

GREEN MOUNTAIN ENGINEERING, INC.

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P.O. Box 159
Williston, VT 05495-7274
(802) 862-5590

December 19, 2011

Board of Commissioners
GICWD
P.O. Box 9
Grand Isle, VT 05458

RE: Engineering Services Agreement Amendment No. 1 for Step II Final Design Phase
GICWD Backwash Settling Tank & Disinfection-By-Product Improvements
Engineer's Project No. 8-005.14

Dear Commissioners;

This revised AMENDMENT is written pursuant to a change in the Scope of Services to be provided by Green Mountain Engineering, Inc., (GME) (CONSULTANT) as your (CLIENT) civil engineering consultant for the above-referenced project in Grand Isle, Vermont.

REVISED SCOPE OF SERVICES – BASIC SERVICES – FINAL DESIGN

GME shall amend the Final Design Services portion of the Agreement to include final design engineering and evaluation of the current Disinfection by-product issues affecting the GICWD. The scope of review and final design engineering services to be provided are as follows:

1. Analysis of System & Disinfection By-Product Formation;
2. Attend & Assist in DBP Pilot Studies;
3. Design of either 160 feet of 36-inch diameter water pipe or 355 feet of 24-inch diameter water pipe for contact time of free chlorine for 0.5 log Giardia Inactivation.
4. Design of Ammonium Sulphate injection locations, solution concentrations for conversion of free chlorine secondary disinfection to Monochloramine for 0.5 log Giardia Inactivation; and
5. Design of ammonium sulphate process controls, residual monitoring & Operation and Maintenance Manual update.

BASIS OF COMPENSATION

This AMENDMENT results in an increase to the original AGREEMENT, of Fifteen Thousand Four Hundred Eighty Seven Dollars (\$15,487.00).

ATTACHMENT NO. 4

LEVEL OF EFFORT

Task Outline and Fee Estimate Worksheet

Disinfection By-Products & Filter Backwash Improvements - Amendment No. 1

GME Project #8-005.14

Date: 12/15/2011

Preparer DLW

Checked by:

ITEM	Description	Engineer I	Engineer II	Engineer III	Technician II	Office Mgr.	Expenses/Subs	Labor Cost	
I PRELIMINARY ENGINEERING - Basic Services									
II FINAL DESIGN ENGINEERING - Basic Services									
A	Basic Services	12	40	8	24	4	\$250	\$7,510	
	DBP & Filter Backwash Improvements	20		125	16	20	\$400	\$14,740	
Surveys									
B	Backwash Settling Tank & Site Work	0	4	0	8	0	\$50	\$930	
	DBP & Filter Backwash Improvements			4	4		\$87	\$667	
Subsurface Investigation									
C	Backwash Settling Tank & Site Work	0	0	0	0	0	\$0	\$0	
Special Services									
Administrative Assistance									
D	Backwash Settling Tank & DBP's - Site Work	2	4	0	0	2	\$0	\$690	
Permit Assistance									
E	Backwash Settling Tank & DBP's - Site Work	2	16	0	8	2	\$50	\$2,340	
R.O.W Assistance/ Land Issues									
F	Backwash Settling Tank & DBP's - Site Work	0	0	0	0	0	\$0	\$0	
SUBTOTAL (Hours)		36	64	137	60	28			
HOURLY RATE (Direct Labor)		\$110.00	\$90.00	\$80.00	\$65.00	\$55.00			
SUBTOTAL (Labor Cost)		\$3,960.00	\$5,760.00	\$10,960.00	\$3,900.00	\$1,540.00	\$837	\$26,957	
Totals By Work Type:							TOTAL LABOR		\$26,120
DBP & Filter Backwash Improvements							TOTAL EXPENSES		\$837
Total							TOTAL COST		\$26,957

**Engineering Services Agreement Amendment No. 1 for Step II Final Design Phase
GICWD Backwash Settling Tank & Disinfection-By-Product Improvements
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	<u>Original Agreement</u>	<u>Amendment No. 1</u>	<u>Amended Total</u>
I. Basic Services – Final Design	\$ 7,510.00 LS	\$ 14,856.00	\$22,366.00 LS
II. Field Surveys	\$ 930.00 NTE	\$ 631.00	\$ 1,561.00 NTE
III. Special Services	\$ 3,030.00 NTE	\$ 0.00	\$ 3,030.00 NTE
IV. Additional Services	\$ 0.00	\$ 0.00	\$ 0.00
Totals	<u>\$11,470.00</u>	<u>\$15,487.00</u>	<u>\$26,957.00</u>

All other provisions of the AGREEMENT dated June 8, 2011 shall remain in effect.

If this revised AMENDMENT is acceptable, please sign both copies and return one of them to our office, in the enclosed envelope, to confirm our amended AGREEMENT.

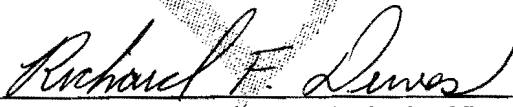
Respectfully,

GREEN MOUNTAIN ENGINEERING, INC.

Alan Huizenga, P.E.
President

ACKNOWLEDGMENT

GRAND ISLE CONSOLIDATED WATER DISTRICT


 Signature _____ Authorized Representative _____ Date 12/21/2011

Executed in Duplicate