## **Dan Albrecht**

From: Miles Waite <mwaite@waiteenv.com>
Sent: Thursday, February 13, 2020 2:51 PM

**To:** Dan Albrecht; Chris Page **Subject:** RE: brownfields mtg, Feb. 18th

Attachments: Winooski Lot 8 Cost Estimate\_Ph II\_DRAFT3.pdf

Dan,

Here you go. I broke down the cost as such: Petrol covers 33% of labor (coord, sampling, reporting) and 50% of the EPA 8260C analysis (soil and groundwater). SO, the math actually comes out to 25% petrol and 75% haz. See bottom of cost estimate for breakout.

Miles

From: Dan Albrecht <dalbrecht@ccrpcvt.org> Sent: Thursday, February 13, 2020 2:10 PM

To: Miles Waite < mwaite@waiteenv.com>; Chris Page < cpage@waiteenv.com>

Subject: RE: brownfields mtg, Feb. 18th

Thanks. Can you provide another page that breaks it out into Petro costs vs. Hazardous Substance cost?

Dan Albrecht, MA, MS CCRPC Senior Planner (802) 846-4490 ext. \*29

From: Miles Waite < <a href="mwaite@waiteenv.com">mwaite@waiteenv.com</a> Sent: Thursday, February 13, 2020 1:43 PM

To: Dan Albrecht < dalbrecht@ccrpcvt.org>; Chris Page < cpage@waiteenv.com>

Subject: RE: brownfields mtg, Feb. 18th

Dan,

Updated Cost Estimate (same cost, but now shows description of Scope of Work) for Tuesday's meeting. Soil Boring Plan also attached.

Miles

Miles E. Waite, PhD, PG

Senior Hydrogeologist



Waite-Heindel Environmental Management 7 Kilburn Street, Suite 301, Burlington VT 05401

Main: (802) 860-9400 Fax: (802) 860-9440 Cell: (802) 310-2979



## COST ESTIMATE: PHASE II ESA LOT #8, WINOOSKI FALLS WAY WINOOSKI, VT February 13, 2020

WHEM will conduct a Phase II ESA at the Site in accordance with the recomendations of the Phase I ESA. This work will involved preparing a Work Plan and Site Specific QAPP Addendum for VT DEC and EPA approval prior to the start of field work. Fleld testing will involve the drilling of five (5) soil borings on the Site in a grid-like pattern, with two of the borings to be completed as groundwater monitoring wells. Drilling will utilize combination of direct push and hollow-stem auger in order to allow soil sampling and geotechnical evalution. Discrete (shallow/deep) soil samples will be collected for analysis of VOCs, PAHs, Metals, and PCBs. A single representative soil sample will be collected for analysis of PFAS and landfill disposal parameters. Monitoring wells (1" PVC) will be developed after installation, and at least one week after will be sampled via low-flow sampling for analysis of VOC, Metals, PCBs, and PFAS. QA/QC procedures will include the collection of a soil duplicate (VOC only), groundwater duplicate (all methods), and water trip blank (VOC only). Upon reciept of the lab data, a full report will be prepared to inlcude a detailed description of the work and any deviations from the work plan, updated conceptual site model, conclusions and recommendations, with appendices for tabulated data, figures/maps showing contaminant distribution, and laboratory reports. The report will be prepared as draft for Client review prior to distribution.

WORK ELEMENT / TASK	UNITS	CATEGORY	QTY	RATE	COST	SUBTOTAL
PROJECT COORDINATION, MEETINGS						
MEETINGS, CCRPC COORDINATION	HR	SENIOR HYDROGEOLOGIST	6.5	\$120.00	\$780.00	
MEETINGS, CCRPC COORDINATION	HR	PROJECT SCIENTIST	5.0	\$75.00	\$375.00	
PLAN DRAFTING	HR	DRAFTSMAN	3.0	\$70.00	\$210.00	
PRE-MARK, DIGSAFE	HR	PROJECT SCIENTIST	1.0	\$75.00	\$75.00	
ADMIN	HR	ADMINISTRATOR	2.0	\$55.00	\$110.00	\$1,550
WORK PLAN & QAPP ADDENDUM						
WORK PLAN/QAPP ADDENDUM, VT DEC/EPA APPROVAL	HR	SENIOR HYDROGEOLOGIST	8.0	\$120.00	\$960.00	
WORKPLAN/QAPP ADDENDUM	HR	PROJECT SCIENTIST	16.0	\$75.00	\$1,200.00	
REDEVELOPMENT CONCEPT PLAN	HR	DRAFTSMAN	3.0	\$70.00	\$210.00	\$2,370
DRILLING - 4 BORINGS, 2 MONITORING WELLS, GEOPHYSICAL						
DRILLING OVERSIGHT, SOIL SAMPLING	HR	PROJECT SCIENTIEST	10.0	\$75.00	\$750.00	
SOIL SAMPLING, WELL DEVELOPMENT	HR	FIELD TECH	10.0	\$65.00	\$650.00	
MOB / DEMOB - GEOPROBE	LUMP	TBD	1.0	\$583.00	\$583.00	
DRILL RIG - DAY RATE	DAY	TBD	1.0	\$2,255.00	\$2,255.00	
DRILLING MATERIALS (acetate sleeves)	FT	TBD	60.0	\$1.65	\$99.00	
WELL MATERIALS (1" PVC)	FT	TBD	30.0	\$11.00	\$330.00	
WELL MATERIALS (WELL BOXES)	EA	TBD	2.0	\$141.90	\$283.80	
EQUIPMENT - PID	DAY	EQUIPMENT	1.0	\$90.00	\$90.00	
EQUIPMENT - PERISTALTIC PUMP	DAY	EQUIPMENT	1.0	\$50.00	\$50.00	
TUBING, DECON MATERIALS	DAY	WHEM	1.0	\$20.00	\$20.00	
WASTE DISPOSAL - 1 DRUM	DRUM	EP&S	1.0	\$350.00	\$350.00	
MILEAGE	MI	WHE, 1	10	\$0.58	\$5.80	\$5,467
SOIL TESTING - 4 BORINGS, 1 COMPOSITE, QA/QC	Q	<b>/</b> / /				
LAB TESTING - VOCS BY 8260B	11	ENDYNE	7.0	\$154.00	\$1,078.00	
LAB TESTING - PRIORITY POLLUTANT METALS	Ελ	EN DYN E	5.0	\$220.00	\$1,100.00	
LAB TESTING - PAH ONLY BY 8270D	EA	ENDYNE	5.0	\$137.50	\$687.50	
LAB TESTING - PCBS BY 8082	EA	ENDYNE	5.0	\$137.50	\$687.50	
LAB TESTING - FULL SVOC BY 8270D	EA	ENDYNE	1.0	\$385.00	\$385.00	
LAB TESTING - PFAS BY 537 MOD	EA	EN DYN E	1.0	\$275.00	\$275.00	
LAB TESTING - IGNITABILITY	EA	ENDYNE	1.0	\$49.50	\$49.50	
LAB TESTING -pH	EA	EN DYN E	1.0	\$31.90	\$31.90	
LAB TESTING -TPH-DRO	EA	EN DYN E	1.0	\$99.00	\$99.00	
LAB TESTING -% SOLIDS	EA	EN DYN E	1.0	\$16.50	\$16.50	
LAB TESTING -REACTIVITY	EA	EN DYN E	1.0	\$110.00	\$110.00	
LAB TESTING - TCLP METALS	EA	EN DYN E	1.0	\$288.20	\$288.20	\$4,808



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UNITS	CATEGORY	QTY	RATE	COST	SUBTOTAL
HR	STAFF SCIENTIST	6.0	\$70.00	\$420.00	
DAY	EQUIPMENT	1.0	\$30.00	\$30.00	
DAY	EQUIPMENT	1.0	\$150.00	\$150.00	
DAY	EQUIPMENT	1.0	\$20.00	\$20.00	
MI	WHEM	10	\$0.58	\$5.80	
EA	FNDYN	4.0	\$154.00	\$616.00	
EA	F NDAe	3.0	\$220.00	\$660.00	
EA	EN DYNE	3.0	\$159.50	\$478.50	
EA	ENDYNE	3.0	\$275.00	\$825.00	\$3,205
HR	STAFF SCIENTIST	6.0	\$70.00	\$420.00	
HR	STAFF SCIENTIST	1.0	\$70.00	\$70.00	
HR	DRAFTMAN	8.0	\$70.00	\$560.00	
HR	PROJECT SCIENTIST	14.0	\$75.00	\$1,050.00	
HR	SENIOR HYDROGEOLOGIST	2.0	\$120.00	\$240.00	
HR	ADMINISTRATOR	3.0	\$55.00	\$165.00	\$2,505
	HR DAY DAY MI EA EA HR HR	HR STAFF SCIENTIST  DAY EQUIPMENT  DAY EQUIPMENT  DAY EQUIPMENT  MI WHEM  EA FNDYN.  EA ENDYNE  EA ENDYNE  HR STAFF SCIENTIST  HR DRAFTMAN  HR PROJECT SCIENTIST  HR SENIOR HYDROGEOLOGIST	HR STAFF SCIENTIST 6.0  DAY EQUIPMENT 1.0  DAY EQUIPMENT 1.0  DAY EQUIPMENT 1.0  MI WHEM 10  EA FNDYN. 4.0  EA E NDY'F 3.0  EA EN DYNE 3.0  EA EN DYNE 3.0  HR STAFF SCIENTIST 6.0  HR STAFF SCIENTIST 1.0  HR DRAFTMAN 8.0  HR PROJECT SCIENTIST 14.0  HR SENIOR HYDROGEOLOGIST 2.0	HR STAFF SCIENTIST 6.0 \$70.00  DAY EQUIPMENT 1.0 \$30.00  DAY EQUIPMENT 1.0 \$150.00  DAY EQUIPMENT 1.0 \$20.00  MI WHEM 10 \$0.58  EA FNDYN. 4.0 \$154.00  EA E NDY'F 3.0 \$220.00  EA EN DYNE 3.0 \$220.00  EA EN DYNE 3.0 \$275.00  HR STAFF SCIENTIST 6.0 \$70.00  HR STAFF SCIENTIST 1.0 \$70.00  HR DRAFTMAN 8.0 \$70.00  HR PROJECT SCIENTIST 14.0 \$75.00  HR SENIOR HYDROGEOLOGIST 2.0 \$120.00	HR STAFF SCIENTIST 6.0 \$70.00 \$420.00  DAY EQUIPMENT 1.0 \$30.00 \$30.00  DAY EQUIPMENT 1.0 \$150.00 \$150.00  DAY EQUIPMENT 1.0 \$20.00 \$20.00  MI WHEM 10 \$0.58 \$5.80  EA FNDYN. 4.0 \$154.00 \$616.00  EA E VD'F 3.0 \$220.00 \$660.00  EA EN DYNE 3.0 \$159.50 \$478.50  EA ENDYNE 3.0 \$275.00 \$825.00  HR STAFF SCIENTIST 6.0 \$70.00 \$70.00  HR STAFF SCIENTIST 1.0 \$70.00 \$70.00  HR DRAFTMAN 8.0 \$70.00 \$560.00  HR PROJECT SCIENTIST 14.0 \$75.00 \$1,050.00  HR SENIOR HYDROGEOLOGIST 2.0 \$120.00 \$240.00

TOTAL	\$19,905
HAZ-RELATED (75%)	\$14,999
PETROL-RELATED (25%)	\$4,906

## TERMS AND CONDITIONS

- 1. This is not a fixed cost estimate. Costs may be slightly lower or higher than estimated above. Costs will not exceed the total specified above by more than 10% without prior authorization of the Client.
- 2. This estimate is based on standard field conditions. Extreme weather, difficult work conditions, or access limitations may result in increased costs.
- 3. Work outside the scope of services described above will be billed on a time-and-materials basis.
- 4. Terms of Payment: Net 30 days, regardless of the outcome, results, or permit approval/denial. Interest of 2.0% per month may be charged on balances more than 30 days overdue.
- 5. Rates valid for 2020
- 6. A retainer of \_\_\_\_\_\_dollars (\$) or \_\_\_\_\_NO\_\_\_ retainer is due with this signed estimate.
- 7. All documents produced by WHEM under this Agreement shall remain property of WHEM and may not be used by the Client for any other endeavor without written consent of WHEM.
- 8. Client and WHEM shall each indemnify, defend, and hold harmless the other from and against those claims, demands, judgments, losses, damages, costs and expenses, including reasonable attorney's fees, arising out of or in any way connected with the performance of services under this Agreement, excepting only those damages, liabilities, or costs attributable to the sole negligence of willful midconduct of WHEM.
- 9. Any claims or disputes made during course of work between Client and WHEM shall be submitted to non-binding mediation.
- 10. There are recognized risks and benefits associated with this project to both the Client and to WHEM. The Client agrees that in consideration of WHEM accepting the obligations imposed on it by this Agreement, the Client shall claim no liability on the part of WHEM or any sub-consultants, construction contractors, and subcontractors involved with this project that exceeds the total fee charged by WHEM for services rendered, and hereby releases WHEM from any and all liability in excessof that total fee. This limitation of liability and release applies to all claims, including without limitation those arising from allegations of professional errors or omissions, strict liability, breach of contract or warranty.

Miles E. Waite	Date	-	CCRPC	Date
Owner, Senior Hydrogeologist			CLIENT/AUTHORIZED SIGNATURE	

