



September 7, 2005

Project Reference: #7376

Mr. David Volkert, P.G. Wisconsin Department of Natural Resources 141 NW Barstow Street, Rm 180 Waukesha, WI 53188

RE:

Additional Site Investigation Work Plan and Estimated Costs Former Bask Dry Cleaner, Westbrook Shopping Center 2136 East Moreland Boulevard, Waukesha, Wisconsin FID #268188800 BRRTS #02-68-297669

Dear Mr. Volkert:

In accordance with ch. NR 169, Wis. Adm. Code and your letter addressed to Mr. Greg Butts, dated August 4, 2005, pertaining to the subject site (Figure 1), this work plan and cost estimate was prepared and are being submitted for Wisconsin Department of Natural Resources (WDNR) review and approval.

#### SCOPE OF WORK

In your letter dated August 4, 2005 (Attachment A), you requested completion of the following scope of work:

- Installation of an additional monitoring well west of monitoring well MW-7;
- Sample all existing monitoring wells for volatile organic compounds (VOCs) and measure groundwater elevations; and
- Prepare a brief report documenting recent subsurface investigation activities.

#### Installation of Additional Monitoring Well

Proposed well MW-11 will be installed approximately 100 feet west of existing well MW-7 using hollow stem auger drilling techniques. The well will be flush mount and installed to approximately 30 feet below ground surface (bgs) and constructed of two-inch diameter PVC well screen with the appropriate length of PVC riser pipe. The actual well location will be determined in the field based on site characteristics and access.

Soil samples will be collected continuously at two-foot intervals to the depth of the borehole and soils will be classified using the Unified Soil Classification System (USCS). Each soil sample will be split in the field for field screening using a photoionization detector (PID) and headspace techniques and potential laboratory analysis. Two samples from the borehole will be submitted for laboratory analysis of VOCs by EPA Method 8260; the sample displaying the highest field screening reading and the sample from directly above the water table interface.

A location and elevation survey will be completed for the new well by a State of Wisconsin registered land surveyor. In addition, a soil boring log and well construction form will be completed for the new well.



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Wisconsin Department of Natural Resources September 7, 2005 Page 2

#### Well Development and Groundwater Sampling

Following installation, the well will be developed in accordance with NR 141 and a well development form will be completed.

Groundwater level measurements will be collected at all wells (MW-1 through 10 and proposed well MW-11) and piezometers (PZ-1 through PZ-3). Groundwater samples will be collected at all wells and piezometers and submitted for laboratory analysis of VOCs by EPA Method 8260.

#### **Supplemental Site Investigation Report**

Upon receipt of laboratory analytical results, Sigma will prepare a Supplemental Site Investigation Report summarizing the above activities and results and including all forms, laboratory reports and chain-of-custody documentation. The report will be submitted to the WDNR for review.

#### **ESTIMATED COSTS**

A detailed breakdown of estimated costs for the above scope of work is presented as Attachment B. Supporting drilling bids are also provided as Attachment C. The total estimated cost to complete the scope of work is \$11,708; \$7,958 in professional services and \$3,750 in commodity services. Bids for the drilling scope of work are attached. Costs for laboratory analysis and investigation waste disposal were quoted using previous bids.

We will initiate work immediately upon receiving WDNR approval of the proposed scope of work and estimated costs. Please call me at (414) 643-4120 with any questions.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES, INC.

Ross M. Creighton, P.G.

Project Manager/Hydrogeologist

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Attachments:

Figure 1 - Site Plan Map

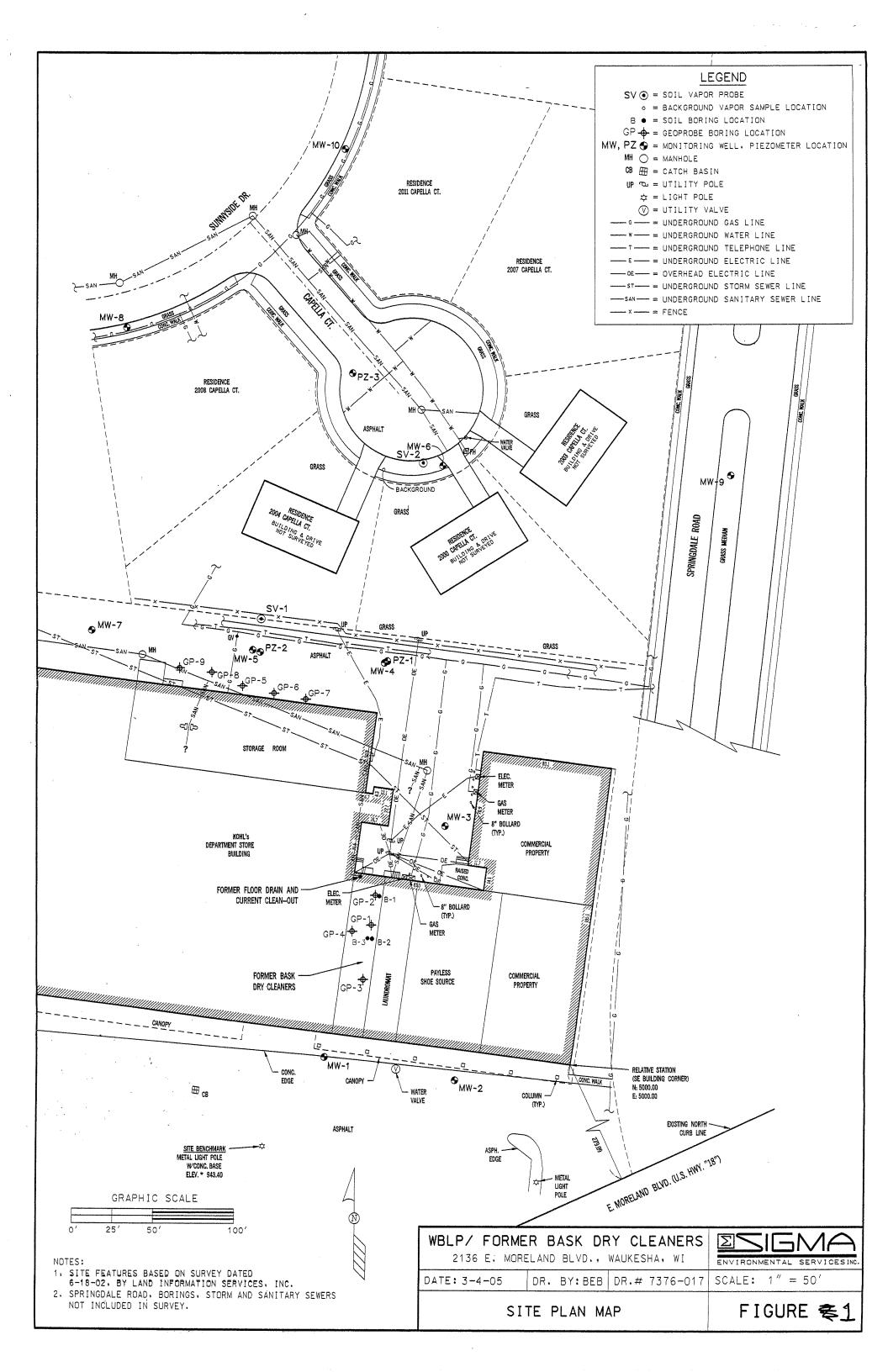
A - WDNR letter dated August 4, 2005

B - Cost Estimate

C – Drilling contractor bids

cc: Greg Butts, Realty Management Consultants, Inc.

Don Gallo, Reinhart Boerner



## ATTACHMENT A

WDNR letter dated August 4, 2005



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Gloria L. McCutchen, Regional Director Waukesha Service Center 141 NW Barstow Street, Room 180 Waukesha, Wisconsin 53188 Telephone 262-574-2166 FAX 262-574-2117

August 4, 2005

Mr. Greg Butts
Westbrook Delaware Limited Partnership
c/o Realty Management Consultants, Inc.
4811 South 76<sup>th</sup> Street
Greenfield, WI 53220

Subject: Additional Site Investigation Work at Former Bask Dry Cleaner Westbrook Shopping Center, 2136 East Moreland Boulevard, Waukesha, WI

FID# 268188800, BRRTS#s 02-68-297669

Dear Mr. Butts:

On June 17, 2005, the Wisconsin Department of Natural Resources (Department) received the June 2005 *Site Investigation Report* that was prepared by Sigma Environmental Services, Inc. for the above referenced property (the Property). Based on the data, the extent of groundwater contamination at the Property has not been determined. Therefore, the site investigation is not complete and additional subsurface investigative work is required.

Please have you consultant complete the following work:

- Install an additional monitoring well west of monitoring well MW-7, which in the last sampling event contained tetrachloroethene (PCE) at a concentration greater than ten times the s. NR 140.10, Wis. Adm. Code, enforcement standard. In addition to helping define the lateral extent of groundwater contamination, the additional well will determine if there is another breech in the sanitary sewer to the west. Sample the new monitoring well for volatile organic compounds (VOCs).
- Please also sample all of the existing monitoring wells for VOCs and measure goundwater elevations for the purpose of determining seasonal flow direction.
- Prepare a brief report documenting recent subsurface investigation activities.

Prior to proceeding with the recommended work please prepare a cost estimate for the Department's review. Remember to obtain three bids for sub-contractor work that will be completed on the project.



Mr. Greg Butts 08/04/2005

The Department appreciates the efforts you are taking to restore the environment at this site. If you have any questions regarding this letter or the site in general, please contact me at the letterhead address or (262) 574-2166.

Sincerely,

David G. Volkert, P.G.

Hydrogeologist

Bureau for Remediation & Redevelopment

cc: Ross Creighton, Sigma

Jeff Soellner, DNR CF/8

SER File

## ATTACHMENT B

Cost Estimate

# ATTACHMENT B COST ESTIMATE

### Additional Site Investigation WBLP - Former Bask Dry Cleaner Site 2136 E Moreland Blvd, Waukesha, WI 18-Aug-05

	PROFE	SSIONAL SERVI	CES	
Work Plan				
				Comments
Project Manager	6 hrs @	\$105 /hr		Develop scope/work plan,
Senior Geologist	1.5 hrs @	\$105 /hr	\$158	coordination
				Solicit lab bids, prepare for
Staff Geologist/Engineer	2 hrs @	\$65 /hr	\$130	field activities.
	W	ork Plan subtotal	\$918	
Field Work				
Install MW				Comments
Senior Geologist	0.5 hrs @	\$105 /hr	\$53	<u>comments</u>
Project Manager	2 hrs @	\$105 /hr	\$210	
Staff Geologist/Engineer	10 hrs @	\$65 /hr	•	Site time-SB, MW
Well Development	4 @	\$65 /hr	\$260	ORG HING-OD, MIVV
Office Support	4 @ 1 hrs @	\$65 /III \$40 /hr	\$200 \$40	
				Location/elevation of new MAA
Surveying	4 hrs @	\$70 /hr	<u>-</u>	Location/elevation of new MW
		subtotal	\$1,493	
GW Sampling				
Project Manager	1.5 hrs @	\$105 /hr		Work plan, coordinate with lat
Field Technician	18 hrs @	\$65 /hr	\$1,170	11 MWs, 3 PZs
Office Support	1 hrs @	\$40 /hr	\$40	
		subtotal	\$1,368	•
Equipment & Expenses (incl.	eamnling		\$1.500	Sampling & survey equip etc.
equipment and materials)	amping		ψ1,500	camping a survey equip etc.
equipment and materials)		subtotal	\$1,500	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Fie	eld Work subtotal	\$4,360	
Supplemental Site Investigat	ion Poport			
Senior Geologist	2 hrs @	\$105 /hr	\$240	Sr. review, certification
Project Manager	6 hrs @	\$105 /hr	\$630	•
Staff Geologist/Engineer	18 hrs @	\$65 /hr		Draft and final report
CADD	_	\$65 /hr	\$1,170 \$130	
	2 hrs @	\$65 /nr \$40 /hr	\$130 \$120	
Office Support	3 hrs @	Report subtotal	\$2,260	
Project Management	4 5 0	#40E /L.	***	
Project Manager	4 hrs @	\$105 /hr	\$420	
TOTAL COST PROFESS	IONAL SER	/ICES	\$7,958	

COMMODITY SERVICES						
Subcontractor Services				Comments		
<b>Drilling Services</b>						
Driller			LS	\$1,560 One MW to 30 ft bgs, sa	ampling	
Laboratory Services						
Soil samples - VOCs	2	@	\$60 /sample	\$120		
GW samples - VOCs	18	@	\$60 /sample	\$1,080 2 dups, , 1 trip, 1 equipn	nent	
Waste Disposal						
Soil (150 mobe + )	3 d	rms @	\$50 /drum	\$300		
Water (150 mobe +)	3 d	rms @	\$180 /drum	\$690		
TOTAL COST COMMODITY SERVICES				\$3,750		
TOTAL PROJECT COST				\$11,708		

## ATTACHMENT C

**Drilling Contractor Bids** 

## BADGER STATE DRILLING CO., INC.

360 BUSINESS PARK CIRCLE STOUGHTON, WI. 53589-3395 PHONE (608)877-9770 Fax (608)877-9771

Website: badgerstatedrilling.com / E-mail: bsd@chorus.net

## IMPORTANT FAX TRANSMISSION

NUMBER OF PAGES INCLUDING COVER PAGE: 3	DATE: 8/12/05
	TIME: 1214

TO: Ross Creighton
FROM: Dave Cruise

MESSAGE:

Sigma Environmental Services, Inc.

REQUEST FOR COST ESTIMATE - DI	RILLING SERVIC	ES Page 1 of 2		
Sigma Project # 7376	Project Location	: Waukesha, WI		
Project Manager Ross Creighton				
Phone # <u>414-643-4120</u> Fax # <u>411-643-4210</u>		tequired by: <u>08/15/05</u> t Date: <u>09/15/05</u>		
Project Summary/ Conditions:				
Advance one soil boring with co	ntinuous samplin	g to an estimated dep	th of 30 feet bg:	<b>5</b> .
<ol><li>Complete the soil boring as an screen with flushmount cover.</li></ol>	All soil cuttings to			
Provide drums and contain soil.		· · · · · · · · · · · · · · · · · · ·		
Responsible for Utility Clearance;	Sigma Drilling	<u>X</u> Contractor		
3. Water Provid <b>ed by</b> ;	Site Ow Drilling	ner Contractor <u>x</u>		
4. Electric Provided by;	Site Ow	ner Drilling Contractor		
5. Drilling Method: GeoprobeAir Rotary		Stern Auger <u>x</u> itary		
6. Drilling Surface: Concrete/asphalt				
7. Sampling Interval: Continuous	X 2½ ft.	Other_		
8. Estimated Depth to Groundwater: _	<b>25</b> ft.			
•		ts must be included in	•	or unit rates for
Task (	)uantity	Unit Rate		Cost
Mobilization (includes support vehicles)	1	Lump Sum	\$	350.
Soll Boring Drilling 30	/feet	/L/ Troot		420
	/feet	5.7foot		7-
	/feet	13:7/foot		390
Well Protective Covers □ Flush Mount		160-feach		160.
Decon/Steam Cleaning		Lump Sum		160-
55- Gallon Drums	,2_	40 /Drum		80-
Visqueen	/Rolls	/Rolls		
Traffic Control			VAIII	

Other	Conditions/Costs
TOT	* 1560
Sigma	Project # 7376 Page 2 of 2
	IEST FOR COST ESTIMATE - DRILLING SERVICES (CONTINUED)
10. C 1.	onditions; Drilling Contractor warrants and represents that all times while providing services under this Agreement, it shall maintain general liability coverage including, pollution impairment liability coverage of no less than \$1,000,000 per claim; \$1,000,000 annual aggregate and a deductible of no more than \$100,000 per claim. The insurance coverage shall be provided by a firm that has an A.M. Best rating of at least "A-".
2.	Drilling Contractor shall notify (Consultant) immediately if the insurance coverage required in paragraph above is interrupted, suspended, lapsed or terminated for any reason.
3.	Drilling Contractor shall indemnify Consultant or (Owner) for all drilling costs determined to be ineligible for DERF reimbursement by the DERF staff due to Contractor's failure to maintain the insurance coverage required in paragraph 1 above.
4.	The above unit costs will be honored for one (1) calendar year starting on the date of the first mobilization.
5.	All bids will follow fax requests/responses with a signed hard copy of this form to be considered.
6.	All drilling equipment will be decontaminated before arrival on-site.
	wid Cruise  e (Print)  hullwie Operations Manager  Title
Phone Comp	608-877-9770  Badger State Drilling  Brilling

NO. 4882 P. 1. 82 e€AUG. 12. 2005€ 3:35PM 4146434211 THE SIGMA GROUP Sigma Environmental Services, Inc. REQUEST FOR COST ESTIMATE - DRILLING SERVICES Page 1 of 2 Sigma Project # 7376 Project Location: Waukesha, WI Project Manager Ross Creighton Phone # 414-643-4120 Cost Estimate Required by: 08/15/05 Fax # 411-643-4210 Anticipated Start Date: \_ Project Summary/ Conditions: Advance one soil boring with continuous sampling to an estimated depth of 30 feet bgs. 2. Complete the soll boring as an NR 141 compliant 2-inch diameter groundwater monitoring well (10 foot) screen with flushmount cover. All soil outlings to be drummed in 55-gal. DOT approved steel drums. 3. Provide drums and contain soll. 2. Responsible for Utility Clearance: Sigma Х. **Drilling Contractor** Water Provided by: Site Owner **Drilling Contractor** 4. Electric Provided by: Site Owner **Drilling Contractor** 5. Drilling Method: Geoprobe Hollow Stem Auger \_\_ Air Rotary \_\_\_\_\_ Mud Rolary 7671 Post-it® Fax Note Drilling Surface: Concrete/asphalt 7. Sampling Interval: Continuous X 2½ ft. Phone # Fax # Fax # Estimated Depth to Groundwater: \_\_ Cost Estimate: This bid form must be used. All costs must be included in the lump sums or unit rates for

Task	Quantity	Unit Rate	Cost
Mobilization (includes support vehicles)	1	950 Lump Sum	\$ 950
Soil Boring Drilling	30 /feet	/5 /foot	450
Borehole Abandonment	/feet	6 /foot	
Well Installation (Includes all well supplies)	30 /feet	14 /foot	420
Well Protective Covers  Trush Mount	1	Z25 /each	225
Decon/Steam Cleaning	1	250 Lump Sum	250
55- Gallon Drums	2	45 /Drum	96
Visqueen	∂ /Rolls	[00 /Rolls	
Traffic Control	0	500	

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Sigma Environmental Services, Inc.

REQUEST FOR COST ESTIMAT	E - DRILLING SE	RVICES Page 1 of 2	
Sigma Project # <u>7376</u>	_ Project Loc	cation: <u>Waukesha, WI</u>	
Project Manager Ross Creighton			SES 913.1506
Phone # <u>414-643-4120</u> Fax # <u>411-643-4210</u>		nate Required by: <u>08/15/05</u> d Start Date: <u>09/15/05</u>	
	as an NR 141 com over. All soil cuttin	• •	dwater monitoring well (10 foot)
Responsible for Utility Clearan	nce: Sig	gma <u>X</u> rilling Contractor	
3. Water Provided by:		te Own <b>er</b> -illing Contractor <u>x</u>	
4. Electric Provided by:	Sit	te Owner Drilling Contractor	_ <u>X</u>
5. Drilling Method: Geoprobe _ Air Rotary		ollow Stem Auger <u>x</u> ud Rotary	
6. Drilling Surface: Concrete/as	phalt		
7. Sampling Interval: Continue	ous X 21/2 ff	iOther_	
8. Estimated Depth to Groundwa	ater: <u>25</u>	ft,	
		All costs must be included in the coptions or substitutions will be	he lump sums or unit rates for e considered,
Task	Quantity	Unit Rate	Cost
Mobilization (includes support vehicles)	(	Lump Sum	\$ 350.00
Soil Boring Drilling	30 /feet	16 Ifoot	480.00
Borehole Abandonment	√ /feet	4 /foot	0.00
Well Installation (Includes all well supplies)	36 /feet	13 /foot	390,00
Well Protective Covers ☐ Flush Mount	1 each	200 leach	200.00
Decon/Steam Cleaning	1	Lump Sum	150,00
55- Gallon Drums	2	45/Drum	90.00
Visqueen	O /Rolls	65/Rolls	0.00
Traffic Control	0	120/hour	0.00
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Other (	Conditions/	Costs					
	Concrete	penetration	<i>d</i> each	100,00/hole	0.00		
тот	AL COST				\$ 1,660.00		
Sigma	Project #_7	7376	Pa	age 2 of 2			
)	EST FOR ( CONTINU	COST ESTIMATE (ED)	- DRILLING SEF	RVICES			
10. Co	it shall m \$1,000,0 claim. T	aintain general fia 00 per claim; \$1,0 he insurance cove	bility coverage Ind 00,000 annual ag rage shall be pro	hat all times while providing soluding, pollution impairment agregate and a deductible of solution by a firm that has an A	liability coverage of no no more than \$100,000 .M. Best rating of at lea	less than 0 per ast "A-",	
				erminated for any reason.	, , ,	- ,	
3.	Drilling Contractor shall indemnify Consultant or (Owner) for all drilling costs determined to be ineligible for DERF reimbursement by the DERF staff due to Contractor's failure to maintain the insurance coverage required in paragraph 1 above.						
4.	The above mobilization		e honored for one	e (1) calendar year starting or	the date of the first		
5.	All bids v	vill follow fax requ	ests/responses w	ith a signed hard copy of this	form to be considered	I.	
6.	All drilling	g equipment will b	e decontaminated	l before arrival on-site.			
Nam Signa	Vane E le (Print) Sume d ture	Reschel  E Breichel  Title	Corporat	e Secretary			
Phon	8-271	1-7600					

Soils & Engineering Services, Inc.
Company Date