

Arlington Public Schools

Purchasing Office 2110 Washington Blvd., Arlington, VA 22204 • Phone: (703) 228-6123 • Fax: (703) 841-0681 www.apsva.us

July 19, 2018

Haley & Aldrich, Inc.
7601 Lewinsville Road, Suite 101
McLean, VA 22102
Attn: David A. Schoenwolf, PE
dschoenwolf@haleyaldrich.com

Via Email

Subject:

Architecture/Engineering Services for Miscellaneous Task Work Order Contracts for Arlington Public Schools - Amendment 2 to Contract 58FY16.

On June 30, 2018, the above cited Contract between your firm and Arlington County School Board, operating as Arlington Public Schools (APS) will expire.

In as much as your firm's performance under the present contract is satisfactory, attached is a proposed Amendment for a one (1) year renewal of the Contract and you are requested to provide a revised Hourly Rate Schedule for the period July 01, 2018 through June 30, 2019. It should be noted any change(s) shall not exceed the change in the Consumer Price Index for all Urban Consumers (CPI-U), U.S. city average, all items index, for April 2018, an increase of 2.9 percent. Increases requested above that amount will not be entertained by APS. You are requested to strike through the option which is not applicable on the attached Amendment: (a) existing prices or (b) the revised rate schedule (attached). The renewal shall be effective July 01, 2018 and shall remain valid through June 30, 2019. All other terms and conditions shall remain unchanged.

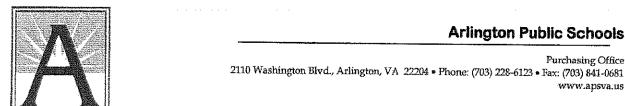
Please indicate your acceptance by having an officer of your firm sign and return the acceptance portion attached. Upon receipt, this office will sign and execute the amendment and return one copy to your office. Your response, to accept or decline, is requested no later than five (5) days from the date of this letter.

Sincerely,

Dyanna McMullen, VCO Senior Procurement Specialist

Phone: (703) 228-7649

Email: dyanna.mcmullen@apsva.us



Arlington Public Schools

Purchasing Office www.apsva.us

Architecture/Engineering Services for Miscellaneous Task Work Order Contracts for SUBJECT: Arlington Public Schools - Amendment 2 to Contract 58FY16.

Haley & Aldrich, Inc. 7601 Lewinsville Road, Suite 101 McLean, VA 22102 Attn: David A. Schoenwolf, PE

By mutual agreement, Contract #58FY16, is renewed for one (1) year at (a) existing prices or (b) the revised rate schedule (attached). The renewal shall be effective from July 1, 2018 and shall remain valid through June 30, 2019. All other terms and conditions shall remain unchanged.

FEE CHANGES:

#	Sub Categories	Current	Rate	CPI-U
	And	Rate	Submitted	Rate
	Descriptions		by Haley	2.9%
			Aldrich	
	Classifications	-		
1	Sr. Project Manager 2	\$229.00	\$243.70	\$235.64
2	Technical Expert 1	\$229.00	\$243.70	\$235.64
3	Senior Consultant	\$229.00	\$243.70	\$235.64
	Other Equipment			
4	c) Daily rate for ATV drills	\$125.00	\$150.00	\$128.63
.5	e) Truck and trailer for skid rig 3 hr. min.	\$125.00	\$150.00	\$128.63
6	Soil borings, ordinary drive samples at max	\$14.00	\$15.00	\$14.41
	Premiums on Item 3			
7	a) hollow stem augers 3-1/4	\$3.00	\$4.00	\$3.09
8	b) hollow stem augers 4-1/4	\$6.00	\$7.00	\$6.17
9	c) hard soil	\$3.00	\$4.00	\$3.09
10	d) depth over 60 ft. less than 90	\$3.00	\$4.00	\$3.09
11	e) mud rotary below water	\$4,50	\$5.50	\$4.63
12	f) casing in lieu of augers	\$6.00	\$7.00	\$6.17
	Intentionally left blank			

Contract 58FY16 Amendment No. 2

ARLINGTON PUBLIC SCHOOLS

FEE CHANGES CONTINUED:

#	Sub Categories And Descriptions	Current Rate	Rate Submitted by Haley Aldrich	CPI-U Rate 2.9%
	Reimbursable Fee Schedule			
13	Type "U" samples (requires at least a 4" diameter boring; sampler provided by you)	\$350.00	\$375.00	\$360.15
	Observation/ Monitoring well in test boring			
14	a) 1-1/4" PV screen and riser, filter sand, bentonite seal, backfill	\$15.00	\$17.00	\$15.44

DELETED ITEMS NOTATED FOR RECORD:

Sub Categories And Descriptions	Current Rate	Submitted by Haley Aldrich
Other Equipment		1 1111111111111111111111111111111111111
b) Dump Truck	\$145.00	Deleted
Reimbursable Fee Schedule		
Personnel Rates		
Travel by motor vehicle	\$0.65	Deleted
The state of the s	And Descriptions Other Equipment b) Dump Truck Reimbursable Fee Schedule Personnel Rates	And Descriptions Other Equipment b) Dump Truck \$145.00 Reimbursable Fee Schedule Personnel Rates

NEW ADDITIONAL ITEMS OR SERVICES OFFERED:

#	Sub Categories And Descriptions	Current Rate	Rate Submitted by Haley Aldrich	Details
	Geotechnical Exploration			THE RESERVE TO THE PERSON OF T
18	Per diem for each crew, per day out of town	New	Current GSA	per diem rates
19	Pollution Liability Insurance-If Project Required		N/C	
20	Wavier of Subrogation-If Required		N/C	
21	Miss Utility Call	New	\$55.00	
22	All environmental drilling and sampling will be quoted on a site specific work plan	7 100	032.00	e anule de la constante de la
	Drilling non-soiling materials with soil drilling equipment			
23	c) Simple concrete patch	New	\$30.00	

ARLINGTON PUBLIC SCHOOLS

NEW ADDITIONAL ITEMS OR SERVICES OFFERED CONTINUED:

GEOTECHNICAL EXPLORATION	UNIT RATES
MOBILIZATION DEMOBILIZATION OF PERSONNEL AND EQUIPMENT	et kalanda kalanda kalanda kalan da kalanda k
ATV DRILL RIG FIRST 100 MILES ROUND TRIP	\$675,00
ATV DRILL RIG GREATER THAN 100 MILES ROUND TRIP, PER MILE	\$4.00
STANDARD SOIL BORING, HOLLOW STEM AUGERS	
DAILY DRILLING RATE INCLUDES MOBILIZATION	\$2,300,00
AUGER PROBE WITHOUT SPT SAMPLES	
0" - 50' PER LINEAR FOOT	\$11.00
50' - 200' PER LINEAR FOOT	\$13.00
AUGER BORING DRILLING WITH STANDARD PENETRATION TESTS ACCORDANCE WITH ASTM D-1586	arrest errores esta inicial de la companya de la c
MINIMUM BORING CHARGE LESS THAN 10' IN DEPTH	\$140.00
CONTINUOUS SPT SAMPLING ON TWO FOOT INTERVALS	\$20.00
0' - 50' PER LINEAR FOOT	\$13.00
50' - 100' PER LINEAR FOOT	\$15.00
Dver 100'	如此可以是1000年4月20日以前,1000日100日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日,1000日
DRILLING IN HARD SOIL > 50 BAF	\$3.(X)
DRILLING IN HARD SOIL > 100 BPF	\$4.00
EXTRA SPLIT SPOON SAMPLES PER AMPLE	\$20,00
BULK BAG SAMPLE & JAR SAMPLE FOR MOISTURE	530.00
SHELBY TUBE (UNDISTURBED SAMPLE)	
0 × 50'	\$120.00
50° - 100°	\$140.00
FIXED PISTON & GUS SAMPLER @ ATTEMPT	
0 - 50	\$220.00
50' - 100'	\$240.00
PITCHER BARREL SAMPLER IN MUD ROTARY BORINGS	
HOURLY RATES TWO MAN CREW	and the control of th
HAND CIFARING	5230 <i>0</i> 00

ARLINGTON PUBLIC SCHOOLS

ACCEPTANCE:

ARLINGTON PUBLIC SCHOOLS

HALEY & ALDRICH, INC.

Authorized Signature:

Printed Name and Title:

David J. Webb, C.P.M.

Date:

Purchasing Agent

Date:

Authorized

Signature:

Printed Name and Title:



HALEY & ALDRICH, INC. 7601 Lewinsville Road Suite 101 McLean, VA 22102 (703) 336.6200

21 June 2018 File No. 130813-001

Ms. Dyanna McMullen, VCO Senior Procurement Specialist Arlington Public Schools 2110 Washington Blvd. Arlington Virginia 22204 Email: dyanna.mcmullen@apsva.us

Subject:

RFP #58FY16 - Contract for Planning/Architecture/Engineering Services

for Task Order Contracts for Miscellaneous Consulting Services

Dear Ms. Wills:

Thank you for your letter dated 13 June 2018. We are pleased to provide continued services to Arlington Public Schools and specifically those listed in your request:

Geotechnical Services Geothermal Engineering Design and Inspection Commissioning – Geothermal Systems

In accordance with your request, we have provided our fully-loaded hourly rates for all personnel and the unit rates for our subcontractors. These rates are for the period 1 July 2018 to 30 June 2019.

We look forward to our continued association with Arlington Public Schools.

Sincerely yours, HALEY & ALDRICH, INC.

Kathleen A. Dorsey Project Manager

David A. Schoenwolf, P.E. Program Executive

and a Sehoman

Enclosure:

- Contract Amendment No. 2 to Contract 58FY16
- Appendix D Reimbursable Fee Schedule

\haleyaldrich.com\Share\was_common\Projects\130813 Arlington Public Schools\On Call Contract\Contract\2018 Rates\2018-0620-HAI-Cover Letter.docx

APPENDIX D FEE SCHEDULE

Haley & Aldrich, Inc. 7601 Lewinsville Road. Suite 101 McLean, VA 22102 FEI No. 04-2295689

> Phone: (703) 336-6200 Facsimile: (703) 356 4699

CATEGORIES OF LABOR, MATERIALS AND RATES for 1 July 2018 through 30 June 2019

CLASSIFICATIONS	HOURLY RATES
Principal Consultant	\$302.40
Technical Expert 3	\$302.40
Construction Manager	\$253.20
Program Manager	\$253.20
Technical Expert 2	\$253.20
Sr. Project Manager 2	\$243.70
Technical Expert 1	\$243.70
Senior Consultant	\$243.70
Sr. Construction Project Manager	\$204.00
Sr. Project Manager 1	\$204.00
Sr. Technical Specialist 2	\$204.00
Construction Project Manager	\$190.70
Project Manager	\$190.70
Sr. Technical Specialist 1	\$190.70
Project Coordinator	\$174.30
Technical Specialist	\$174.30
Sr. Engineer	\$159.90
Sr. Geologist	\$159.90
Sr. Scientist	\$159.90
Staff Engineer	\$138.40
Staff Geologist	\$138.40
Staff Scientist	\$138.40
Engineer 3 / Geologist 3 / Scientist 3	\$132.20
Engineer 2 / Geologist 2 / Scientist 2	\$117.90
Engineer 1 / Geologist 1 / Scientist 1	\$110.70
Sr. Technician	\$112.70
Sr. Technician	\$100.40
Technician	\$93.09
Sr. Graphics	\$138.40
Graphics	\$126.10
Project Support	\$87.10



REIMBURSABLE COSTS

EQUIPMENT USAGE AND BILLING FORM: See Attached Form

DESCRIPTION

RATE OF REIMBURSEMENT/UNIT

1.	Mileage:	IRS Standard/Mile
2.	Printing & Reproduction	See Attached document
3.	Laboratory Charges	See Attached document
4.	Field Supplies	See Attached document
5.	Field Equipment	See Attached document
6.	Small Tools	\$10/Day

- 7. Overtime hours will be charged at straight time rates.
- 8. Shipping charges for water, soil and rock samples, field testing equipment, etc. Cost plus 10%
- 9. Disposal costs

a.	Soil, rock, waste and/or water samples	\$0.30 per ounce (fluid measure, sample
h	Rock core disposal	container size).
	•	\$20.00 per box.
c.	Drummed soils	Per quote



SUBCONSULTANTS "List all of Your Subconsultants"

SUBCONSULTANT NAME - SPECIALITY

Northern Virginia Drilling, Inc.

Geothermal Drilling

Jay Kay Testing

Laboratory Testing

GeoServices Corporation:

Drilling

Free State Drilling

Drilling

DMY

Drilling & Laboratory Testing

DESCRIPTION & HOURLY RATES: See attached documents

REIMBURSABLE COSTS: See attached documents

DESCRIPTIONUNITRATE OF REIMBURSEMENT1. Copying CostPrice Per PageAt Actual Cost2. MileageMileIRS Standard3. Per DiemPerson-DayGSA Standard for N. Virginia





Item #	Equipment Description	Daily	Weekly	Month
Photoioni	zation Detectors	l		
51237	MiniRAE 2000 with 10.6 eV Lamp	\$65.18	\$173.25	\$598.13
51237 / 90160	MiniRAE 2000 with 11.7eV Lamp	\$87.45	\$238.43	\$783.75
51238	MiniRAE 3000 with 10.6 eV Lamp	\$65.18	\$173.25	\$598.13
51238 / 90160	MiniRAE 3000 with 11.7eV Lamp	\$87.45	\$238.43	\$783.75
51252	TE 580B OVM with 10.6 eV Lamp	\$65.18	\$173.25	\$598.13
51252 / 90132	TE 580B OVM with 11.8 eV Lamp	\$87.45	\$238.43	\$783.75
51241	ppBRAE with 10.6 eV Lamp	\$108.90	\$303.60	\$907.50
51242	ppBRAE 3000 10.6 eV Lamp	\$108.90	\$303.60	\$907.50
51242 / 90160	ppBRAE 3000 11.7 eV Lamp	\$130.35	\$368.78	\$1093.13
51244	UltraRAE Specific Compound Monitor	\$103.95	\$303.60	\$907.50
51246	UltraRAE 3000 Specific Compound Monitor	\$103.95	\$303.60	\$907.50
VIII	RAE Sepfilter Tubes for UltraRAE must be purchased separately. Please call for pricing.			
Flame Ion	ization Detectors		,	
52090	PE Photovac MicroFID	\$74.25	\$216.98	\$660.00
51226	Foxboro TVA 1000 Vapor Analyzer- PID/FID	\$108.90	\$303.60	\$907.50
Multi-Gas	Monitors		1	
51262	MultiRAE PLUS Five Gas Monitor	\$65.18	\$173.25	\$598.13
51257	VRAE	\$43.73	\$130.35	\$371.25
51259	QRAE II	\$43.73	\$130.35	\$371.25
61243	QRAE PLUS	\$43.73	\$130.35	\$371.25
51105	RKI Eagle	\$43.73	\$130.35	\$371.25
51264	AreaRAE Monitor	\$86.63	\$259.88	\$742.50
51265	AreaRAE Remote Basic Host Controller	\$86.63	\$259.88	\$742.50
51281	MSA Watchman	\$43.73	\$130.35	\$371.25
51281	RKI GX-2003	\$43.73	\$130.35	\$371.25
51269	EntryRAE LEL/O2/H2S/CO 10.6eV	\$43.73	\$130.35	\$371.25
51295	Industrial Scientific iTX	\$43.73	\$130.35	\$371.25
51282	MSA Orion	\$43.73	\$130.35	\$371.25
51286	MSA Sirius	\$65.18	\$173.25	\$598.13



Item #	Equipment Description	Daily	Weekly	Month
51292	MSA Altair Multi-gas Meter	\$43.73	\$130.35	\$371.25
51366	Thermo Miran Sapphire	\$520.30	\$1270.50	\$3520.00
Single/ Spe	cific Gas Monitors			
50104	ToxiRAE II (specify sensor)	\$22.28	\$65.18	\$185.63
51152	Sperian Biosystems Toxi Vision IR (CO2)	\$43.73	\$130.35	\$371.25
52131	Industrial Scientific T82 Single Gas Monitor	\$22.28	\$65.18	\$185.63
51146	Arizona 631-X H2S Analyzer	\$165.00	\$478.50	\$1435.50
51150	J605 Gas Meter H2S Analyzer w/ Comm	\$216.98	\$650.10	\$1856.25
51164	RKI FP-40 Formaldehyde Detector	\$43.73	\$130.35	\$371.25
51165	Diversified Research Alpha II Radon Monitor	\$43.73	\$130.35	\$371.25
51304	Gowmac Gas Leak Detector	\$43.73	\$130.35	\$371.25
51306	MGD-2002 Helium/Hydrogen Leak Detector	\$78.38	\$325.05	\$804.38
Landfill Mo	onitors			
	RKI Eagle Gas Portable Monitor	\$82.50	\$259.88	\$701.25
51155	GEM 2000 Plus with H2S	\$130.35	\$390.23	\$990.00
51156	GEM 2000	\$95.70	\$277.20	\$792.00
90134	H2S Pod for GEM 2000	\$13.20	\$26.40	\$74.25
90167	Temp Probe for GEM 2000/GEM 2000 Plus	\$22.28	\$43.73	\$123.75
52091	GEM 500	\$86.63	\$259.88	\$742.50
51168	GA 90/94	\$82.50	\$259.88	\$701.25
Gas Chrom	atograph			
51169 Photovac Voyager	Photovac Voyager	\$346.50	\$866.80	\$2750.00
Aerosol Mo	onitors			
51343	MIE DR-2000 DataRAM	\$130.35	\$390.23	\$990.00
51344	MIE DR-4000 DataRAM	\$130.35	\$390.23	\$990.00
51347	Temperature Conditioning Heater, 115V	\$9.08	\$26.40	\$74.25
51348	In-Line Impactor Head (PM10/ 2.5)	\$9.08	\$26.40	\$74.25
51346	Omni Directional Sampling Inlet	\$0.00	\$0.00	\$0.00
51359	TSI DustTRAK II 8530 Desktop	\$86.63	\$259.88	\$742.50
51360	TSI DustTRAK II 8532 Handheld	\$108.90	\$325.05	\$928.13



Item #	Equipment Description	Daily	Weekly	Month
51361 / 51362	TSI DustTRAK DRX 8533/8534	\$130.35	\$390.23	\$990.00
51356	TSI DustTRAK Environmental Enclosure	\$13.20	\$39.60	\$111.38
51349	MIE pDR-1500	\$86.63	\$259.88	\$742.50
51350	MIE pDR-1000	\$65.18	\$165.00	\$470.25
51351	MIE pDR-1200	\$65.18	\$165.00	\$470.25
54669	Rechargeable Battery Module for pDR-1000	\$13.20	\$39.60	\$111.38
	Tripod w/ Environmental Enclosure	\$17.33	\$43.73	\$123.75
***************************************	Tripod w/ Environmental Enclosure and Strobe Light	\$17.33	\$43.73	\$148.50
Ambient H	ligh-Volume Samplers	_		
51111	Andersen PM-10	\$108.90	\$325.05	\$763.13
52128	PM-10 Calibration Kit	\$30.53	\$91.58	\$259.88
51112	Andersen TSP	\$108.90	\$325.05	\$928.13
52129	TSP Calibration Kit	\$30.53	\$91.58	\$259.88
51113	Andersen Polyurethane Foam (PUF) Sampling System	\$65.18	\$216.98	\$618.75
52130	PUF Calibration Kit	\$30.53	\$91.58	\$259.88
51365	Cal Kit, SLPro- Partisol FRM	\$51.98	\$151.80	\$412.50
51114	BGI PQ100 Portable PM10/ TSP/PM2.5 Sampling Unit	\$108.90	\$325.05	\$928.13
Air Sampli	ing Pumps			
51309	Gilian GilAir-3	\$17.33	\$43.73	\$152.63
61197	Gilian GilAir-5	\$17.33	\$43.73	\$152.63
90263	Cyclone Adapter for Gilian Pump	\$4.95	\$13.20	\$61.88
90187	Gilian Low Flow Module	\$4.95	\$13.20	\$61.88
51339	MSA ELF Escort Sampling Pump	\$17.33	\$43.73	\$152.63
51314	Gilian Gilibrator Air Flow Calibrator	\$22.28	\$65.18	\$165.00
51318	BIOS DryCal DC-Lite (specify range)	\$22.28	\$65.18	\$165.00
51324	BIOS Defender (specify range)	\$22.28	\$65.18	\$165.00
51329	SKC Universal PCXR8 Programmable Pump	\$17.33	\$43.73	\$152.63
51330	SKC Vac-U-Chamber - 1L	\$22.28	\$65.18	\$123.75
51331	SKC Vac-U-Chamber - 5L	\$22.28	\$65.18	\$123.75
-				



ltem#	Equipment Description	Daily	Weekly	Monthly
51316	Gilian AirCon-2 High Vol Air Sampler, DC Program	\$34.65	\$103.95	\$297.00
51336	Gast 1532 High Volume Area Sampling Pump	\$17.33	\$56.93	\$173.25
51337	CS3 HVS3 High Volume Small Surface Sample	\$17.33	\$56.93	\$173.25
52095	Pump, Sensidyne HFS-513 AUC, Clock	\$17.33	\$43.73	\$152.63
Mercury A	nalyzers			
51173	Jerome 431X (vapor)	\$95.70	\$286.28	\$816.75
51174	Jerome J405 (vapor)	\$143.55	\$390.23	\$907.50
51176	Jerome J505 (vapor)	\$286.28	\$779.63	\$1815.00
51177	Lumex RA-915+ (vapor)	\$577.50	\$1732.50	\$4400.00
51178	Lumex RP-91 Cold Vapor Option (water)	\$231.00	\$693.00	\$1980.00
51179	Lumex RP-91C Pyrolysis Option (soil/sediment)	\$346.50	\$1039.50	\$2970.00
Air Velocit	y Meters		•	
51182	TSI VelociCalc Multi-Function Ventilation Meter 9555, 9545, 9535	\$30.53	\$91.58	\$259.88
51186	TSI VelociCalc Plus Ventilation Meter 8384, 8385, 8386	\$30.53	\$91.58	\$259.88
51191	TSI VelociCalc Velocity Meter 8345, 8346	\$30.53	\$91.58	\$259.88
51196	TSI VelociCalc Rotating Vane Anemometer 8324	\$30.53	\$91.58	\$259.88
51194	TSI VelociCheck Velocity Meter 8330, 8340	\$30.53	\$91.58	\$259.88
Indoor Air	Quality (IAQ)			
51219	TSI Q-Trak	\$65.18	\$195.53	\$598.13
51218	TSI Q-TRAK PLUS with CO	\$65.18	\$195.53	\$598.13
52092	Metrosonics AQ5000	\$65.18	\$195.53	\$598.13
51220	TSI P-Trak Ultrafine Particle Counter	\$86.63	\$259.88	\$742.50
51223	Fluke 983 Particle Counter	\$86.63	\$259.88	\$742.50
51221	Delmhorst Moisture Meter BD-10	\$30.53	\$91.58	\$259.88
51222	Delmhorst Moisture Meter BD-2100	\$30.53	\$91.58	\$259.88
51224	Moisture Meter Protimeter (MMS)	\$30.53	\$91.58	\$259.88
51206	Manometer, 475-3-FM	\$9.08	\$30.53	\$115.50
51199	Manometer, 477-(0-6) -FM	\$9.08	\$30.53	\$115.50
51205	Infiltec DM1 Micro-Manometer	\$30.53	\$91.58	\$259.88
51370	Omniguard 4 Differential Pressure Recorder	\$43.73	\$130.35	\$371.25
51263	MultiRAE IR CO2 and PID Monitor	\$65.18	\$195.53	\$598.13
51261	IAQ RAE with VOCs	\$86.63	\$259.88	\$742.50



ltem#	Equipment Description	Daily	Weekly	Monthly
Detector '	Tube Hand Pumps & Chip Reader			
51372	Drager (CMS) Chip Measurement System	\$22.28	\$86.63	\$247.50
51373	Drager Accuro Hand Pump	\$9.08	\$30.53	\$115.50
51376	Sensidyne Piston Hand Pump	\$9.08	\$30.53	\$115.50
51377	RAE Piston Hand Pump Model LP-1200	\$9.08	\$30.53	\$115.50
Water Le	vel Meters			
51701	Solinst101, Heron Dipper-T or SLOPE WLM 100'	\$22.28	\$43.73	\$123.75
51705	Solinst101, Heron Dipper-T or SLOPE WLM 200'	\$22.28	\$51.98	\$165.00
51708	Solinst101, Heron Dipper-T or SLOPE WLM 300'	\$26.40	\$78.38	\$222.75
51711	Solinst101, Heron Dipper-T or SLOPE WLM 500'	\$26.40	\$78.38	\$222.75
51702	Solinst101, Heron Dipper-T or SLOPE WLM 1000'	\$39.60	\$117.15	\$334.13
51733	Global Water Sonic Water Level Indicator WL600	\$22.28	\$43.73	\$123.75
Oil/Wate	r Interface Probes			
51744	Solinst122, Heron H.01L or Testwell Interface Probe (Specify Length)	\$39.60	\$121.28	\$363.00
Remediat	ion Pumps			
51822	Spill Buddy Portable Product Skimming Pump- (50' or 100')	\$65.18	\$195.53	\$577.50
51823	Spill Buddy Pro Portable w/ Interface Tape 50' Hose	\$86.63	\$259.88	\$742.50
51824	Magnum Spill Buster Recovery System	\$173.25	\$433.13	\$742.50
51825	QED Hammerhead Pump- 2"	\$30.53	\$117.15	\$330.00
51829	QED Hammerhead Pump- 4"	\$43.73	\$173.25	\$495.00
	QED Ferrett In-Well Oil/ Water Separator	N/A	N/A	N/A
51872	QED LP1301 Pulse Pump	\$30.53	\$117.15	\$330.00
51863	QED LP1702 4" Eliminator Pump	\$43.73	\$173.25	\$495.00
Submersi	ble Sampling Pumps		<u> </u>	
51840	Grundfos Redi-Flo2 with Control Box (specify length)	\$82.50	\$252.45	\$742.50
51842	Grundfos Redi-Flo3 5, 115 V	\$61.05	\$173.25	\$495.00
51892	Grundfos Redi-Flo3 30, 220V	\$61.05	\$173.25	\$495.00
90251	Grundfos Cooling Shroud	\$0.00	\$0.00	\$0.00
51833	Turbine Digital Totalizer	\$17.33	\$43.73	\$152.63



ltem #	Equipment Description	Daily	Weekly	Monthly
Peristalti	Pumps			
51860	GeoPump2	\$22.28	\$65.18	\$185.63
51859	Solinst Model 410	\$22.28	\$65.18	\$185.63
54542 / 54541	Masterflex Environmental Sampling Pump	\$22.28	\$65.18	\$185.63
Bladder P	umps	<u> </u>		
51865	QED SamplePro Portable Micropurge Pump 1.75"	\$43.73	\$130.35	\$330.00
54957	QED SamplePro Portable Micropurge Pump .75"	\$43.73	\$130.35	\$330.00
51870	QED Well Wizard Dedicated Sampling Pump	\$43.73	\$130.35	\$330.00
51873	QED Micropurge Basics MP10 Controller	\$65.18	\$195.53	\$556.88
51874	QED Micropurge Basics MP10 H Controller	\$86.63	\$259.88	\$660.00
51875	QED Micropurge Basics MP10 UH Controller	\$86.63	\$259.88	\$660.00
51876	QED MP15 Control & Power Pack with CO2 Tank full	\$86.63	\$259.88	\$742.50
51878	QED Compressor 12V, Model 3020	\$22.28	\$65.18	\$185.63
51877	QED Compressor, MP40, Gasoline Powered	\$65.18	\$259.88	\$783.75
51882	QED MP-50 Compressor/Controller in one	\$86.63	\$259.88	\$742.50
94650	Nitrogen Regulator	\$9.08	\$22.28	\$61.88
51880	QED Micropurge Basics MP30 Drawdown Meter	\$26.40	\$78.38	\$222.75
Other Pu	mps & Controllers			
51890	Waterra Inertial HydroLift II Pump	\$65.18	\$195.53	\$556.88
51851	Whale Flow Controller	\$22.28	\$65.18	\$185.63
51689	Proactive Tsunami PVC High Performance Pump	\$22.28	\$65.18	\$185.63
51692	Proactive 12V SS Monsoon Pump 130ft Cable	\$51.98	\$134.48	\$342.38
51830	Proactive SS Mega Typhoon Pump 90ft Cable	\$86.63	\$259.88	\$742.50
51832	Proactive PVC Mega-Monsoon, 24V, 210ft Cable	\$41.25	\$126.23	\$556.88
51690	Power Booster 2 Low Flow Controller (PVC Tsunami)	\$13.20	\$39.60	\$111.38
51693	Power Booster 2 LCD Controller (used for SS Monsoon)	\$13.20	\$39.60	\$111.38



ltem#	Equipment Description	Daily	Weekly	Monthly
51700	Power Booster 3 LF Controller (PVC Mega Monsoon)	\$13.20	\$39.60	\$111.38
51894	2" Trash Pump, Honda WP20	\$30.53	\$91.58	\$259.88
	Jet Pump, Shallow well, 1/2 HP	\$28.88	\$61.88	\$123.75
Composit	e Samplers			
51776	ISCO 6700 Composite Sampler	\$43.73	\$130.35	\$371.25
51777	ISCO 6712 Composite Sampler	\$43.73	\$130.35	\$371.25
51780	ISCO 3710 Composite Sampler	\$43.73	\$130.35	\$371.25
51799	Global WS300 Wastewater Sampler	\$43.73	\$130.35	\$371.25
Samplers				
51437	Telescopic Dipper 6-18' w/ sample cup	\$9.08	\$26.40	\$74.25
51787	Solinst Discrete Sampler	\$30.53	\$91.58	\$247.50
	Wildco Gravity Corer	\$26.40	\$103.95	\$297.00
51788	Eckman Dredge Sampler 6X6X6	\$26.40	\$103.95	\$297.00
51792	Petite Ponar Grab SS 6X6	\$26.40	\$103.95	\$297.00
51790	Standard Ponar Dredge Sampler 9X9	\$26.40	\$103.95	\$297.00
51798	Global SS201 Stormwater Sampler	\$34.65	\$103.95	\$297.00
51797	Global SS505 Discrete Stormwater Sampler 1 L	\$34.65	\$103.95	\$297.00
51793	Bomb Sampler SS 2.5X10" 500mL Capacity	\$30.53	\$91.58	\$247.50
Stream Fl	ow Probes	-		
51805	Marsh McBirney Flo-Dar Sensor	\$130.35	\$390.23	\$928.13
51804	Marsh McBirney Flo-Tote Sensor	\$91.58	\$273.08	\$779.63
51810	Marsh-McBirney Flo-Mate 2000 (No sensor disconnect)	\$61.05	\$182.33	\$519.75
51811	Marsh-McBirney Flo-Mate 2000 (w/ sensor disconnect)	\$61.05	\$182.33	\$519.75
51812	Wading Rod- Flow Mate 2000 (Top Setting)	\$0.00	\$0.00	\$0.00
51813	Wading Rod- Flow Mate 2000 (Standard)	\$0.00	\$0.00	\$0.00
51814	Suspension Cable, 20ft.	\$0.00	\$0.00	\$0.00
51818	Greyline PDFM-IV Portable Doppler Flow Meter	\$86.63	\$259.88	\$742.50
51820	EESiFlo EASZ-10P Portable Flow Meter	\$65.18	\$173.25	\$598.13
51806	Global FP 101 Water Flow Probe	\$30.53	\$91.58	\$259.88
51807	Global FP 201 Water Flow Probe	\$30.53	\$91.58	\$259.88



ltem#	Equipment Description	Daily	Weekly	Monthly
Datalogge	rs & Transducers		9)1	
54659	Solinst Level Logger 3001 LT	\$74.25	\$169.13	\$482.63
51912	Solinst Level Logger 3001 Barologger	\$30.53	\$91.58	\$259.88
51917	Solinst Level Logger 3001 LTC	\$86.63	\$259.88	\$742.50
61316	Solinst Optical Reader	\$9.08	\$26.40	\$74.25
52050	In-Situ LevelTroll 700	\$74.25	\$195.53	\$536.25
52025	In-Situ BaroTroll	\$74.25	\$169.13	\$482.63
	Global WL15X Water Level Logger	\$74.25	\$195.53	\$536.25
	Geothermal Temperature Datalogger	\$30.00	\$120.00	\$360.00
51933	Micro-Diver	\$74.25	\$169.13	\$482.63
51927	Mini-Diver	\$74.25	\$169.13	\$482.63
52026	Baro-Diver	\$30.53	\$91.58	\$259.88
51923	CTD-Diver	\$86.63	\$259.88	\$742.50
52085	YSI Level Scout	\$74.25	\$195.53	\$536.25
Communi	cation Kits	<u>.</u>	<u> </u>	
52009	In-Situ Rugged Reader	\$22.28	\$86.63	\$247.50
51942	Archer	\$22.28	\$86.63	\$247.50
Multi-Para	ameter Water Quality Meters	4		
	YSI EcoNet Data Acquisition System	\$130.35	\$390.23	\$742.50
51680	YSI 6920 MPS - Datalogging	\$130.35	\$390.23	\$907.50
51679	YSI 6820 MPS	\$130.35	\$390.23	\$907.50
51629	YSI 6920 V2 Sonde with Optical DO and Turbidity	\$130.35	\$390.23	\$907.50
51682	YSI 600 XLM MPS with Datalogging	\$86.63	\$259.88	\$742.50
54672	YSI 600XL MPS	\$86.63	\$259.88	\$742.50
51657	YSI 556 Multi-Parameter System	\$86.63	\$259.88	\$742.50
51659	YSI Pro Professional	\$86.63	\$259.88	\$742.50
51664	Horiba U-22 Water Quality System	\$86.63	\$259.88	\$742.50
51665 /51669	Horiba U-50 Series (U-52 and U-53)	\$86.63	\$259.88	\$742.50
51677	Hanna 9828	\$65.18	\$173.25	\$660.00
51676	Hydrolab Quanta MP Checker	\$86.63	\$259.88	\$742.50
51624	YSI 600 OMS with Rhodamine WT Sensor	\$173.25	\$519.75	\$1485.00
61181	QED Micropurge Basics MP20 Flow Cell	\$86.63	\$259.88	\$742.50



ltem #	Equipment Description	Daily	Weekly	Monthly
51673	QED Micropurge Basics MP20 DT Flow Cell	\$108.90	\$325.05	\$928.13
51675	Insitu Troll 9500	\$86.63	\$259.88	\$742.50
51642	YSI 30 Conductivity, Salinity & Temp Meter	\$22.28	\$51.98	\$148.50
51648	YSI 60 pH & Temperature meter (specify length)	\$22.28	\$65.18	\$185.63
51650	YSI 63 pH, Conductivity, Salinity & Temp Meter (specify length)	\$22.28	\$65.18	\$185.63
51643	YSI 85 DO, Salinity, Conductivity & Temp Meter (specify length)	\$26.40	\$78.38	\$226.88
51598	Hanna 991301 pH, conductivity, TDS and Temp	\$17.33	\$43.73	\$123.75
51683	Myron 6P UltraMeter	\$22.28	\$65.18	\$185.63
51595	Hanna 9025 Meter	\$17.33	\$56.93	\$165.00
51614	Orion 250A Meter	\$17.33	\$56.93	\$165.00
51603	Hydac 910 Meter	\$17.33	\$43.73	\$123.75
Dissolved C	Dxygen Meters			
51640	YSI 550	\$22.28	\$65.18	\$185.63
51655	YSI 550A	\$22.28	\$65.18	\$185.63
51661	YSI 95	\$22.28	\$65.18	\$185.63
51639	YSI 55	\$22.28	\$74.25	\$185.63
51594	Hanna 9142	\$22.28	\$74.25	\$185.63
51619	Hach LDO Luminescent Dissolved Oxygen	\$34.65	\$103.95	\$297.00
Turbidity N	Meters		•	
52104	Lamotte 2020e	\$22.28	\$69.30	\$198.00
51610	Lamotte 2020we	\$22.28	\$69.30	\$198.00
52105	Hach 2100P	\$22.28	\$69.30	\$198.00
51617	Hach 2100Q	\$22.28	\$69.30	\$198.00
51622	HF Scientific DRT-15	\$22.28	\$69.30	\$198.00
51616	Global WQ770	\$22.28	\$69.30	\$198.00
51612	Hanna 98703	\$22.28	\$69.30	\$198.00
51620	Hach TSS Meter	\$43.73	\$130.35	\$371.25
Water Ana	lysis Instruments			
51589	Hach Spectrophotometer Model DR/2010	\$51.98	\$155.93	\$371.25
	Hach Spectrophotometer Model DR/2400	\$51.98	\$155.93	\$371.25
51591	Hach Spectrophotometer Model DR/2800	\$51.98	\$155.93	\$371.25
51583	HACH DR/890 Colorimeter	\$43.73	\$130.35	\$371.25
51608	Lamotte TC-3000e Tri-Meter	\$22.28	\$69.30	\$198.00



Item #	Equipment Description	Daily	Weekly	Monthly
Respirato	ry	'	•	
51399	TSI Portacount Plus Respirator Fit Tester	\$143.55	\$390.23	\$907.50
51424	TSI Portacount Pro Respirator Fit Tester (8030)	\$143.55	\$390.23	\$907.50
51433	N95 Companion Kit	\$71.78	\$195.53	\$453.75
51428	TSI Portacount Pro+ Respirator Fit Tester (8038)	\$143.55	\$390.23	\$907.50
51388	Particle Generator	\$71.78	\$195.53	\$453.75
Fall Prote	ction	1	-	
61170	Tripods Rescue System (tripod and winch)	\$86.63	\$303.60	\$990.00
51524	Confined Space Blower	\$30.53	\$91.58	\$259.88
Sound Lev	vel Meters/Dosimeters		<u> </u>	
51426	Quest NoisePro DLX Type 2	\$30.53	\$91.58	\$259.88
52097	Quest Q-300/400/500 Datalogging Noise Dosimeter	\$30.53	\$91.58	\$259.88
51393	Quest SoundPro DL Sound Level Meter	\$30.53	\$91.58	\$259.88
51421	Casella D-Badge Noise Dosimeter	\$30.53	\$91.58	\$259.88
61171	Casella Acoustic Calibrator	\$9.08	\$22.28	\$61.88
51419	Edge 5 Noise Dosimeter	\$30.53	\$91.58	\$259.88
51403	Larson Davis System 824A Sound Level Meter	\$65.18	\$195.53	\$556.88
52117	PCB Piezotronics ICP 2-Axis Accelerometer (works with 824 meter)	\$22.28	\$65.18	\$185.63
51391	Quest 2700/1900 Sound Level Meter	\$30.53	\$91.58	\$259.88
51405	Quest 2900 Sound Level Meter	\$30.53	\$91.58	\$259.88
54653	QC-10 Calibrator	\$9.08	\$22.28	\$61.88
54652	Octave Band Filter - OB100	\$22.28	\$65.18	\$185.63
54651	Octave Band Filter - OB300	\$22.28	\$65.18	\$185.63
Heat Stres	ss Monitors			
51427	Quest Temp II	\$30.53	\$91.58	\$259.88
51408	Quest Temp 34 Datalogging Thermal Environmental Monitor	\$30.53	\$91.58	\$259.88
51420	HeatStrain Monitor QUESTEMP 3	\$43.73	\$130.35	\$371.25



Item #	Equipment Description	Daily	Weekly	Monthly
Survey Ed	uipment		!	
51463	GPS, Trimble Geo XH (Handheld)	\$173.25	\$519.75	\$1237.50
51465	GPS, Trimble Geo XT (Handheld)	\$173.25	\$519.75	\$1237.50
51483	Trimble Zephyr External L1/L2 GPS antenna (use with XH)	\$30.53	\$91.58	\$99.00
51482	Trimble Hurricane external GPS antenna (use with XT)	\$9.08	\$43.73	\$82.50
51468	Meridian Magellan GPS	\$9.08	\$22.28	\$61.88
51469	Topcon AT-G7 Survey Set	\$22.28	\$65.18	\$185.63
	Topcon Pulse Total Station GPT-6000C	\$130.35	\$390.23	\$907.50
51533	Schonstedt GA72 CD Magnetometer	\$34.65	\$103.95	\$297.00
61261	Schonstedt MAC 51B Pipe & Cable Locator	\$34.65	\$103.95	\$396.00
51470	Two Way Radios	\$9.08	\$30.53	\$115.50
51471	Laser Level (tripod, rod, laser level)	\$43.73	\$130.35	\$371.25
Weather	Equipment			
51502	Davis Vantage Pro2 Weather Station	\$39.60	\$117.15	\$334.13
52100	Davis Vantage Pro Weather Station	\$39.60	\$117.15	\$334.13
94679	Tripod, Weather Station	\$4.95	\$13.20	\$37.13
51506	Kestrel 4500 Weather Meter	\$26.40	\$78.38	\$222.75
51507	Spectrum Electronics Thunderbolt 300 Series Storm Detector	\$17.33	\$51.98	\$148.50
Radiation	Detectors	•		
51515	Ludlum MODEL 3 Survey Meter	\$30.53	\$91.58	\$259.88
51516	Ludlum MODEL 3 Survey Meter with 44-9 G-M Detector	\$30.53	\$91.58	\$259.88
51514	Ludlum MODEL 5 Geiger Counter	\$30.53	\$91.58	\$259.88
XRFs		•	1	
51551	Thermo Niton XRF	\$577.50	\$1732.50	\$4950.00
51548	Innov-X Portable XRF Analyzer	\$577.50	\$1732.50	\$4950.00
	<u> </u>	4	,	



ltem #	Equipment Description	Daily	Weekly	Monthly
Soil Samp	oling Equipment	'	•	
90193	Hand Auger Kit (auger head, t-handle, 3 extensions)	\$13.20	\$39.60	\$111.38
51563	Power Auger Kit	\$69.30	\$329.18	\$1072.50
90218	Soil Sample Kit	\$26.40	\$78.38	\$288.75
51529	Scale, Analytical	\$4.95	\$13.20	\$37.13
90262	Split Core Sampler 2 x 6	\$4.95	\$13.20	\$37.13
51570	AMS Soil Gas Vapor System	\$69.30	\$329.18	\$1072.50
90271	Geoprobe Hand Tool System	\$86.63	\$259.88	\$742.50
	KVA Rotary Hefty System	\$69.30	\$329.18	\$1072.50
51557	Hammer Drill	\$43.73	\$130.35	\$371.25
51578	Durham Geo Slope Indicator Double Ring Infiltrometer Set	\$65.18	\$173.25	\$515.63
51580	Nilsson Model 400 Soil Resistance Meter	\$65.18	\$173.25	\$556.88
51225	Kelway HB-2 Soil Acidity & Moisture Tester	\$13.20	\$39.60	\$119.63
51615	Petro Flag, PF-MTR HydrcarbSoil	\$43.73	\$130.35	\$371.25
51623	L2000DX Analyzer	\$65.18	\$173.25	\$598.13
Generato	rs	•	•	
51509	Generator 3,000-5,000 watts	\$39.60	\$117.15	\$334.13
51510	Generator , Small, Honda EU2000I	\$39.60	\$117.15	\$334.13
Cameras				
51442	Digital Camera	\$43.73	\$130.35	\$371.25
51552	FLIR BCAM SD Infra-Red Camera	\$95.70	\$121.28	\$816.75
51406	Well-Vu Downhole Camera	\$108.90	\$325.05	\$948.75
51390	InSight Vision Digital Xpress Plus	\$108.90	\$325.05	\$948.75
51394	RIDGID SeeSnake Micro-Inspection Camera	\$9.08	\$30.53	\$115.50
Boats				
51445	Inflatable Boat, Model 330	\$43.73	\$130.35	\$371.25
51446	Carolina Skiff Flat-Bottom Motor Boats: 16', 18' and 19'	\$231.00	\$693.00	\$1980.00
51448	Boston Whaler 14ft Boat with 45 HP Motor	\$173.80	\$520.30	\$1485.00
	Scout 202 Sportfish, 20' Motor Boat	\$231.00	\$693.00	\$1980.00
51452	Rowboat	\$30.53	\$91.58	\$259.88
52119	Trolling Motor, rowboat	\$13.20	\$39.60	\$111.38



Item #	Equipment Description	Daily	Weekly	Monthly
Miscellan	eous		1	
51378	AllerAir 5000 Vocarb Area Air Filter	\$17.33	\$43.73	\$152.63
51383	Fiberglass Tape Measure 300'	\$4.95	\$13.20	\$37.13
51436	Measuring Wheel	\$4.95	\$13.20	\$37.13
51542	Wobble Light	\$9.08	\$26.40	\$74.25
51538	Ultraviolet Light	\$9.08	\$26.40	\$74.25
51540	Extech Heavy Duty Light Meter	\$9.08	\$26.40	\$74.25
51539	Fisher Control Co. Light Meter	\$9.08	\$26.40	\$74.25
51537	F.W. Bell 5080 Gauss/Tesla Meter	\$22.28	\$65.18	\$165.00
51684	Smith-Root LR-24 Electrofisher	\$173.25	\$433.13	\$1237.50
	Pick Up Truck	\$85.00	\$340.00	\$1020.00
	Power Analyzers and Electrical Diagnostic Tools		Per quo	te

Northern Virginia Drilling, Inc. Haley & Aldrich, Inc. Reimbursable Fee Schedule 2018



GEOTHERMAL TEST WELL	UNIT RATES	UNIT
Mobilization/Demobilization	\$1,815.00	LS
Mud Rotary Drilling/Hr	\$544.00	Hr.
Mud Rotary Drilling/Day	\$5,434.00	Day
Air Rotary Drilling/Hr	\$544.00	Hr.
Air Rotary Drilling/Day	\$5,434.00	Day
4" Mud Rotary Drilling	\$10.30	LF
5" Mud Rotary Drilling	\$10.30	LF
6" Mud Rotary Drilling	\$10.30	LF
8" Mud Rotary Drilling	\$20.60	LF
4" Air Rotary Drilling	\$10.90	LF
5" Air Rotary Drilling	\$10.90	LF
6" Air Rotary Drilling	\$10.90	LF
8" Air Rotary Drilling	\$20.60	LF
4" Air Hammer Drilling	\$10.90	LF
5" Air Hammer Drilling	\$10.90	LF
6" Air Hammer Drilling	\$10.90	LF
8" Air Hammer Drilling	\$20.60	LF
4" Steel Casing Install	\$15.70	LF
5" Steel Casing Install	\$15.70	LF
6" Steel Casing Install	\$15.70	LF
8" Steel Casing Install	\$30.20	LF
Install and grout 1" HDPE borehole loop	\$6.70	LF
Install and grout 1 1/4" HDPE borehole loop	\$7.40	LF
Install and grout 1 1/2" HDPE borehole loop	\$9.00	LF
48 hr Formation Thermal Conductivity Test	\$3,864.00	LS
Install 4" Diameter PVC Pump Sleeve (porter shroud)	\$5.60	LF
Install 2" HDPE Line	\$5.60	LF
Install 4" submersible well pump	\$12,650.00	LS

Northern Virginia Drilling, Inc. Haley & Aldrich, Inc. Reimbursable Fee Schedule 2018



GEOTHERMAL TEST WELL	UNIT RATES	UNIT
24-hr Pump Test	\$4,200.00	LS
Well Development	\$172.50	Hr.
Additional Air Compressor/Day	\$920.00	Day
Bag Filter/Day	\$115.00	Day
Water Storage/Settling Tanks	\$345.00	Day
Rig & Equipment Set Up/Day	\$1,725.00	Day
Pull Pump & Pipe	\$3,018.75	LS
Borehole Grouting/surface restoration	\$5.00	SF
Directed Standby (rush hour restriction)	\$2,300.00	Ea
Miss Utility Clearance	\$111.00	Ea
Private Utility Locator	\$906.00	Ea
Nighttime weekend, holiday surcharge	\$2,875.00	Day
ALL RIG TIME INCLUDES CRI	EW LABOR	



DESCI	RIPTION	ESTIMATED TOTAL	UNIT
MAD	ILIZATION AND DEMOBILIZATION OF DRILLING EQUIPMENT		
	Truck-mounted drill	¢EE0.00	
a)		\$550.00	each
p)	ATV drill	\$1,025.00	each
c)	Skid rig drill	\$1,725.00	each
OTHE	R EQUIPMENT		
a)	Stakebody truck/water truck	\$145.00	day
b)	Water tank for service truck	\$30.00	day
c)	Daily rate for ATV drills	\$150.00	day
d)	Transporter and driver to move ATV, with a 3 hr. per occasion minimum	\$175.00	hour
e)	Truck and trailer for skid rig moves with a 3 hr. per occasion minimum (labor separate)	\$150.00	hour
5 ft. i hamr	porings, ordinary drive samples at max. intervals (2" OD sampler driven with 140 lb. mer falling 30") per ASTM D-1586,2-1/4" ID, D hollow stem auger, truck or ATV drill access	\$15.00	LF
PREM	IIUMS ON ITEM 3		-
a)	3-1/4" ID, 7" OD hollow stem augers	\$4.00	LF
b)	4-1/4" ID, 8" OD hollow stem augers	\$7.00	LF
c)	Hard soil (N>=60)	\$4.00	LF
d)	Depth over 60 ft., less than 90 ft.	\$4.00	LF
e)	Mud rotary below water table in 3-1/4" ID augers	\$5.50	LF
f)	4" casing in lieu of augers	\$7.00	LF
g)	Extra split spoon samples (more than 5 in the top 10 ft. or closer than 5 ft. intervals below 10 ft., 18" drive		
	1) 0 to 60 ft.	\$25.00	each
	2) 60 to 90 ft.	\$35.00	each
	3) 24" drive in lieu of 18" drive	\$10.00	each
h)	Skid rig borings, no overhead restrictions	1.5 times	
		applicable parts	
		of items 3-9	



DESCRIPTION	ESTIMATED TOTAL	UNIT	
CREDITS ON ITEM 3			1
a) Drilling without soil sampling	(\$3.00)	LF	
UNDISTURBED SOIL SAMPLES, 3" (FAILED TUBES AT HALF UNIT PRICE)	,		
b) Standard Shelby tube	\$160.00	each]
c) Piston	\$225.00	each	-
TYPE "U" SAMPLES (REQUIRES AT LEAST A 4" DIAMETER BORING; SAMPLER PROVIDED BY YOU)	3.15** \$375.00	each	DAS 7.80.11
ROCK CORE DRILLING		······································	
a) Set-up per boring	\$90.00	each	_
b) "NX" rock core	\$45.00	LF	
DRILLING NON-SOIL MATERIALS WITH SOIL DRILLING EQUIPMENT			
a) Asphalt	\$6.00	in.	
b) Unreinforced concrete, rubble	\$12.00	in,	
c) Simple concrete patch	\$30.00	each	
STANDPIPES		·]
a) Shallow, up to 25 ft.	\$75.00	each	
b) Medium, 25 to 60 ft.	\$125.00	each	
c) Deep, over 60 ft. but under 100 ft.	\$175.00	each	
OBSERVATION/MONITORING WELL IN TEST BORING			<u>.</u>
a) 1-1/4" PVC screen and riser, filter sand, bentonite seal, backfill (based on depth of the boring, not depth of the well, since the boring below screen tip would have to be grouted or sanded to the screen level b before installation)	15.396	each	215 7.30.12
b) Flush cover set in concrete	\$ 200.00	each	
CONCRETE PATCH IN PAVEMENTS	\$115.00	each	
(High Early Strength concrete plug)]

HO Changes made 39.

** Changes in listed by 30 July 2018

** Changes in listed by 30 July 2018

** David Schochwaff in 30 July 2018

and are in accordance with CPI-4 of 2.9 70



ESTIMATED TOTAL	UNIT
\$225.00	crew-hr.
\$20.00	hr./man
A	
Cost plus 15%	
	<u> </u>
\$175.00	hr.
\$145.00	hr.
\$105.00	hr.
\$72.00	hr.
\$45.00	hr.
	77
	\$225.00 \$225.00 \$20.00 Cost plus 15% \$175.00 \$145.00 \$105.00 \$72.00

JAY KAY TESTING INC.

5233 Lehman Road, Suite 110 Spring Grove, PA 17362 Phone (410) 259-5101

2018 FEE SCHEDULE

An AASHTO-Accredited Soils Laboratory

TEST	DESCRIPTION	PRICE
Moisture Content	Determination of Water (Moisture) Content of Soil.	\$8.00
Organic Content	Determination of Organic Content in Soil.	\$35.00
Liquid & Plastic Limits	Liquid Limit, Plastic Limit and Plasticity Index of Soils (Atterberg).	\$60.00
Verification of Non-Plasticity	Verification that soil is non-plastic.	\$40.00
Percent Passing #200	Amount of Material in Soils Finer Than the No. 200 Sieve.	\$45.00
Grain Size	Particle-Size (Gradation) Analysis of Soils.	\$60.00
Standard Proctor	Moisture-Density Relations of Soils. Soil compaction. Standard.	\$115.00
Modified Proctor	Moisture-Density Relations of Soils. Soil compaction. Modified.	\$135.00
CBR (Per Point)	California Bearing Ratio (CBR) of Laboratory-Compacted Soils.	\$105.00
Grain Size with Hydrometer	Particle-Size (Gradation) Analysis of Soils with Hydrometer.	\$140.00
USDA Classification	Hydrometer test to determine soil Texture	\$80.00
Unconfined Compressive Strength of Soils	Unconfined Compressive Strength of Cohesive Soils.	\$115.00
pH of Soils	Determination of Soil pH.	\$25.00
Shrinkage Limit	Determination of Shrinkage Limit of Soils.	\$40.00
Specific Gravity of Soils	Determination of Specific Gravity of Soils.	\$45.00
Tube Density	Measurement of in-situ density/moisture of soil within Shelby Tube.	\$40.00
Consolidation	One-Dimensional Consolidation Properties of Soils.	\$450.00

For more information and to view our AASHTO accreditation details, visit http://www.jaykaytesting.com.



DESCR	IPTION	ESTIMATED TOTAL	UNIT	
				1
	IZATION AND DEMOBILIZATION OF DRILLING EQUIPMENT			1
	Truck-mounted drill	\$550.00	each]
·····	ATV drill	\$1,025.00	each]
c)	Skid rig drill	\$1,725.00	each	
OTHER	REQUIPMENT			
a)	Stakebody truck/water truck	\$145.00	day	
b)	Water tank for service truck	\$30.00	day] _
c)	Daily rate for ATV drills	180 ¥\$150.00	day	7301
d)	Transporter and driver to move ATV, with a 3 hr. per occasion minimum	\$175.00	hour	
	Truck and trailer for skid rig moves with a 3 hr. per occasion minimum (labor separate)	168 K\$150.00	hour	015 7.30.10
5 ft. ir həmm	orings, ordinary drive samples at max. ntervals (2" OD sampler driven with 140 lb. ner falling 30") per ASTM D-1586,2-1/4" lD, b hollow stem auger; truck or ATV drill access	14.35 ¥\$15.00	LF	015 7.30.12
PREMI	UMS ON ITEM 3			
a)	3-1/4" ID, 7" OD hollow stem augers	3.07) \$ 54.00	LF	My
	4-1/4" ID, 8" OD hollow stem augers	6.15 X\$7.00	LF	01573
c)	Hard soil (N>=60)	308 \$4.00	LF	0570
d)	Depth over 60 ft., less than 90 ft.	308 X54.00	LF	ans 9:
e)	Mud rotary below water table in 3-1/4" ID augers	J.Q(1 * \$5.50	LF.	1874
f)	4" casing in lieu of augers	10.15 of \$2.00	LF	Maz
	Extra split spoon samples (more than 5 in the top 10 ft. or closer than 5 ft. intervals below 10 ft., 18" drive			, ,
	1) 0 to 60 ft.	\$25.00	each	
,	2) 60 to 90 ft.	\$35.00	each	
	.3) 24" drive in lieu of 18" drive	\$10.00	each	
h)	Skid rig borings, no overhead restrictions	1.5 times		
• .		applicable parts		
		of items 3-9		

NO Changes made to comply with CPI-4 of 2.9%.



GEOTECHNICAL EXPLORATION	UNIT RATES
WATER HAULING	\$225.00
SITE CLEANING	\$225.00
STEAM CLEANING	\$225.00
CORING PAVEMENTS	
ASPHALT WITH AUGER	N/C
ASPHALT WITH 6" CORE (10" IN DEPTH)	\$125.00
COMPACTING & PATCHING PAVEMENT WITH ASPHALT @ CONCRETE WITH 6" CORE	\$30.00
COMPACTING & PATCHING PAVEMENT WITH CONCRETE @	\$35.00
ROCK CORING	
NX CORING SET-UP CHARGE (for coring less than 10' per boring)	\$225.00
NX CORING PER LINEAR FOOT 0' - 50'	\$50.00
NX CORING PER LINEAR FOOT 50' - 100'	\$60.00
NW CASING ADVANCER	
CASING CAVING FORMATIONS FOR SOIL BORING OR ROCK CORING	
3" NW CASING PER LINEAR FOOT 0' - 50'	\$34.00
3" NW CASING PER LINEAR FOOT 50' - 100'	\$44.00
OBSERVATION WELL MONITORING GROUND WATER LEVEL	
(NON-ENVIRONMENTAL) 2" SCHEDULE 40 PVC 10' SCREEN AND RISER	
ADDED TO THE COST OF DRILLING AND SAMPLING	\$22.00
PROTECTIVE STICK-UP COVERS LOCKING	\$250.00
LOCKING FLUSHMOUNT COVER	\$265.00
PERMITS AND COMPLETION LOGS (STATE OF MARYLAND)	\$275.00
WELL ABANDONMENT REPORTS	\$75.00
SLOPE INCLINOMETERS INSTALLED IN PER DRILLED 4.25 AUGER BORING	\$24.00

Free State Drilling Reimbursable Fee Schedule 2018

HALEY

GEOTECHNICAL EXPLORATION	UNIT RATES	
PER DIEM FOR EACH CREW, PER DAY OUT OF TOWN	\$138.00	018 7.31
POLLUTION LIABILITY INSURANCE - IF PROJECT REQUIRED	N/C	, -
WAIVER OF SUBROGATION - IF REQUIRED	N/C	
MISS UTILITY CALL	\$55.00	
ALL ENVIRONMENTAL DRILLING AND SAMPLING WILL BE QUOTED ON A SITE SPECFIC WORK PLAN		1
NO Changes to reflect GSA Ro	Mad	l

DMY Engineering Consultants Inc. Reimbursable Fee Schedule 2018



FIELD TESTING	UNIT RATES	UNIT
Drill Rig Mobilization (Truck)	\$748.00	each
Drill Rig Mobilization (ATV)	\$863.00	each
Drill Rig Onsite/Offsite Mobilization (ATV)	\$345.00	each
Drill Rig Minimum Daily Charge	\$2,013.00	day
Drill Rig Moving/Difficult Moving/ Standby/Cleanup/Site Clearing	\$248.00	crew-hour
Additional Mobilization (> 50 miles one way)	\$5.00	mile
Site Reconnaissance/Meeting/Boring Layout/Groundwater Reading	\$104.00	hour
Public Utility Clearance (< 1 hour)	\$92.00	site
Drilling Permit (VDOT, MDSHA, DCRA/DDOE, DDOT, etc.)	per quote	each
Night Work Surcharge	\$1,150.00	crew-shift
Saturday Work Surcharge	\$1,035.00	crew-shift
2-1/4" or 3-1/4" HSA SPT Borings (0'-40')	\$17.00	foot
2-1/4" or 3-1/4" HSA SPT Borings (40'-80')	\$18.00	foot
2-1/4" or 3-1/4" HSA SPT Borings (80'-120')	\$20.00	foot
2-1/4" or 3-1/4" HSA SPT Borings (120'-160')	\$24.00	foot
2-1/4" or 3-1/4" Auger Probe Borings (0'-40')	\$12.00	foot
4-1/4" HSA SPT Borings (0'-40')	\$21.00	foot
4-1/4" HSA SPT Borings (40'-80')	\$23.00	foot
4-1/4" HSA SPT Borings (80'-120')	\$26.00	foot
4-1/4" Auger Probe Borings (0'-40')	\$15.00	foot
6-1/4" HSA SPT Borings (0'-40')	\$23.00	foot
6-1/4" HSA SPT Borings (40'-80')	\$26.00	foot
6-1/4" HSA SPT Borings (80'-120')	per quote	foot
3-1/2" Mud Rotary SPT Borings (0'-40')	\$19.00	foot
3-1/2" Mud Rotary SPT Borings (40'-80')	\$21.00	foot
3-1/2" Mud Rotary SPT Borings (80'-120')	\$25.00	foot
3-1/2" Mud Rotary SPT Borings (120'-160')	\$29.00	foot
Hard Drilling Surcharge (>50 BPF)	\$5.00	foot
Grout Boreholes	\$11.00	foot
NQ Rock Coring (0'-100')	\$60.00	foot
NQ Rock Coring (100'-160')	\$67.00	foot
NW Casing Advancing (0'-80')	\$53.00	foot
NW Casing Advancing (0>80')	per quote	foot
Cardboard Waxed Corebox (2.5' x 4 slots)	\$18.00	each
Wooden Corebox (5' x 4 slots)	per quote	each
Wooden Corebox (4' x 4 slots)	per quote	each
Setup Charge (Mud Rotary, Rock Coring, or Casing Advancer)	\$156.00	each

DMY Engineering Consultants Inc. Reimbursable Fee Schedule 2018



FIELD TESTING (cont.)	UNIT RATE	UNIT
Additional Split Spoon Samples	\$29.00	each
Shelby Tube Samples	\$138.00	each
Bag Sample of Auger Cuttings	\$46.00	each
Hauling Water	\$173.00	day
Pavement Coring Machine Mobilization	\$144.00	each
Asphalt Pavement Coring, Minimum	\$58.00	each
Asphalt Pavement Coring, ≤ 4" diameter	\$14.00	inch
Asphalt Pavement Coring, 6" diameter	\$19.00	inch
Asphalt Pavement Coring, 8" diameter	\$29.00	inch
Asphalt Pavement Coring, ≥ 10" diameter	per quote	inch
Patching Pavement Core with Cold Asphalt Mix	\$41.00	each
Concrete Pavement Coring, Minimum	\$80.00	each
Concrete Pavement Coring, ≤ 4" diameter	\$22.00	inch
Concrete Pavement Coring, 6" diameter	\$27.00	inch
Concrete Pavement Coring, 8" diameter	\$41.00	inch
Concrete Pavement Coring, ≥ 10" diameter	per quote	inch
Patching Pavement Core with Concrete Mix	\$41.00	each
Monitoring Well (1"/1.25" PVC), excluding drilling and pipe	\$14.00	foot
Monitoring Well (2" PVC), excluding drilling and pipe	\$23.00	foot
Monitoring Well (4" PVC), excluding drilling and pipe	\$28.00	foot
Monitoring Well Protective Cover	\$225.00	each
Well Box with 2' Pad	\$230.00	each
Well Development	\$248.00	hour
Flush Joint Threaded/Slotted Screen, 1"/1.25" PVC	\$10.00	foot
Flush Joint Threaded/Slotted Screen, ≥ 2" PVC	per quote	foot
Conduit Pipe/Piezometer, 1"/1.25" PVC, no sand or bentonite	\$6.00	foot
Infiltration Pipe, 4" PVC	\$7.00	foot
Infiltration Pipe, 5" PVC	\$9.00	foot
Infiltration Pipe, 6" PVC	\$10.00	foot
Inclinometer Installation	per quote	foot
Decontamination Pad Set-Up	\$518.00	each
Decontamination	\$259.00	hour
Plastic Sheeting	\$115.00	hour

DMY Engineering Consultants Inc. Reimbursable Fee Schedule 2018



FIELD TESTING (cont.)	UNIT RATE	UNIT
Hazmat 55 Gallon Drums	\$87.00	each
Drum Disposal	per quote	each
Traffic Control	per quote	each
Bulldozer/Backhoe Rental and Operator	per quote	each
Per Diem	per quote	each
PERSONNEL	<u> </u>	
Principal Geotech Engineer	\$220.60	hour
Sr.Geotech Engineer/Geologist	\$156.76	hour
Project Geotech Engineer/Geologist	\$115.27	hour
Staff Geotech Engineer/Geologist	\$90.37	hour
Administrative	\$76.59	hour
CADD Technician	\$76.83	hour
LABORATORY TESTING		
Soil		
Moisture Content Test (ASTM D2216)	\$11.50	test
Sieve Analysis (ASTM D422)	\$80.50	test
Atterberg Limits Test (ASTM D4318)	\$80.50	test
Hydrometer Analysis (ASTM D422)	\$80.50	test
USDA Textural Soil Classification (Sieve Analysis and Hydrometer)	\$161.00	test
Specific Gravity (ASTM D854)	\$57.50	test
Standard Proctor Test (ASTM D698/VTM-1)	\$155.25	test
One Point Proctor Test (VTM-12)	\$97.75	test
Modified Proctor Test (ASTM D1557)	\$184.00	test
California Bearing Ratio with Standard Proctor (ASTM D1883/VTM-8)	\$402.50	test
pH and Resistivity	\$253.00	test
Concrete/Mortar/Grout		
Compressive Strength of Concrete Cylinders-4"x8" (ASTM C39)	\$13.23	test
Compressive Strength of Concrete Cylinders-6"x12" (ASTM C39)	\$15.53	test
Compressive Strength of Mortar Cubes (ASTM C170) (set of three)	\$40.25	test
Compressive Strength of Grout Specimen (ASTM C1019)	\$17.25	test