcontractor will be mandatory and shall be scheduled prior to the mobilization.

- By submitting a bid Subcontractor acknowledges that they have sufficiently investigated the Site and investigation locations, and publicly available information regarding both, prior to bidding and are satisfied as to conditions affecting the work, including, but not limited to, restrictions to means of access, storage of equipment, availability of water and electric power, and other conditions that may affect the performance of the work. Any failure by the subcontractor to acquaint themselves with the available information and conditions shall not relieve them of responsibility for estimating properly the difficulty or cost of successfully performing the work.

- Soil boring advancement and monitoring well installation, including supporting activities, shall be completed as described below.

Task 1 – Multi-Level Groundwater Monitoring Well Installation

The work shall consist of advancing boreholes, using sonic drilling methods, and installing two groundwater monitoring well clusters (SF-MW-201ML and SF-MW-202ML) as shown on **Figures 1 and 2**. Locations may be adjusted following review of a utility locating survey, performed by others.

Monitoring wells shall be installed utilizing sonic drilling methods with 7, 8, and 10-inch diameter outer casings and 6-inch diameter samplers. The anticipated multi-level groundwater monitoring well construction details are provided below. Please note that final termination depths shall be determined in the field.

Well ID	Well Details (Estimated)								
	Total Borehole Depth (feet)[1]	Sampler Dia. (inch)	Outer Casing Dia. (inch)	Outer Casing Depth (feet bgs)	Well Dia. (inch)	Well Screen Interval (feet bgs)	Sump Interval (feet bgs)	Well Material	
								Casing	Screen/ Sump
SF-MW-201ML	550								
A		6	10	430	2.5	410 to 430	None	Sch 80 PVC	Sch 304 SS
B		6	8	480	2.5	460 to 480	None	Sch 80 PVC	Sch 304 SS
C		6	7	550	2.5	528 to 548[2]	548 to 550	Sch 80 PVC	Sch 304 SS
SF-MW-202ML	500								
A		6	10	385	2	365 to 385	None	Sch 80 PVC	Sch 80 PVC
B		6	8	410	2	390 to 410	None	Sch 80 PVC	Sch 80 PVC
C		6	7	500	2	480 to 500[2]	None	Sch 80 PVC	Sch 80 PVC

Notes:
[1] Borings will be terminated at the surface of the clay. The depth of the clay surface is unknown but is anticipated to be 550 feet bgs or less.
[2] Estimated, deepest well screen will be completed directly above the surface of clay layer. Well screen length will be 20 feet.
PVC – Polyvinyl chloride
SS – Stainless steel

Soil Sampling

At each monitoring well cluster location, the boring shall be advanced to the termination depth of the deepest well with 7-inch diameter casing and soil samples shall be collected with a 6-inch diameter sampler in 10-foot lengths from ground surface into the underlying clay layer, as directed by TRC.

Groundwater Vertical Profiling

During advancement of the soil boring for each monitoring well cluster groundwater samples shall be collected with a push-ahead vertical groundwater profiling tool. At SF-MW-201ML groundwater samples shall be collected every 50 feet (approximate), starting at the water table (approximately 85 feet bgs) to a maximum depth of 550 bgs. At SF-MW-202ML groundwater samples shall be collected every 50 feet (approximate), starting at approximately -100 feet North American Vertical Datum of 1988 (NAVD88) (approximately 250 feet bgs) to a maximum depth of 500 bgs. At the direction of TRC, each groundwater sample interval shall be purged for a maximum of one hour prior to sample collection.

Monitoring Well Installation

Three monitoring wells shall be installed in each borehole as described in the table above. Wire-wrapped stainless steel well screens shall be installed at SF-MW-201ML. No. 10-slot Schedule 80 PVC well screens shall be installed at SF-MW-202ML. The borehole annulus for each well cluster shall be backfilled with No. 2 sand to 2 feet above each well screen. A 1-foot thick (minimum) layer of choker sand (No. 00) shall be placed directly above the filter pack of each well. An approximately 2-foot-thick hydrated bentonite seal shall be placed directly above the choker sand. The borehole annulus for each well shall be backfilled with No. 2 sand to 10 feet above the bentonite seal. Larger diameter “over-ride” casing shall then be installed to the bottom depth of the next (shallower) well and the natural formation shall be allowed to collapse around the well clusters as the casing is retracted. If the natural formation does not collapse, No. 2 sand shall be added as needed to achieve target depths. An approximately 2-foot-thick hydrated bentonite seal shall be placed directly above the surface of the water table at each location, and the remaining annular space above the seal shall be grouted to the ground surface. Each well shall be completed with a flush-mount protective steel manhole and lid in a concrete pad.

Task 2 – Monitoring Well Development

At least 24 hours after completion of construction air lifting techniques shall be used to develop each newly installed monitoring well. Well development shall be considered complete when either the turbidity of the purge water from the well is below 50 nephelometric turbidity units (NTUs), the well purges dry, or three well volumes have been removed, whichever occurs first.

Task 3 – Decontamination and Investigative-Derived Waste

Decontamination

All down-hole drilling equipment shall be decontaminated prior to use at each borehole location using a pressure washer in the decontamination pad area. All wastewater shall be collected and containerized. The decontamination pad shall be constructed by the Contractor as shown in the technical specifications in the subcontract agreement with TRC. Sampling equipment (or items which cannot be safely pressure washed) shall, at a minimum, be cleaned of all foreign matter, washed with potable water and Alconox™, and rinsed with potable water between locations.

Investigative-Derived Waste

All solid and liquid investigative-derived waste, including, but not limited to, used plastic sheeting, PPE, soil cuttings, drilling fluids, development water, and decontamination wastewater shall be containerized in 55-gallon drums at each soil boring location, transported daily to a location designated by TRC at the Solvent Finishers site, and staged on pallets. The drum staging area shall be secured on all sides with properly anchored and gated temporary chain link fencing (minimum height of 6 feet), provided by the Subcontractor.

If you have any questions or need additional information, please contact me. We ask for receipt of your response by **COB Thursday, July 13, 2023**. Pre-bid Site inspections will be arranged upon request. TRC also requests that you provide with your response an estimated number of 10-hour field days required to complete the work as well estimated volumes of liquid and solid IDW that will be generated. Please provide a response even if you are not interested in providing a quote for the work. Thank you for your attention to this matter and we look forward to hearing back from you.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☑ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☑ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Bethlehem Land Surveying, PLLC (SDVOB)	(518) 650-6434	7/7/23	$2,420.00
Laberge Group	(518) 458-7112	7/11/23	$3,800.00
Control Point Associates, Inc.	(646) 780-0411	7/10/23	$6,500.00

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Bethlehem Land Surveying, PLLC (SDVOB)

Name of Subcontractor

rev 9/27/2021

Warren, Daniel

From: Warren, Daniel
Sent: Wednesday, June 28, 2023 4:20 PM
To: Jason Peterson
Cc: Magda, Jim; Bochner, Jordan
Subject: NYSDEC Solvent Finishers | Request for Pricing - Land Surveying
Attachments: D009812 - TRC Generic Terms and Conditions.pdf; SF-Figures 1 and 2.pdf; SF-Surveying Quotation Request_BETHLEHEM.pdf

Jason,

TRC Engineers, Inc. (TRC) is requesting that your firm provide a price quotation for land surveying services for subsurface investigation work at, and near, the Solvent Finishers Site located at 601 Cantiague Rock Road in Jericho, NY (the Site, see attached **Figure 1**). Please note that the work is being performed under TRC's Standby Engineering Services Contract No. D009812 (the Prime Agreement) with the New York State Department of Environmental Conservation (the Department or NYSDEC).

The required scope of work is presented below and it is anticipated the work will be performed during Summer/Fall 2023 (or later).

The survey must be signed, sealed, and certified by a Professional Land Surveyor (PLS) licensed to practice in the State of New York. Coordinates and elevations of the survey shall be in the New York State Plane Coordinate System (North American Datum [NAD 1983] and North American Vertical Datum [NAVD] of 1988). All horizontal measurements shall be within 0.1-foot accuracy, and vertical measurements shall be within 0.01-foot accuracy.

The survey work includes the following items:

- Surveying (x, y, and z coordinates) of one on-Site monitoring well cluster (SF-MW-201ML, location shown on **Figure 1**), comprised of three monitoring wells, and one off-Site monitoring well cluster (SF-MW-202ML, location shown on **Figure 2**), comprised of three monitoring wells, including for each, location (coordinates), top of outer casing elevation, and top of each polyvinyl chloride (PVC) riser elevation. Additionally, the ground surface elevation at the location of each well cluster shall be surveyed. The point of measurement on the PVC risers shall be permanently marked by the surveyor. The surveyor shall use the well identification numbers provided by TRC.

- All field work shall be completed during a single mobilization.

The following deliverable shall be furnished to TRC by the surveyor:

- The surveyor shall furnish a letter report summarizing the work completed including a table of the x, y, and z values for all collected survey points in PDF and Excel format. The letter report shall be submitted to TRC within two weeks following completion of the field work. The letter report shall be signed, sealed, and certified by a Professional Land Surveyor licensed to practice in the State of New York.

The selected surveyor will be required to enter into an agreement with TRC for this project, will be required to accept the terms and conditions of the agreement (attached), and provide TRC with the proper insurance documentation, including General Liability and Worker's Compensation insurance naming, TRC Engineers, Inc., the State of New York, and the New York State Department of Environmental Conservation as Additionally Insured Parties.

Please provide a lump sum cost for the above-described services on the attached spreadsheet by COB, **Thursday, July 6, 2023. Please note that costs associated with this project shall be based on prevailing wages, and your proposed lump-sum cost must be all-inclusive (including all applicable taxes and fees).** Note that New York State, and NYSDEC, are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption. In addition to providing a cost for the scope described above, TRC also requests that you provide with your response an estimated number of days required to complete the field work. Please email me with any questions you may have on the scope of work. Please provide a response even if you are not interested in providing a bid for the work.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
LAND SURVEYING SERVICES
COST COMPARISON SUMMARY

ITEM DESCRIPTION	UNIT	QUANTITY	CONTROL POINT ASSOCIATES, INC.		BETHLEHEM LAND SURVEYING, PLLC (SDVOB)		LABERGE GROUP	
			UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST
1 LAND SURVEYING SERVICES	LUMP SUM	1	$ 6,500.00	$ 6,500.00	$ 2,420.00	$ 2,420.00	$ 3,800.00	$ 3,800.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
LAND SURVEYING SERVICES
PRICE QUOTATION REQUEST

ITEM DESCRIPTION	UNIT	QUANTITY	BETHLEHEM LAND SURVEYING, PLLC (SDVOB)	
			UNIT COST (1)	EXTENDED COST
1 LAND SURVEYING SERVICES	LUMP SUM	1	2,420	2,420.00

Total: $2,420.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

AUTHORIZED REPRESENTATIVE: JASON R. PETERSON

SIGNATURE:

DATE SUBMITTED: 07-07-2023

ESTIMATED NUMBER OF FIELD DAYS TO COMPLETE FIELD WORK: (1) ONE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
LAND SURVEYING SERVICES
PRICE QUOTATION REQUEST

ITEM DESCRIPTION	UNIT	QUANTITY	LABERGE GROUP	
			UNIT COST (1)	EXTENDED COST
1 LAND SURVEYING SERVICES	LUMP SUM	1	$3800.00	$3,800.00

Total: $3,800.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

AUTHORIZED REPRESENTATIVE: Richard F. Laberge, President
Laberge Group

SIGNATURE:

DATE SUBMITTED: 7/11/23

ESTIMATED NUMBER OF FIELD DAYS TO COMPLETE FIELD WORK: 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
LAND SURVEYING SERVICES
PRICE QUOTATION REQUEST

ITEM DESCRIPTION	UNIT	QUANTITY	CONTROL POINT ASSOCIATES, INC.	
			UNIT COST (1)	EXTENDED COST
1 LAND SURVEYING SERVICES	LUMP SUM	1	$6,500	$6,500

Total: $6,500.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

AUTHORIZED REPRESENTATIVE: Gregory Sawulski

SIGNATURE: _____

DATE SUBMITTED: 7/10/2023

ESTIMATED NUMBER OF FIELD DAYS TO COMPLETE FIELD WORK: 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☑ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☐ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☑ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Vali-Data of WNY (WBE)	(716) 289-0926	6/30/23	$4,550.00
Environmental Data Services (WBE)	(561) 475-2000	7/6/23	$5,605.60
Alpha Geoscience	(518) 348-6995	6/30/23	$33,041.00

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Vali-Data of WNY (WBE)

Name of Subcontractor

rev 9/27/2021

Warren, Daniel

From: Warren, Daniel
Sent: Thursday, June 29, 2023 12:08 AM
To: Jodi Zimmerman - Vali-Data of WNY, NY (Vali-data.wny@hotmail.com)
Cc: Magda, Jim; Bochner, Jordan
Subject: NYSDEC Solvent Finishers | Request for Pricing - Data Validation
Attachments: SF - DV Price Quotation Request_VALI-DATA.pdf; D009812 - TRC Generic Terms and Conditions.pdf; NYSDEC DER-10 - Appendix 2B.pdf

Jodi,

TRC Engineers, Inc. (TRC), on behalf of the New York State Department of Environmental Conservation (NYSDEC), is requesting that your firm provide a cost estimate for third-party independent analytical data validation and EQuIS electronic data deliverable (EDD) updating for environmental samples to be collected at the Solvent Finishers site located at 601 Cantiague Rock Road, Jericho, NY.

Following review and validation of the analytical data, the selected data validation firm will summarize its findings in a data usability summary report (DUSR) and update the associated EDDs accordingly. All data validation activities will be performed in accordance with NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B "Guidance for Data Deliverables and the Development of DUSRs" (attached). Receipt of the analytical data is expected during Winter 2023/2024 (or later).

The selected data validator will be required to enter into an agreement with TRC for this project and will be required to accept the terms and conditions of the agreement (attached) and provide TRC with the proper insurance documentation (General Liability and Worker's Compensation insurance naming TRC Engineers, Inc., the State of New York, and the New York State Department of Environmental Conservation as additional insured).

Based on TRC's proposed scope of work to the NYSDEC, up to 38 sample delivery groups (SDGs) will require validation. In addition, TRC will collect standard laboratory and field quality assurance/quality control (QA/QC) samples including blind duplicates, equipment blanks, trip blanks, and matrix spike/matrix spike duplicates (MS/MSDs). TRC will provide parent sample information, where applicable, when the data packages are transmitted to the selected data validation firm.

Please complete the attached spreadsheet and return via email. Your proposed cost must be all inclusive (i.e., include all applicable taxes, fees, etc.) and must be submitted on the attached form. Note that New York State, and NYSDEC, are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption. Prevailing wage rates apply.

If you have any questions or require additional information, please contact me. We ask for receipt of your response by **Thursday, July 6, 2023**. Please provide a response even if you are not interested in providing a quote for the work. Thank you for your attention to this matter and I look forward to your reply.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
DATA VALIDATION SERVICES
COST COMPARISON SUMMARY

ITEM DESCRIPTION		SAMPLE MATRIX	USEPA METHOD NO.	UNIT	QUANTITY[1]	ALPHA GEOSCIENCE		ENVIRONMENTAL DATA SERVICES (WBE)		VALI-DATA OF WNY (WBE)	
						UNIT COST[2]	EXTENDED COST	UNIT COST[2]	EXTENDED COST	UNIT COST[2]	EXTENDED COST
SOIL SAMPLING (UP TO 8 SDGs)											
1)	TCL VOCS + 10 TICs[3]	SOLID	8260D	EACH	27	$183.00	$4,941.00	$30.80	$831.60	$25.00	$675.00
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	8	$125.00	$1,000.00	$0.00	$0.00	$0.00	$0.00
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	8	$125.00	$1,000.00	$0.00	$0.00	$0.00	$0.00
GROUNDWATER SAMPLING (UP TO 30 SDGs)											
1)	TCL VOCS + 10 TICs[3]	AQUEOUS	8260D	EACH	155	$120.00	$18,600.00	$30.80	$4,774.00	$25.00	$3,875.00
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	30	$125.00	$3,750.00	$0.00	$0.00	$0.00	$0.00
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	30	$125.00	$3,750.00	$0.00	$0.00	$0.00	$0.00
					TOTAL		$33,041.00		$5,605.60		$4,550.00

NOTES:
1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.
2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), INCIDENTALS, TAXES, ETC.
3. MAY INCLUDE THE FOLLOWING QA/QC SAMPLES: BLIND DUPLICATE, EQUIPMENT BLANK, MS/MSD, AND TRIP BLANK.
4. INCLUDES UP TO 1-HOUR OF LABORATORY COORDINATION TIME FOR QUESTIONS, CLARIFICATIONS, ETC. PER SDG.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
DATA VALIDATION SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	SAMPLE MATRIX	USEPA METHOD NO.	UNIT	QUANTITY[1]	VALI-DATA OF WNY (WBE)	
						UNIT COST[2]	EXTENDED COST
SOIL SAMPLING (UP TO 8 SDGs)							
1)	TCL VOCS + 10 TICs[3]	SOLID	8260D	EACH	27	$25.00	$675.00
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	8	$0	$0
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	8	$0	$0
GROUNDWATER SAMPLING (UP TO 30 SDGs)							
1)	TCL VOCS + 10 TICs[3]	AQUEOUS	8260D	EACH	155	$25.00	$3875.00
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	30	$0	$0
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	30	$0	$0

NOTES:

Total: $4,550.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.
2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), INCIDENTALS, TAXES, ETC.
3. MAY INCLUDE THE FOLLOWING QA/QC SAMPLES: BLIND DUPLICATE, EQUIPMENT BLANK, MS/MSD, AND TRIP BLANK.
4. INCLUDES UP TO 1-HOUR OF LABORATORY COORDINATION TIME FOR QUESTIONS, CLARIFICATIONS, ETC. PER SDG.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
DATA VALIDATION SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	SAMPLE MATRIX	USEPA METHOD NO.	UNIT	QUANTITY[1]	ENVIRONMENTAL DATA SERVICES (WBE)		
						UNIT COST[2]	EXTENDED COST	
SOIL SAMPLING (UP TO 8 SDGs)								
1)	TCL VOCS + 10 TICs[3]	SOLID	8260D	EACH	27	30.80~~$28.00~~	~~$756.00~~	$831.60
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	8		~~$75.00~~	
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	8			
GROUNDWATER SAMPLING (UP TO 30 SDGs)								
1)	TCL VOCS + 10 TICs[3]	AQUEOUS	8260D	EACH	155	30.80 ~~$26.00~~	~~$4,340.00~~	$4,774.00
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	30		~~$434.00~~	
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	30			

NOTES:

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.
2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), INCIDENTALS, TAXES, ETC.
3. MAY INCLUDE THE FOLLOWING QA/QC SAMPLES: BLIND DUPLICATE, EQUIPMENT BLANK, MS/MSD, AND TRIP BLANK.
4. INCLUDES UP TO 1-HOUR OF LABORATORY COORDINATION TIME FOR QUESTIONS, CLARIFICATIONS, ETC. PER SDG.

Total: $5,605.60

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
DATA VALIDATION SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	SAMPLE MATRIX	USEPA METHOD NO.	UNIT	QUANTITY[1]	ALPHA GEOSCIENCE	
						UNIT COST[2]	EXTENDED COST
SOIL SAMPLING (UP TO 8 SDGs)							
1)	TCL VOCS + 10 TICs[3]	SOLID	8260D	EACH	27	$183	$4,941
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	8	$125	$1,000
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	8	$125	$1,000
GROUNDWATER SAMPLING (UP TO 30 SDGs)							
1)	TCL VOCS + 10 TICs[3]	AQUEOUS	8260D	EACH	155	$120	$18,600
2)	DUSR AND EQUIS EDD UPDATE[4]	NA	NA	EACH	30	$125	$3,750
3)	LABORATORY COORDINATION EXCEEDING 1-HOUR PER SDG	NA	NA	HOUR	30	$125	$3,750

NOTES:

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.
2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), INCIDENTALS, TAXES, ETC.
3. MAY INCLUDE THE FOLLOWING QA/QC SAMPLES: BLIND DUPLICATE, EQUIPMENT BLANK, MS/MSD, AND TRIP BLANK.
4. INCLUDES UP TO 1-HOUR OF LABORATORY COORDINATION TIME FOR QUESTIONS, CLARIFICATIONS, ETC. PER SDG.

Total: $33,041.00

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☑ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☐ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☐ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
AARCO Environmental Services Corp.	(631) 586-5900	6/28/23	$39,340.00
Innovative Recycling Technologies, Inc.	(631) 225-3044	6/30/23	$45,080.24
Rivers Environmental, LLC	(516) 693-8000	7/6/23	$49,225.00
Brookside Environmental, Inc.	(516)-852-1631	7/6/23	$50,790.00
Environmental Waste Minimization, Inc.	(484) 735-3357	7/20/23	$153,490.00

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

AARCO Environmental Services Corp.

Name of Subcontractor

rev 9/27/2021

Warren, Daniel

From: Warren, Daniel
Sent: Wednesday, June 28, 2023 3:05 PM
To: Stuthill@aarcoenvironmental.com
Cc: Tara Boggs; Magda, Jim; Bochner, Jordan
Subject: NYSDEC Solvent Finishers | Request for Pricing - IDW Management
Attachments: D009812 - TRC Generic Terms and Conditions.pdf; SF-Figure 1.pdf; SF-IDW Management Price Quotation_AARCO.pdf

Sean,

TRC Engineers, Inc. (TRC) is requesting that your firm provide a price quotation for investigation derived waste (IDW), pickup, transportation and disposal services for an investigation at, and near, the Solvent Finishers site located at 601 Cantiague Rock Road, Jericho, NY (the Site, see attached **Figure 1**). Please note that the work will be performed under TRC's Standby Engineering Services Contract No. D009812 (the Prime Agreement) with the New York State Department of Environmental Conservation (the Department or NYSDEC).

Liquid IDW is anticipated to consist of drilling fluids, well development water, well sampling purge water and decontamination wastewater. Solid IDW is anticipated to consist of drill cuttings and used personal protective equipment (PPE). TRC will provide solid and liquid IDW waste characterization sampling results (for the drummed waste). It is expected that solid and liquid waste will be determined as hazardous based on tetrachloroethene, the primary Site contaminant, concentrations. The maximum concentrations of tetrachloroethene in soil (hazardous solid waste) is expected to be less than 60 milligrams per kilograms (mg/kg). The maximum concentration of tetrachloroethene in hazardous liquid waste is expected to be less than 200 milligrams per liter (mg/L).

IDW will be containerized by others in 55-gallon drums. It is anticipated that up to nine IDW pickup and disposal events will be required between Summer 2023 and Winter 2023/2024 (or later).

Please review the attached spreadsheet, add proposed unit costs for the items identified below, and add the proposed disposal facilities for solid and liquid waste in your return email. Please also provide all sampling and analyses requirements including sampling frequency, necessary to obtain acceptance at each disposal facility for each waste type. **Please note that all proposed unit costs in the attached cost schedule shall be all inclusive (including all applicable taxes and fees).** Note that New York State, and NYSDEC, are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption. **This project is a prevailing wage rate job.** The estimated scope of work is summarized below. Payment will be made based on unit prices and actual quantities only.

- Pickup of drummed solid and liquid IDW. Up to 20 full 55-gallon drums of solid and/or liquid IDW will be included in each pickup (a minimum number of drums per pickup event is not guaranteed);
- Disposal of empty 55-gallon drums;
- Disposal of full 55-gallon drums containing municipal-type solid waste;
- Disposal of full 55-gallon drums containing hazardous solid IDW;
- Disposal of full 55-gallon drums containing non-hazardous solid IDW;
- Disposal of full 55-gallon drums containing hazardous liquid IDW; and
- Disposal of full 55-gallon drums containing non-hazardous liquid IDW.

The selected subcontractor will be required to enter into an agreement with TRC for this project and will be required to accept the terms and conditions of the agreement (attached) and provide TRC with the proper insurance documentation (General Liability and Worker's Compensation insurance naming TRC Engineers, Inc., The State of New York, and New York State Department of Environmental Conservation as Additional Insured).

Please email me with any questions you may have on the scope of work.

We ask for receipt of your response by **COB Thursday, July 6, 2023**. Please provide a response even if you are not interested in providing a bid for the work.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
COST COMPARISON SUMMARY

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	AARCO ENVIRONMENTAL SERVICES CORP.		INNOVATIVE RECYCLING TECHNOLOGIES, INC. (WBE)		RIVERS ENVIRONMENTAL, LLC		BROOKSIDE ENVIRONMENTAL, INC.		ENVIRONMENTAL WASTE MINIMIZATION, INC.	
				UNIT COST (2)	EXTENDED COST	UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	9	$800.00	$7,200.00	$488.81	$4,399.29	$550.00	$4,950.00	$1,250.00	$11,250.00	$12,485.00	$112,365.00
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$25.00	$125.00	$65.18	$325.90	$25.00	$125.00	$20.00	$100.00	$35.00	$175.00
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$89.00	$890.00	$168.37	$1,683.70	$140.00	$1,400.00	$145.00	$1,450.00	$140.00	$1,400.00
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$650.00	$6,500.00	$754.94	$7,549.40	$1,250.00	$12,500.00	$469.00	$4,690.00	$765.00	$7,650.00
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	45	$89.00	$4,005.00	$157.51	$7,087.95	$140.00	$6,300.00	$195.00	$8,775.00	$140.00	$6,300.00
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	30	$475.00	$14,250.00	$412.78	$12,383.40	$495.00	$14,850.00	$395.00	$11,850.00	$550.00	$16,500.00
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	65	$98.00	$6,370.00	$179.24	$11,650.60	$140.00	$9,100.00	$195.00	$12,675.00	$140.00	$9,100.00
		TOTAL:			$39,340.00		$45,080.24		$49,225.00		$50,790.00		$153,490.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
REQUEST FOR PRICE QUOTATION

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	AARCO ENVIRONMENTAL SERVICES CORP. UNIT COST (2)	AARCO ENVIRONMENTAL SERVICES CORP. EXTENDED COST	
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	9	$800.00	$7200.00	
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$25.00	$125.00	
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$89.00	$890.00	
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$650.00	$6500.00	
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	~~100~~ 45	$89.00	~~$8900.00~~	$4,005.00
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~15~~ 30	$475.00	~~$7125.00~~	$14,250.00
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~25~~ 65	$98.00	~~$2450.00~~	$6,370.00

Total: $39,340.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Environmental Systems, Hatfield PA
NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Dale Transfer Corp., West Babylon NY
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Environmental Systems, Hatfield PA
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Dale Transfer Corp., West Babylon NY

AUTHORIZED REPRESENTATIVE: Steve Plofker

SIGNATURE: 

DATE SUBMITTED: 6/28/2023

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
REQUEST FOR PRICE QUOTATION

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	INNOVATIVE RECYCLING TECHNOLOGIES, INC. (WBE) UNIT COST (1)	EXTENDED COST	
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	9	$488.81	$4,399.29	
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$65.18	$325.90	
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$168.37	$1,683.70	
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$754.94	$7,549.40	
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	~~100~~ 45	$157.51	~~$15,751.00~~	$7,087.95
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~15~~ 30	$412.78	~~$6,191.70~~	$12,383.40
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~25~~ 65	$179.24	~~$4,481.00~~	$11,650.60

Total: $45,080.24

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Environnmental Sytsems Hatfield PA
NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Republic Environmental Systems Hatfield PA
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Environmental Systems Hatfield PA
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Republic Environmental Systems Hatfield PA

AUTHORIZED REPRESENTATIVE: Randall Burnett **Innovative Recycling Tech., Inc.**

SIGNATURE: Randall Burnett

DATE SUBMITTED: June 30th, 2023

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
REQUEST FOR PRICE QUOTATION

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	RIVERS ENVIRONMENTAL, LLC		
				UNIT COST (1)	EXTENDED COST	
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	9	$550	$4,950.00	
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$25	$125.00	
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$140	$1,400.00	
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$1,250	$12,500.00	
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	45 ~~100~~	$140	~~$14,000.00~~	$6,300
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	30 ~~15~~	*** $495	~~$7,425.00~~	$14,850.00
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	65 ~~25~~	$140	~~$3,500.00~~	$9,100.00

Total: $49,225.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

*** Lean Water <5% Chlorinated, greater than that is 5% - 10 % is incineration and $1,500/drum, over 10% is 2,500/drum

NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Env Systems /Ross
NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Republic Env Systems
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (HAZARDOUS):	Republic Env Systems/Ross
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Republic Env Systems

AUTHORIZED REPRESENTATIVE: Daniel J Rivers

SIGNATURE: Daniel J Rivers

DATE SUBMITTED: 7-6-23

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
REQUEST FOR PRICE QUOTATION

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	BROOKSIDE ENVIRONMENTAL, INC. UNIT COST (1)	BROOKSIDE ENVIRONMENTAL, INC. EXTENDED COST	
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	9	$1,250.00	$11,250.00	
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$ 20.00	$ 100.00	
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$ 145.00	$ 1,450.00	
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$ 469.00	$4,690.00	
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	~~100~~ 45	$ 195.00	~~$19,500.00~~	$8,775.00
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~15~~ 30	$ 395.00	~~$5,925.00~~	$11,850.00
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~25~~ 65	$195.00	~~$4,875.00~~	$12,675.00

Total: $50,790.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.

2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (HAZARDOUS):	Veolia ES Technical Solutions Flanders, New Jersey
NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (HAZARDOUS):	
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	

AUTHORIZED REPRESENTATIVE: Richard V. Taylor

SIGNATURE: Richard V. Taylor

DATE SUBMITTED: 7/6/23

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
IDW MANAGEMENT SERVICES
REQUEST FOR PRICE QUOTATION

	ITEM DESCRIPTION	UNIT	QUANTITY (1)	ENVIRONMENTAL WASTE MINIMIZATION, INC.	
				UNIT COST (1)	EXTENDED COST
1	DRUM PICKUP AND TRANSPORTATION FEE (UP TO 20 DRUMS PER PICKUP)	PER EVENT	~~1~~ 9	$12,485.00	~~$12,485.00~~ $112,365.00
2	DISPOSAL OF EMPTY DRUMS	EMPTY 55-GALLON DRUM	5	$35.00	$175.00
3	DISPOSAL OF MUNICIPAL-TYPE SOLID IDW	FULL 55-GALLON DRUM	10	$140.00	$1,400.00
4	DISPOSAL OF HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	10	$765.00	$7,650.00
5	DISPOSAL OF NON-HAZARDOUS SOLID IDW	FULL 55-GALLON DRUM	~~100~~ 45	$140.00	~~$14,000.00~~ $6,300.00
6	DISPOSAL OF HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~15~~ 30	$550.00	~~$8,250.00~~ $16,500.00
7	DISPOSAL OF NON-HAZARDOUS LIQUID IDW	FULL 55-GALLON DRUM	~~25~~ 65	$140.00	~~$3,500.00~~ $9,100.00
			~~TOTAL:~~		~~$47,460.00~~

Total: $153,490.00

1. QUANTITIES ARE ESTIMATES ONLY. ACTUAL AMOUNTS WILL VARY. PAYMENT WILL BE MADE BASED ON UNIT PRICES AND ACTUAL AMOUNTS ONLY.
2. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC. TO COMPLETE THE WORK.

NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (HAZARDOUS):	Veolia, 1 Eden Lane / Flanders, New Jersey 07836
NAME AND LOCATION OF PROPOSED SOLID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	VLS, 1116 Manheim Pike, Lancaster, PA 17601
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (HAZARDOUS):	VLS, 1116 Manheim Pike, Lancaster, PA 17601
NAME AND LOCATION OF PROPOSED LIQUID WASTE DISPOSAL FACILITY (NON-HAZARDOUS):	Veolia, 1 Eden Lane / Flanders, New Jersey 07836

AUTHORIZED REPRESENTATIVE: Matthew K Smith

SIGNATURE:

DATE SUBMITTED: 7/20/23

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation

Subcontract Solicitation Record and Certification for Standby Engineering Contracts

Contract/WA No: D009812-37 Site/Spill No.: 130172

Site/Spill Name: Solvent Finishers

Check the appropriate box below, fill in the quotation chart, and complete all fields on page 2.

Standby Subcontractors

☐ **Standby laboratory or data validator selected on rotational basis.**
Work that includes non-contract items will be evaluated on a case-by-case basis (dollar amount, percent of items).

☐ **Standby driller or geoprobe selected as lowest quote.**
Obtain complete quotes from all standby firms, including mob/demob and any other non-contract items. Declinations to bid must be included in back-up.

Non-Standby Subcontractors
For non-standby Unit Price or Lump-Sum subcontractor work, obtain and attach the necessary number of quotes indicated below. Declinations to bid are not considered responsive quotes.

☐ **Total estimated cost is less than $1,000**; justification is provided for usage of subcontractor.

☐ **Total estimated cost is between $1,000 and $10,000**; three responsive quotes must be obtained (verbal is allowed).

☐ **Total estimated cost is between $10,000 and $20,000**; three written responsive quotes must be obtained.

☑ **Total estimated cost exceeds $20,000**; five written responsive quotes must be obtained.

☑ **Insufficient number of quotes were obtained:** provide method/evidence of procurement inquiry. Provide all quotes and declinations in order to show good faith efforts to obtain appropriate number of quotes.

☐ **MBE/WBE/DBE/SDVOB subcontractor usage with an estimated cost under $10,000:** obtain one comparative quote to show cost reasonableness. Provide another type of cost comparison if second quote was unavailable.

☐ **Single Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for particular vendor usage (e.g., importance of site familiarity, quick mobilization or turnaround needed, specific maintenance/warranty demands).

☐ **Sole Source procurement is needed:** provide at least one comparable quote to show cost reasonableness along with an explanation of circumstances for specific vendor usage (e.g., trademarked or proprietary product and/or service).

Subcontractor/Subconsultant	*Phone Number*	*Date*	*Quoted Price*
Terra Systems, Inc.	(302) 798-9553	7/20/23	$70,000.00
Ursus Remediation Testing and Technologies, LLC	(608) 437-7413	7/21/23	$93,728.80
Resolution Partners, LLC	(608) 669-1248	7/21/23	$145,146.00

On behalf of the Engineering Firm named below, I hereby certify that the subcontract named below was procured in accordance with the terms of the prime contract and all applicable requirements of the State of New York. I also hereby certify that the executed subcontract will include all appropriate language and that all required documents were completed appropriately and were acceptable. Specifically, I hereby certify the following:

1. The Engineer has determined that the subcontractor is qualified. A statement of qualifications for the subcontractor is maintained. It includes a statement of compliance with all licenses, certifications, and permits, if applicable. Note: For laboratories, this can be determined at https://www.wadsworth.org/regulatory/elap

2. The Engineer has determined the costs are reasonable. A procurement record supporting the determination is maintained.

3. The Engineer performed a Conflict of Interest check, if applicable, and documented it in writing. Refer to Appendix B, clause III (e) for applicability. Note: When using standby subcontractors on a work assignment (WA), new WA-specific subcontract certifications must be submitted.

4. For subcontracts in excess (or anticipated to be in excess) of $100,000, the subcontractor submitted an acceptable New York State Vendor Responsibility Questionnaire. Information related to vendor responsibility can be found at https://www.osc.state.ny.us/vendrep/

5. The subcontract includes pass down requirements from the prime contract as follows:
   - From Appendix B, regarding Minority- and Women-Owned Business Enterprises (M/WBE)
   - From Appendix B, regarding Conflict of Interest (COI) checks
   - From Appendix F, regarding Service-Disabled Veteran-Owned Businesses (SDVOB)

6. The subcontract includes the termination clause required in the prime contract.

7. The subcontract does not include "pay if paid" type clauses which are unenforceable in New York State.

8. The Engineer's use of subcontractors will not diminish the Engineer's obligations to complete the work in accordance with the contract. Each Engineer will control and coordinate the work of his subcontractors. The Engineer is responsible for informing his subcontractors of all the terms, conditions, and requirements of the contract documents. The Engineer will impose insurance requirements/limits on the subcontractor that are commensurate with the work of the subcontractor. The Department has the right to request proof of insurance at any time.

9. Documentation supporting this certification, including the executed subcontract, is maintained by the Engineer and will be provided within 10 days of any request made by the Department.

Signature of Engineer's Authorized Representative

08/04/2023

Date

TRC Engineers, Inc.

Name of Engineering Firm

D009812-37

Contract/WA No.

Terra Systems, Inc.

Name of Subcontractor

rev 9/27/2021

1430 Broadway, 10th Floor
New York, NY 10018
T 212.221.7822
TRCcompanies.com

Memorandum

To: Ms. Dana Nieder, Contract Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management
Contracts and Payment Section
625 Broadway, 12th Floor
Albany, NY 12233-7012

From: James Magda, P.G.

Subject: Solvent Finishers – Site No. 130172
Subcontracting to Terra Systems, Inc. – Insufficient Number of Quotes

Date: August 4, 2023

cc: J. Thompson – NYSDEC
D. Glass, D. Warren, B. Lazar – TRC

TRC Engineers, Inc. (TRC) will be investigating the Solvent Finishers Site under New York State Department of Environmental Conservation (NYSDEC or the Department) Work Assignment No. D009812-37 to support a future remedial design that will likely include in-situ chemical oxidation (ISCO) injections. As such, a bench-scale column testing program is required to determine total oxidant and activator demand/loss rates, contaminant destruction rates, and contaminant transport properties of site soil. The results of the bench-scale column testing will be used in conjunction with the results of site-wide soil and groundwater sampling to inform future investigation and design activities.

There are less than five testing laboratories that are capable of conducting column tests with contaminated soil and ISCO amendments that TRC can confidently recommend. Due to the specialized nature of the work (i.e., experience with proprietary and non-proprietary products, understanding of various applied remedial technologies, experience with field and laboratory test methods, etc.) and the significant influence the results of bench-scale testing will have on the remedial design, it is critical that the subcontractor performing the work is able to execute the full scope of the bench-scale test and deliver accurate conclusions and reliable recommendations. Additionally, a responsive firm is required for the testing, since while testing is underway, the subcontractor will be required to be in close contact with the TRC project team to convey in-progress test results, discuss and explain test observations, and implement changes or adjustments to the testing program based on recommendations from the design team. As such, TRC recommends subcontracting this work to a testing laboratory that the project team has previously worked with and is known to be reliable.

TRC solicited and received pricing from three qualified testing laboratories [Resolution Partners, LLC (Resolution Partners), Terra Systems, Inc. (Terra Systems), and Ursus Remediation Testing and Technologies, Inc. (Ursus)]. TRC has previously subcontracted similar work to each of these testing laboratories. As the lowest qualified bidder, TRC is requesting authorization to utilize Terra Systems to perform the bench-scale testing work.

TRC has worked successfully with Terra Systems chemists and personnel on similar bench-scale testing programs and is comfortable with their ability to complete the bench-scale test scope of work, communicate test

results and observations effectively to the project team, implement changes to the testing program when needed and as directed, as well as provide meaningful data to be used during remedial design.

For cost comparison purposes, attached to this memorandum are bids received from Terra Systems, Inc., Ursus, and Resolution Partners.

Warren, Daniel

From: Warren, Daniel
Sent: Tuesday, July 18, 2023 10:33 AM
To: mlee@terrasystems.net
Cc: mfree@terrasystems.net; Magda, Jim; Lazar, Brendan
Subject: NYSDEC Solvent Finishers | Column Testing - Request for Pricing
Attachments: D009812 - TRC Generic Terms and Conditions.pdf; SF - Column Testing Quotation Request_TERRA.pdf; SF - Column Testing RTC_20230718.pdf

Mike,

TRC Engineers, Inc. (TRC), on behalf of the New York State Department of Environmental Conservation (NYSDEC), is requesting that your firm provide a cost estimate for bench-scale treatability testing of environmental samples to be collected for the Solvent Finishers site located at 601 Cantiague Rock Road, Jericho, NY. This request for pricing supersedes the request for pricing transmitted by TRC on June 7, 2023. Attached are TRC's responses to questions from potential bidders received by TRC in response to the June 7, 2023 pricing request.

Treatability testing will be conducted to collect data in support of a remedial design for chlorinated volatile organic compounds (VOCs), primarily tetrachloroethene, in saturated soil and overburden groundwater from approximately 80 to 550 feet below ground surface (bgs). The selected laboratory shall conduct treatability testing of in-situ chemical oxidation (ISCO), with alkaline activated persulfate, of soil and groundwater samples representing the following approximate vertical intervals (VI):

- VI-1: 80 to 200 feet below ground surface (bgs);
- VI-2: 200 to 300 feet bgs;
- VI-3: 300 to 400 feet bgs;
- VI-4: 400 to 500 feet bgs; and
- VI-5: 500 to 550 feet bgs.

The selected treatability laboratory will be required to enter into an agreement with TRC for this project and will be required to accept the terms and conditions of the agreement (attached) and provide TRC with the proper insurance documentation (General Liability and Worker's Compensation insurance naming TRC Engineers, Inc., the State of New York, and the New York State Department of Environmental Conservation as additional insured).

Please complete the attached price quotation spreadsheet and return via email. Your proposed cost must be all inclusive (i.e., include all applicable taxes, fees, etc.) and must be submitted on the attached form. Note that New York State and NYSDEC, are exempt from sales and use taxes. The Prime Agreement will be the only evidence provided of the exemption. Prevailing wage rates apply. The work is anticipated to be executed during the Summer/Fall of 2023 (or later).

The selected laboratory shall perform the following:

Soil and Groundwater Analyses:

1. Up to 7 soil samples shall be analyzed for:
   - Grain size analysis via ASTM D6913 or ASTM D7928;
   - Bulk density via ASTM D7263;
   - Permeability via method proposed by laboratory and approved by TRC;
   - 48-hour total oxidant demand (TOD), utilizing alkaline-activated persulfate, via method to be proposed by laboratory and approved by TRC;
   - Total alkaline buffer demand via method proposed by laboratory and approved by TRC;

2. Up to 7 groundwater samples collected from one existing multi-level monitoring well (SF-MW-101ML) and the newly-installed multi-level monitoring well (SF-MW-201ML) shall be analyzed for:
   - 48-hour TOD utilizing alkaline-activated persulfate, via method to be proposed by laboratory and approved by TRC;

- Total alkaline buffer demand via method proposed by laboratory and approved by TRC;

In-Situ Chemical Oxidation Treatability Testing

2. ***Sample Receipt and Management:*** TRC will furnish up to five samples of each saturated soil and groundwater in quantities (i.e., weight of soil, volume of groundwater), dimensions (i.e., length of soil cores), and sampling containers specified by the laboratory. TRC will containerize, package, and ship the samples under chain of custody protocols to the laboratory. Upon receipt, the laboratory shall conduct an inventory of the samples compared to the chain of custody, documenting the quantity and condition of the samples, as well as the temperature of the sample coolers/containers and provide a signed copy of the chain of custody form(s) and inventory documentation to TRC. Samples shall be stored at 4°C when not being tested.

3. ***Baseline Analyses:***

   Up to five soil samples shall be analyzed for:

   - Grain size analysis via ASTM D6913 or ASTM D7928;
   - Bulk density via ASTM D7263;
   - Permeability via method proposed by laboratory and approved by TRC;
   - pH via method proposed by laboratory and approved by TRC;
   - 48-hour TOD, utilizing alkaline-activated persulfate, via method to be proposed by laboratory and approved by TRC;
   - Total alkaline buffer demand via method proposed by laboratory and approved by TRC;
   - Target Compound List (TCL) VOCs, via USEPA Method 8260, with a forward library search;
   - Total organic carbon (TOC) via Lloyd Kahn or USEPA Method 9060; and
   - Target Analyte List (TAL) metals via USEPA Method 6010.

   Up to five groundwater samples shall be analyzed for;

   - Groundwater quality parameters (pH, temperature, specific conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) via methods proposed by laboratory and approved by TRC;
   - 48-hour total oxidant demand, utilizing alkaline-activated persulfate, via method to be proposed by laboratory and approved by TRC;
   - Total alkaline buffer demand via method proposed by laboratory and approved by TRC;
   - TCL VOCs, via USEPA Method 8260, with a forward library search;
   - Total organic carbon via Lloyd Kahn or USEPA Method 9060; and
   - TAL metals via USEPA Method 6010.

Where applicable, all analyses shall be performed by a New York Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. This includes, at a minimum, but is not limited to, all analyses for VOCs and metals. Laboratory shall provide analytical results within 20 business days. Laboratory shall provide NYSDEC Analytical Services Protocol (ASP) Category A deliverables and NYSDEC EQuiS Electronic Data Deliverables (EDDs), when applicable.

4. ***Batch Bottle Tests:*** The laboratory shall conduct two batch bottle tests for each vertical interval to determine TOD with alkaline-activated persulfate. Two oxidant loading rates shall be recommended from the results of baseline analyses (described above) and approved by TRC prior to beginning tests. Sacrificial bottle sets will be established for each loading rate for each vertical interval. For each loading rate one bottle set shall be prepared with soil and groundwater treated with the approved dosages of oxidant and activator and one bottle set shall be prepared with untreated soil and groundwater. Bottle sets shall be comprised of a slurry of soil and groundwater at a ratio of approximately 1 part soil to 1 part groundwater or 2 parts soil to 1 part groundwater. Mixing ratios shall be recommended by the laboratory and approved by TRC prior to beginning tests.

   Testing of Untreated Bottles

   Groundwater samples and soil samples shall be collected from the untreated bottle sets of each of the five vertical intervals on the specified days following bottle setup as detailed below.

   - Day 0:
     - Groundwater samples shall be measured or analyzed by the treatability laboratory for temperature, pH, and Oxidation-Reduction Potential (ORP). Groundwater samples shall be collected and submitted for

laboratory analysis of TCL VOCs via USEPA Method 8260 (one groundwater sample from the untreated bottle set for each of the 5 vertical intervals).
    - Soil samples of the saturated soil shall be collected after decanting the remaining groundwater and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 (one soil sample from the untreated bottle set from each of the 5 vertical intervals)
- Day 14:
    - Groundwater samples shall be measured or analyzed by the treatability laboratory for temperature, pH, and ORP. Groundwater samples shall be collected and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 (one groundwater sample from the untreated bottle set from each of the 5 vertical intervals).
    - Soil samples of the saturated soil shall be collected after decanting the remaining groundwater and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 (one soil sample from the untreated bottle set from each of the 5 vertical intervals)
- Day 28:
    - Groundwater samples shall be measured or analyzed by the treatability laboratory for temperature, pH, and ORP. Groundwater samples shall be collected and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 and TAL metals via USEPA Method 6010 (up to 5 groundwater samples from the 5 untreated bottle sets representing each of the 5 vertical intervals).
    - Soil samples of the saturated soil shall be collected after decanting the remaining groundwater and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 and TAL metals via USEPA Method 6010 (up to 5 soil samples from the 5 untreated bottle sets representing each of the 5 vertical intervals).

The total quantity of samples and corresponding analyses for the untreated bottles is summarized below:

- Up to 15 groundwater samples analyzed/measured for temperature, pH, and ORP.
- Up to 15 groundwater samples analyzed for TCL VOCs via USEPA Method 8260
- Up to 5 groundwater samples analyzed for TAL Metals via USEPA Method 6010
- Up to 15 saturated soil samples for TCL VOCs via USEPA Method 8260
- Up to 5 saturated soil samples for TAL Metals via USEPA Method 6010

<u>Testing of Treated Bottles</u>

Groundwater samples and soil samples shall be collected from the treated bottle sets of each of the five vertical intervals and loadings on the specified days following bottle setup as detailed below.

- Day 14:
    - Groundwater samples shall be measured or analyzed by the treatability laboratory for temperature, pH, ORP, persulfate, and TOD (one sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Groundwater samples shall be collected and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 (one groundwater sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Soil samples shall be analyzed by the treatability laboratory for TOD (one sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Soil samples of the saturated soil shall be collected after decanting the remaining groundwater and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 (one soil sample from each of the 2 treated bottle sets from each of the 5 vertical intervals)
- Day 28:
    - Groundwater samples shall be measured or analyzed by the treatability laboratory for temperature, pH, ORP, persulfate, and TOD (one sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Groundwater samples shall be collected and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 and TAL metals via USEPA Method 6010 (one groundwater sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Soil samples shall be analyzed by the treatability laboratory for TOD (one sample from each of the 2 treated bottle sets from each of the 5 vertical intervals).
    - Soil samples of the saturated soil shall be collected after decanting the remaining groundwater and submitted for laboratory analysis of TCL VOCs via USEPA Method 8260 and TAL metals via USEPA Method 6010 (one soil sample from each of the 2 treated bottle sets from each of the 5 vertical intervals)

The total quantity of samples and corresponding analysis for the treated bottles is summarized below:

- Up to 20 groundwater samples analyzed/measured for temperature, pH, ORP, persulfate, and TOD.

- Up to 20 soil samples analyzed for TOD.
- Up to 20 groundwater samples analyzed for TCL VOCs via USEPA Method 8260
- Up to 10 groundwater samples analyzed for TAL Metals via USEPA Method 6010
- Up to 20 saturated soil samples for TCL VOCs via USEPA Method 8260
- Up to 10 saturated soil samples for TAL Metals via USEPA Method 6010

Where applicable, all analyses shall be performed by a NYSDOH Environmental Laboratory Approval Program-certified laboratory. This includes, at a minimum, but is not limited to, all analyses for VOCs and metals. Laboratory shall provide analytical results within 20 business days. Laboratory shall provide NYSDEC ASP Category A deliverables and NYSDEC EQuiS EDDs, when applicable.

Within 15 business days of receipt of the final analytical data package(s), the laboratory shall submit to TRC tabulated results of all analyses, and estimated TOD, alkaline activator demand, and VOC destruction efficiency in treated bottles compared to the untreated bottles along with any recommendations for the bench-scale column tests prior to initiating the column tests described below.

5. ***Column Tests:***

- *Column Construction:* The laboratory shall construct up to five columns representing each vertical interval sampled. The laboratory shall obtain TRC's approval of construction details of each column before beginning construction. The columns shall be constructed with 3-inch diameter clear Schedule 40 PVC or acrylic at a length of approximately 2 to 3 feet. The columns shall be constructed such that they can be operated with upward flow entering the bottom of the column and exiting the top of the column. The bottom of the column shall be capped with a PVC cap affixed with a hose nipple and valve. The hole for the hose nipple shall be covered with a screen and clean filter sand (or approved alternative) shall fill the base to the top of the PVC cap. The interior walls of the columns shall be coated with Dow Corning silicone stopcock grease (or approved alternative) to mitigate edge flow (i.e., preferential flow along the column surface) and the columns shall be carefully loaded with the soils from each respective vertical interval to simulate formation compaction and to minimize bridging. The top of the column shall be completed with clean filter sand, screen, PVC cap with hose nipple, and discharge tubing. Record and report the weight of soil added per column. Carefully saturate each column with groundwater from the respective vertical zone and record the weight increase of the saturated column and the volume of groundwater added. For each column, report the measured pore volume, unsaturated bulk density of soils, and the saturated bulk density of soils.

- *Salt Tracer Tests:* The laboratory shall conduct salt tracer tests of each column with upward flow to determine porosity and dispersivity and confirm the pore volume of each column. The laboratory shall obtain TRC's approval of means and methods to perform the salt tracer tests, including frequency of sampling/measurements and selection of tracer, prior to beginning tests. For bidding purposes, the laboratory shall include a total of 20 sampling events for:
    - Lab-measured flow (volume per time period).
    - Lab-measured temperature, pH, ORP, and specific conductivity.

  Within 10 days of completing the salt tracer tests, the laboratory shall provide an interim report including:
    - Tabulated testing results showing time, flow, temperature, pH, and specific conductivity.
    - Graphs for temperature, pH, ORP, and specific conductivity versus time to determine and report the salt tracer breakthrough time, effective porosity and dispersivity.
    - Any evidence of edge flow (i.e., short-circuiting) shall be documented.

- *Activated Persulfate Column Tests:* The laboratory shall conduct activated persulfate tests of each column with upward flow of Site groundwater to calculate oxidant and activator breakthrough, residual persulfate, and destruction efficiency of VOCs in groundwater from the effluent compared to the influent concentration. The laboratory shall obtain TRC's approval of means and methods to perform the tests, including oxidant and activator loading rates based on the results of the batch bottle tests, flow rates, and sampling frequency, prior to beginning tests. For bidding purposes, the laboratory shall include a total of 20 sampling/measurement events per column for flow, specific conductivity, pH, and persulfate in their price. Additionally, the laboratory shall collect and submit column influent and effluent water samples for laboratory analysis of TCL VOCs via USEPA Method 8260 of up to 10 sampling events per column (total of 100 samples for TCL VOC analysis). The laboratory shall provide the laboratory results and prepare summary tables showing time, flow, temperature, specific conductivity, pH, ORP, persulfate, and targeted VOCs. The laboratory shall prepare and provide temporal graphs for persulfate, pH and targeted VOCs.

Where applicable, all analyses shall be performed by a NYSDOH Environmental Laboratory Approval Program-certified laboratory. This includes, at a minimum, but is not limited to, all analyses for VOCs. Laboratory shall provide analytical results within 20 business days. Laboratory shall provide NYSDEC ASP Category A deliverables and NYSDEC EQuiS EDDs, when applicable.

6. ***Treatability Testing Report:*** Within 30 calendar days of receipt of the final laboratory data package, the laboratory shall provide a final treatability testing report including sample chains of custody, sample inventory, all testing means and methods, testing results in tables and graphs, recommendations for oxidant and activator loadings for each vertical interval, and recommendations for field-scale application.

We ask for receipt of your response by **July 21, 2023**. Please provide a response even if you are not interested in the work due to Site location, availability, etc. Thank you for your attention to this matter and we look forward to hearing back from you.

Thank you,
Dan Warren
TRC
c: 917-232-9837

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
COLUMN TESTING SERVICES
COST COMPARISON SUMMARY

	ITEM DESCRIPTION	UNIT	QUANTITY	RESOLUTION PARTNERS, LLC		TERRA SYSTEMS, INC.		URSUS REMEDIATION TESTING AND TECHNOLOGIES, LLC	
				UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST	UNIT COST (1)	EXTENDED COST
SOIL AND GROUNDWATER ANALYSES									
1	GRAIN SIZE VIA METHOD ASTM D6913 OR D7928 - NON-AQUEOUS	PER SAMPLE	7	$ 402.50	$ 2,817.50	$ 136.40	$ 954.80	$ 179.40	$ 1,255.80
2	BULK DENSITY VIA METHOD ASTM D7263 - NON-AQUEOUS	PER SAMPLE	7	$ 460.00	$ 3,220.00	$ 27.50	$ 192.50	$ 172.50	$ 1,207.50
3	PERMEABILITY - NON-AQUEOUS (2)	PER SAMPLE	7	$ 1,207.50	$ 8,452.50	$ 643.50	$ 4,504.50	$ 230.00	$ 1,610.00
4	48-HOUR TOTAL OXIDANT DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	$ 400.00	$ 2,800.00	$ 175.00	$ 1,225.00	$ 500.00	$ 3,500.00
5	TOTAL ALKALINE BUFFER DEMAND - NON-AQUEOUS (2,3)	PER SAMPLE	7	$ 100.00	$ 700.00	$ -	$ -	$ -	$ -
6	48-HOUR TOTAL OXIDANT DEMAND - AQUEOUS (2)	PER SAMPLE	7	$ 400.00	$ 2,800.00	$ 175.00	$ 1,225.00	$ 500.00	$ 3,500.00
7	TOTAL ALKALINE BUFFER DEMAND - AQUEOUS (2,3)	PER SAMPLE	7	$ 100.00	$ 700.00	$ -	$ -	$ -	$ -
IN-SITU CHEMICAL OXIDATION TREATABILITY TESTING									
1	SAMPLE RECEIPT AND MANAGEMENT	LUMP SUM	1	$ 8,725.00	$ 8,725.00	$ 11,545.40	$ 11,545.40	$ 1,000.00	$ 1,000.00
2	BASELINE ANALYSES	LUMP SUM	1	$ 23,304.00	$ 23,304.00	$ 5,690.80	$ 5,690.80	$ 12,625.00	$ 12,625.00
3	BATCH BOTTLE TESTS	LUMP SUM	1	$ 27,588.00	$ 27,588.00	$ 15,662.00	$ 15,662.00	$ 37,030.50	$ 37,030.50
4	COLUMN TESTS	LUMP SUM	1	$ 50,039.00	$ 50,039.00	$ 24,840.00	$ 24,840.00	$ 27,200.00	$ 27,200.00
5	TREATABILITY TESTING REPORT	EACH	1	$ 7,980.00	$ 7,980.00	$ 4,160.00	$ 4,160.00	$ 4,800.00	$ 4,800.00
6	OPTIONAL MANAGEMENT OF ANOXIC GROUNDWATER	EACH	1	$ 6,020.00	$ 6,020.00	$ -	$ -	$ -	$ -
				TOTAL:	$ 145,146.00	**TOTAL:**	$ 70,000.00	**TOTAL:**	$ 93,728.80

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.
2. VIA METHOD TO BE PROPOSED BY LABORATORY AND APPROVED BY TRC.
3. TERRA SYSTEMS, INC. AND URSUS REMEDIATION TESTING AND TECHNOLOGIES, LLC COSTS FOR TOTAL ALKALINE BUFFER DEMAND ARE INCLUDED IN THE COST ITEMS FOR TOTAL OXIDANT DEMAND.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
COLUMN TESTING SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	UNIT	QUANTITY	RESOLUTION PARTNERS, LLC	
				UNIT COST (1)	EXTENDED COST
SOIL AND GROUNDWATER ANALYSES (3)					
1	GRAIN SIZE VIA METHOD ASTM D6913 OR D7928 - NON-AQUEOUS	PER SAMPLE	7	$402.50	$2817.50
2	BULK DENSITY VIA METHOD ASTM D7263 - NON-AQUEOUS	PER SAMPLE	7	$460.00	$3220.00
3	PERMEABILITY - NON-AQUEOUS (2)(4)	PER SAMPLE	7	$1207.50	$8452.50
4	48-HOUR TOTAL OXIDANT DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	$400.00	$2800.00
5	TOTAL ALKALINE BUFFER DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	$100.00	$700.00
6	48-HOUR TOTAL OXIDANT DEMAND - AQUEOUS (2)	PER SAMPLE	7	$400.00	$2800.00
7	TOTAL ALKALINE BUFFER DEMAND - AQUEOUS (2)	PER SAMPLE	7	$100.00	$700.00
IN-SITU CHEMICAL OXIDATION TREATABILITY TESTING					
1	SAMPLE RECEIPT AND MANAGEMENT	LUMP SUM	1	$8,725	$8,725
2	BASELINE ANALYSES	LUMP SUM	1	$23,304	$23,304
3	BATCH BOTTLE TESTS	LUMP SUM	1	$27,588	$27,588
4	COLUMN TESTS	LUMP SUM	1	$50,039	$50,039
5	TREATABILITY TESTING REPORT	EACH	1	$7,980	$7,980
6	OPTIONAL MANAGEMENT OF ANOXIC GROUNDWATER (5)	LUMP SUM	1	$6,020	$6,020

Total: $145,146.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.
2. VIA METHOD TO BE PROPOSED BY LABORATORY AND APPROVED BY TRC.
3. Cost per analysis only. Does not include coordination, shipping, and reporting.
4. TRC Geotech labs do not accept contaminated samples. TEST, LLC will accept contaminated samples, but does not have permeameters that can maintain 200 psi confining pressures that would be required for samples from the specified depths.
5. RP can ship specialized containers for preservation of anoxic groundwater.

AUTHORIZED REPRESENTATIVE: Angela Hassell

SIGNATURE: Angela Hassell

PROPOSED NYSDOH ELAP-CERTIFIED LABORATORY: Microbac

DATE SUBMITTED: July 21, 2023

Table 1. Terra Systems, Inc. Quote

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
COLUMN TESTING SERVICES
PRICE QUOTATION REQUEST

ITEM DESCRIPTION	UNIT	QUANTITY	TERRA SYSTEMS	
			UNIT COST (1)	EXTENDED COST
SOIL AND GROUNDWATER ANALYSES				
1 GRAIN SIZE VIA METHOD ASTM D6913 OR D7928 - NON-AQUEOUS	PER SAMPLE	7	$136.40	$954.80
2 BULK DENSITY VIA METHOD ASTM D7263 - NON-AQUEOUS	PER SAMPLE	7	$27.50	$192.50
3 PERMEABILITY - NON-AQUEOUS(2)	PER SAMPLE	7	$643.50	$4,504.50
4 48-HOUR TOTAL OXIDANT DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	$175.00	$1,225.00
5 TOTAL ALKALINE BUFFER DEMAND - NON-AQUEOUS(2)	PER SAMPLE	7	Included in TOD	
6 48-HOUR TOTAL OXIDANT DEMAND - AQUEOUS (2)	PER SAMPLE	7	$175.00	$1,225.00
7 TOTAL ALKALINE BUFFER DEMAND - AQUEOUS(2)	PER SAMPLE	7	Included in TOD	
IN-SITU CHEMICAL OXIDATION TREATABILITY TESTING				
1 SAMPLE RECEIPT AND MANAGEMENT	LUMP SUM	1	$11,545.40	$11,545.40
2 BASELINE ANALYSES	LUMP SUM	1	$5,690.80	$5,690.80
3 BATCH BOTTLE TESTS	LUMP SUM	1	$15,662.00	$15,662.00
4 COLUMN TESTS	LUMP SUM	1	$24,840.00	$24,840.00
5 TREATABILITY TESTING REPORT	EACH	1	$4,160.00	$4,160.00

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.

Total: $70,000.00

2. VIA METHOD TO BE PROPOSED BY LABORATORY AND APPROVED BY TRC.

AUTHORIZED REPRESENTATIVE: Michael D. Lee, PhD

SIGNATURE: Michael D Lee, PhD.

PROPOSED NYSDOH ELAP-CERTIFIED LABORATORY: Eurofins Lancaster Laboratories Environmental

DATE SUBMITTED: 7/20/2023

7/18/20233

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOLVENT FINISHERS, SITE NO. 130172
CONTRACT/WA NO. D009812-37
COLUMN TESTING SERVICES
PRICE QUOTATION REQUEST

	ITEM DESCRIPTION	UNIT	QUANTITY	URSUS REMEDIATION TESTING	
				UNIT COST (1)	EXTENDED COST
SOIL AND GROUNDWATER ANALYSES					
1	GRAIN SIZE VIA METHOD ASTM D6913 OR D7928 - NON-AQUEOUS	PER SAMPLE	7	179.40	1,225.80
2	BULK DENSITY VIA METHOD ASTM D7263 - NON-AQUEOUS	PER SAMPLE	7	172.50	1,207.50
3	PERMEABILITY - NON-AQUEOUS (2)	PER SAMPLE	7	230.00	1,610.00
4	48-HOUR TOTAL OXIDANT DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	500	3,500.00
5	TOTAL ALKALINE BUFFER DEMAND - NON-AQUEOUS (2)	PER SAMPLE	7	0	0
6	48-HOUR TOTAL OXIDANT DEMAND - AQUEOUS (2)	PER SAMPLE	7	500	3,500.00
7	TOTAL ALKALINE BUFFER DEMAND - AQUEOUS (2)	PER SAMPLE	7	0	0
IN-SITU CHEMICAL OXIDATION TREATABILITY TESTING					
1	SAMPLE RECEIPT AND MANAGEMENT	LUMP SUM	1	1,000.00	1,000.00
2	BASELINE ANALYSES	LUMP SUM	1	12,625.00	12,625.00
3	BATCH BOTTLE TESTS	LUMP SUM	1	37,030.50	37,030.50
4	COLUMN TESTS	LUMP SUM	1	27,200.00	27,200.00
5	TREATABILITY TESTING REPORT	EACH	1	4,800,00	4,800.00

Total: $93,728.80

1. UNIT PRICES MUST INCLUDE ALL COSTS FOR LABOR (PREVAILING WAGE LABOR RATES), EQUIPMENT, MATERIALS, SUPPLIES, TOOLS, DAILY TRAVEL, APPROPRIATE HEALTH AND SAFETY REQUIREMENTS (ASSUME LEVEL D), INCIDENTALS, TAXES, ETC.
2. VIA METHOD TO BE PROPOSED BY LABORATORY AND APPROVED BY TRC.

AUTHORIZED REPRESENTATIVE: Andrew Wenzel

SIGNATURE: Andrew Wenzel

PROPOSED NYSDOH ELAP-CERTIFIED LABORATORY: Pace - Melville, NY

DATE SUBMITTED: 7/21/2023