

K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

Rec'd
3-4-15

ADDITIONAL WORK PLAN and BUDGET REQUEST

February 18, 2015
Revised March 3, 2015

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

VIA Email and US Mail

KPRG Project 10009

Re: Additional Work Plan and Budget Request – March 2015
Former Bask Dry Cleaners – Waukesha, WI
BRRTS# 02-68-297669, FID# 268188800

Dear Mr. Volkert:

Results from the most recent round of vapor and groundwater sampling were discussed with the Wisconsin Department of Natural Resources (WDNR) in a conference call on January 21, 2015. During that call, the WDNR requested that sub-slab depressurization systems (SSDSs) be installed at the Lex residence (2157 Rambling Rose Rd.) and the Stockinger residence (2151 Rambling Rose Rd.). In addition, KPRG and Associates, Inc. (KPRG) was directed to evaluate the most current groundwater impact map and the most current soil vapor map to determine where additional wells, if necessary, and vapor probes may need to be installed to complete definition of the areal extent of impacts. KPRG submitted a revised additional work plan dated February 17, 2015 to the WDNR. A follow-up discussion with the WDNR Project Manager on February 24, 2015 resulted in a directive to install three to four additional monitoring wells in addition to the work already proposed.

This additional work plan and budget is submitted in response to the WDNR directive for additional groundwater monitoring wells and to maintain dry cleaner environmental response fund [DERF] eligibility. The groundwater and vapor impacts are discussed separately below followed by an additional work plan and proposed budget.

Groundwater Evaluation

The most recent round of groundwater samples were collected on October 22, 2014. The groundwater elevation measurements are included in Table 1 and the data are

summarized in Table 2 which includes historical data. Figure 1 provides the most recent groundwater flow map and Figure 2 provides isoconcentration contours based on that data for tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2 dichloroethene (DCE). The only vinyl chloride detection in the most recent sampling was 0.89 ug/l at well MW-5 which is within the source area.

A review of the groundwater impact map (Figure 2) indicates that the extent of groundwater impacts is well defined. The furthest downgradient monitoring well (MW-10) had a PCE detection of 11 ug/l which is just above the NR 140 Enforcement Standard (ES) of 5 ug/l. This indicates that well MW-10 is near the overall edge of the impact plume. At this location, TCE was detected at 4 ug/l (below the ES of 5 ug/l) and cis-1,2 DCE was detected at 12 ug/l (below the ES of 70 ug/l). This data suggests that the groundwater impact plume has been sufficiently defined, however, as discussed below, three additional monitoring wells are being proposed per WDNR directive.

Soil Vapor Evaluation

Table 3 summarizes all soil vapor sampling data to date. Figure 3 provides an isoconcentration contour map of soil vapor impacts. It indicates some elevated soil vapor impacts extending slightly northeast of the groundwater impact plume area. It is recognized that soil vapor impacts do not always mimic groundwater flow/impacts as the pathway allows for vapor migration through the unsaturated zone following potential fractures and/or more permeable soil seams without necessarily following a primary groundwater flow direction. Based on this map, SSDS systems will be installed at the Lex and Stockinger residences as previously noted above (2157 Rambling Rose Rd. and 2151 Rambling Rose Rd., respectively).

In addition to the SSDS installs noted above, another soil vapor probe (SV-12) is being proposed to complete the definition of the extent of soil vapor impacts to the northeast. The location of this probe is on the north side of Rambling Rose Rd as shown on Figure 3.

ADDITIONAL WORK PLAN SCOPE OF WORK

For budget estimating purposes, the additional work provided below is divided into the following tasks:

- Task 1 – Additional Requested Work Planning/Coordination
- Task 2 – Additional SSDS Installations
- Task 3 – Additional Soil Vapor Probe Installation and Sampling
- Task 4 – Additional Monitoring Well Installation and Groundwater Sampling

- Task 5 – Additional Reporting

Each task is discussed separately below.

Task 1 – Additional Requested Work Planning/Coordination

The scope of this task includes the project management and planning that will be required for the successful completion of the additional work. This includes expanding the current property access agreements (or creating a new agreement(s)), with the Lex/Stockinger residences for SSDS installs, and the City of Waukesha for the additional soil boring/vapor probe and monitoring wells on their property within the right-of-way of Rambling Rose Road. In addition, an access permit will need to be obtained from Waukesha County for the installation of a new well within the Springdale Road (County SR) right-of-way.

Task 2 – Additional SSDS Installs

Following the execution of the property access agreements, KPRG will meet with Radon Measurement & Elimination Services (RMES), a radon venting contractor that we have used extensively in the past, at the sites to obtain a more accurate cost estimate for the work. However, based on recent installations for other residents in the area, RMES is anticipating installing one vapor extraction point at the sump crock within the basement. RMES will install a new sump pump (if necessary), seal the crock with a clear see-thru lid, and use the crock and associated weeping tile system as the vapor depressurization system. A “point” will then be installed into the sealed crock and vented outside with an inline fan. Pressure Field Extension (PFE) testing will be performed to verify that the footprint of the structure is being sufficiently vented, assuming the resident allows for the additional holes to be drilled through the floor for testing. The RMES estimated cost for each SSDS, including electrical hookups and subsequent pressure/vacuum testing beneath the floor slab to document the effectiveness of the system to draw vapor, is \$2,700. The detailed cost breakdown sheets use \$3,700 for contractor cost allowing for some additional money in case of unexpected field installation condition/issues. It is KPRG’s understanding that due to the nature of this response action, obtaining three bids for this work will not be required. Each system installation will require up to two days to install and one day for testing.

The WDNR has also requested that a follow-up indoor air sample be collected from within each basement approximately three months after SSDS installations. The cost of two additional ambient air samples is included within the proposed budget.

Task 3 – Additional Soil Vapor Probe Installation and Sampling

Soil Vapor Probe Installation Procedure

One additional soil vapor probe will be installed using the direct push Geoprobe drilling method. One boring, SV-12, will be advanced within the right-of-way of Rambling Rose

Rd (see Figure 3). The location of the probe is intended to assist in defining the potential extent of soil vapor impacts.

The borehole will be advanced to a depth of approximately ten feet below ground surface (bgs), or groundwater, whichever is shallower. A 1-inch diameter, schedule 40 PVC probe will be placed down hole with 3-feet of 0.010-slot screen. Clean silica sand will be placed around the screen to approximately six inches above the top of the screen. The remainder of the borehole will be backfilled with bentonite pellets and hydrated. The surface casing will be completed as a flush mount and the top of the PVC riser will be finished with an air-tight cap having a fitting to allow for vapor sample collection.

Not less than 24 hours after probe installation, the integrity of the probe seal will be tested by placing an approximately 4' by 4' section of visqueen over the ground with a hole in the center placed over the vapor probe. A plastic pail will be sealed with the visqueen over the hole and vapor probe and the atmosphere within the pail will be enriched with helium covering the entire sampling apparatus. Approximately two probe volumes of air will be purged and a vapor sample will be monitored directly for the presence of helium using an Alcatel ASM 142S, or equivalent, detector/field monitor. If no helium is detected, the probe construction will be deemed adequate for subsequent vapor sampling. If helium is detected, the probe surface seal will be re-enforced and tested again until a sufficient seal is documented. If for some reason the seal can not be adequately completed, the vapor point will be properly abandoned and redrilled/constructed within five feet of the original location.

Vapor Probe Sampling Procedure

Once an adequate surface seal is documented, a soil vapor sample will be collected from the new vapor point along with all the other vapor probes already installed (points SV-1B through SV-11) using a Summa canister with a one-hour flow control valve at each location. This will yield a total of 12 soil vapor samples. Approximately two vapor probe volumes of air will be purged from the probe. A disposable polyethylene sampling tube will then be connected from the probe sampling fitting to the Summa canister. The canister valve will be opened and a one-hour vapor sample will be collected. Once the canister is full, the valve will be closed and the canister will be disconnected from the sampling tube. The Summa canisters will then be shipped under a properly completed chain-of-custody (COC) for analysis to a Wisconsin certified laboratory.

Field notes will be maintained during each sampling event which will include the weather conditions, ambient air photoionization detector (PID) measurements and a description of any potential odors in the ambient air or other conditions that may be deemed pertinent.

Analytical Requirements

The Summa canister samples will be analyzed using the TO15 analytical method. Since the constituent of concern at this site is tetrachloroethene (PCE), the lab will be requested to only report the chlorinated volatile organic portion of the TO15 scan which will include PCE and its breakdown products of TCE, cis-1,2-dichloroethene (DCE) and vinyl

chloride as well as 1,1,1-TCA and its breakdown product of 1,1-dichloroethane (DCA) and 1,1-DCE.

As noted above, all sample collection, handling and analysis will be performed in accordance with the approved Work Plan for the work previously completed.

Task 4 – Groundwater Sampling

A total of three additional monitoring wells (MW-13 through MW-15) will be drilled and constructed at locations shown on Figure 2. Monitoring wells will be drilled using the hollow-stem auger drilling method. Drilling of the wells will extend to approximately 25 feet bgs. The vertical soil profile will be sampled using a split spoon or continuous core barrel, logged and screened in the field for total organic vapors using a PID. Once the target depth is reached, each well will be constructed of 2-inch, inner-diameter PVC (schedule 40) casing with 10-feet of 0.010 slot screen intended to straddle the water table. Each well will be completed by placing a 10/20 silica sand filter pack to approximately one foot above the top of the screen followed by up to two feet of fine sand (100 mesh). A minimum 2-foot bentonite pellet seal will then be placed and hydrated. The remainder of the annulus for the wells will be filled with granular bentonite. The surface completions will be flush mount vaults which will be anchored with concrete.

Monitoring wells will be developed using the pump and surge method. Purging will continue until a minimum of five casing volumes of water are removed or until field parameters of pH, specific conductance and temperature show stable conditions.

All proper documentation for drilling and well construction will be submitted on the required WDNR forms.

Since there has not been any well head surveying completed since the installation of MW-10, over 10 years ago, all of the monitoring wells (new and existing) will be surveyed in by a Wisconsin licensed surveyor. The ground elevation will be surveyed to an accuracy of 0.1 feet and the top of casing elevation will be surveyed to an accuracy of 0.01 feet.

This proposal assumes two rounds of groundwater sampling to include the three new monitoring wells and the wells generally sampled (MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and PZ-1). PZ-2 which is clustered adjacent to well MW-5 has been historically dry. This well will be checked for the presence of water. If water is encountered, it will also be sampled. All samples will be analyzed for VOCs at the laboratory and field measurements of dissolved oxygen (DO), temperature, pH, specific conductivity and oxidation-reduction potential (ORP) will be gathered and recorded. One duplicate sample will be analyzed for VOCs per sampling event for quality assurance/quality control purposes.

Task 5 – Additional Reporting

This task covers the additional effort in tabulating, evaluating and reporting the added data. This includes tables, figures and text discussions for both groundwater and soil vapor impacts.

PATHWAY TO CLOSURE

It is our understanding that once all the SSDS systems are in place and required follow-up indoor air sampling data shows no impacts, the groundwater data continues to indicate that the plume is stable or receding, and the additional vapor sampling defines the extent of vapor impacts, that the site will be ready for conditional closure. If the data indicates that additional work is necessary, discussions will be held with WDNR to define further scope.

COST ESTIMATE

Costs are summarized in Table 4 and detailed on the costing sheets in Attachment 1. The additional requested budget for the above defined scope of work is \$48,863. The unit rates used in this cost estimate are consistent with previous KPRG rates. One round of soil vapor probe sampling and two rounds of groundwater sampling are assumed.

Only those costs incurred will be billed. All billing will be performed on a monthly basis and will be broken down by task and unit rates. No additional work will be performed until formal WDNR approval of the proposed budget is received. If there are any questions, please contact me at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.







Richard R. Gnat, P.G.
Principal

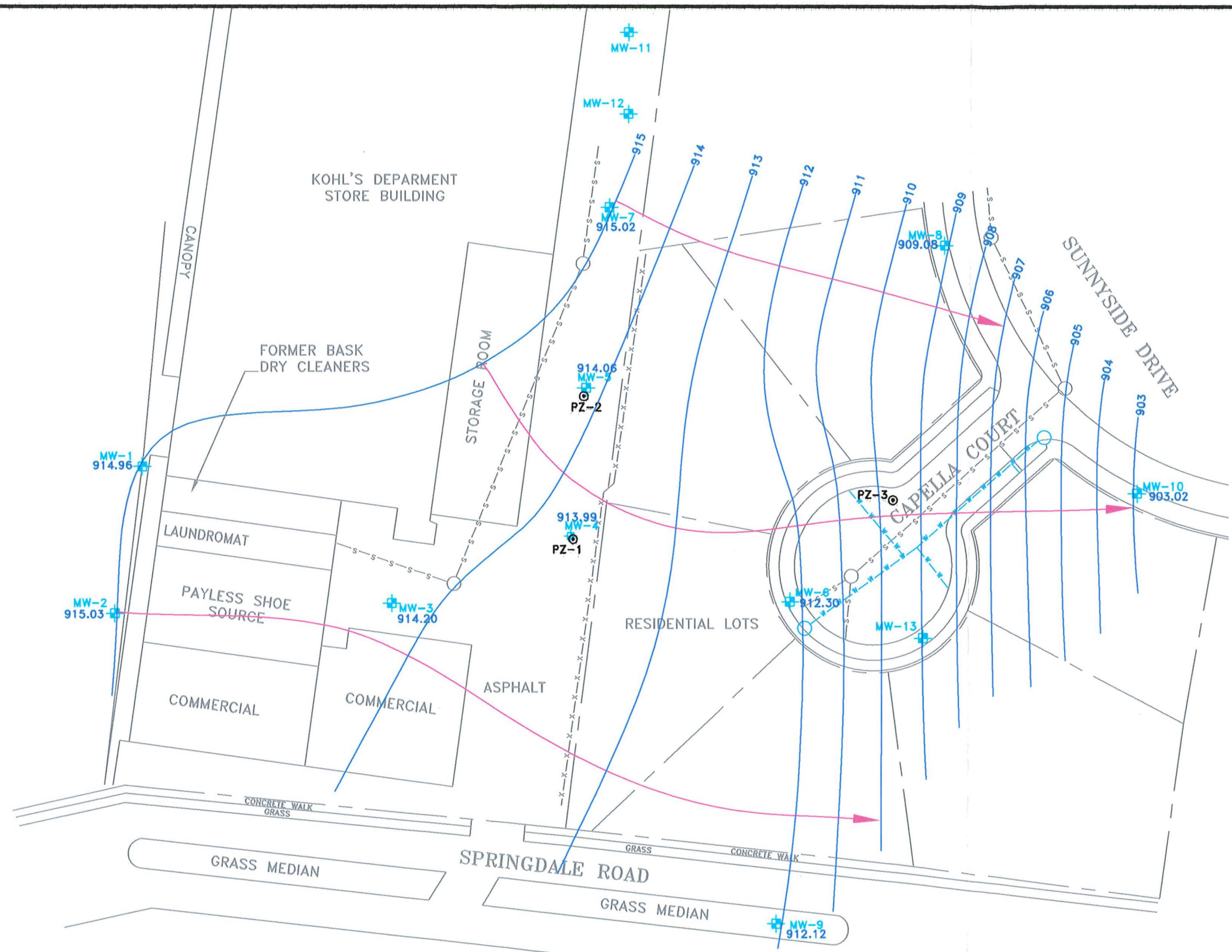
cc: Mr. Greg Butts, former Bask Dry Cleaners
Ms. Michelle Williams, Whyte Hirschboeck Dudek, S.C.
Mr. Donald Gallo, Whyte Hirschboeck Dudek, S.C.

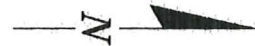
FIGURES

W:\CI\projects\westbrook_shopping_center\10009_gw_map_oct_2014.dwg

LEGEND

- PZ-1  PIEZOMETER LOCATION
- MW-12  MONITORING WELL LOCATION
-  GROUNDWATER CONTOUR
-  FLOW DIRECTION





LEGEND

MW-12 MONITORING WELL,
PIEZOMETER LOCATION

5 PCE CONCENTRATION
CONTOUR

5 TCE CONCENTRATION
CONTOUR

100 cis-1,2-DCE
CONCENTRATION CONTOUR

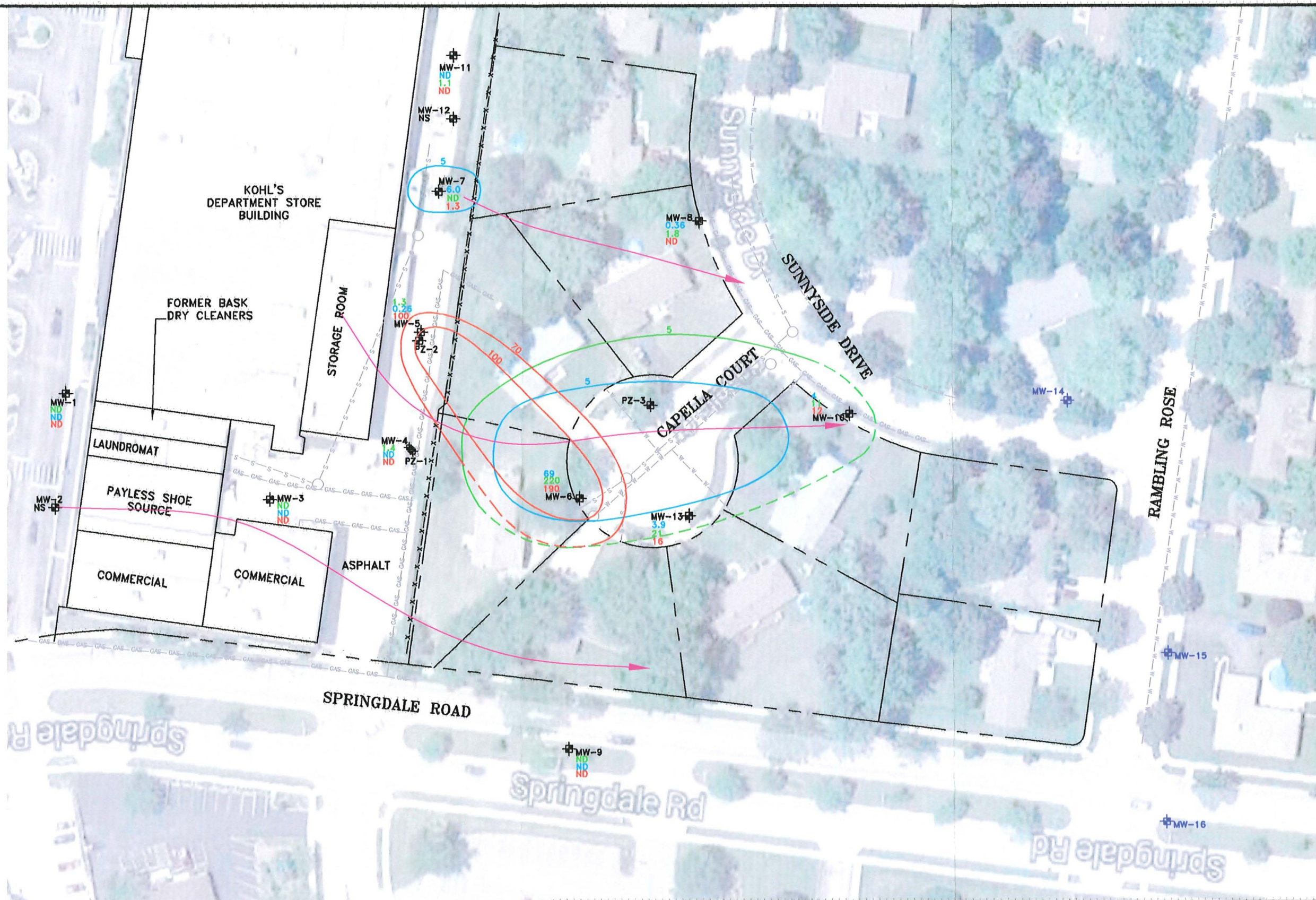
PCE ENFORCEMENT
STANDARD = 5 µg/L

TCE ENFORCEMENT
STANDARD = 5 µg/L

cis-1,2-DCE ENFORCEMENT
STANDARD = 70 µg/L

GROUNDWATER FLOW
DIRECTION

MW-14 PROPOSED MONITORING
WELL LOCATION



0 70'
APPROXIMATE SCALE

ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 2B Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

PROPOSED MONITORING WELLS LOCATIONS

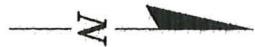
WESTBROOK SHOPPING CENTER
WAUKESHA, WISCONSIN

Scale: 1" = 70'

Date: March 3, 2015

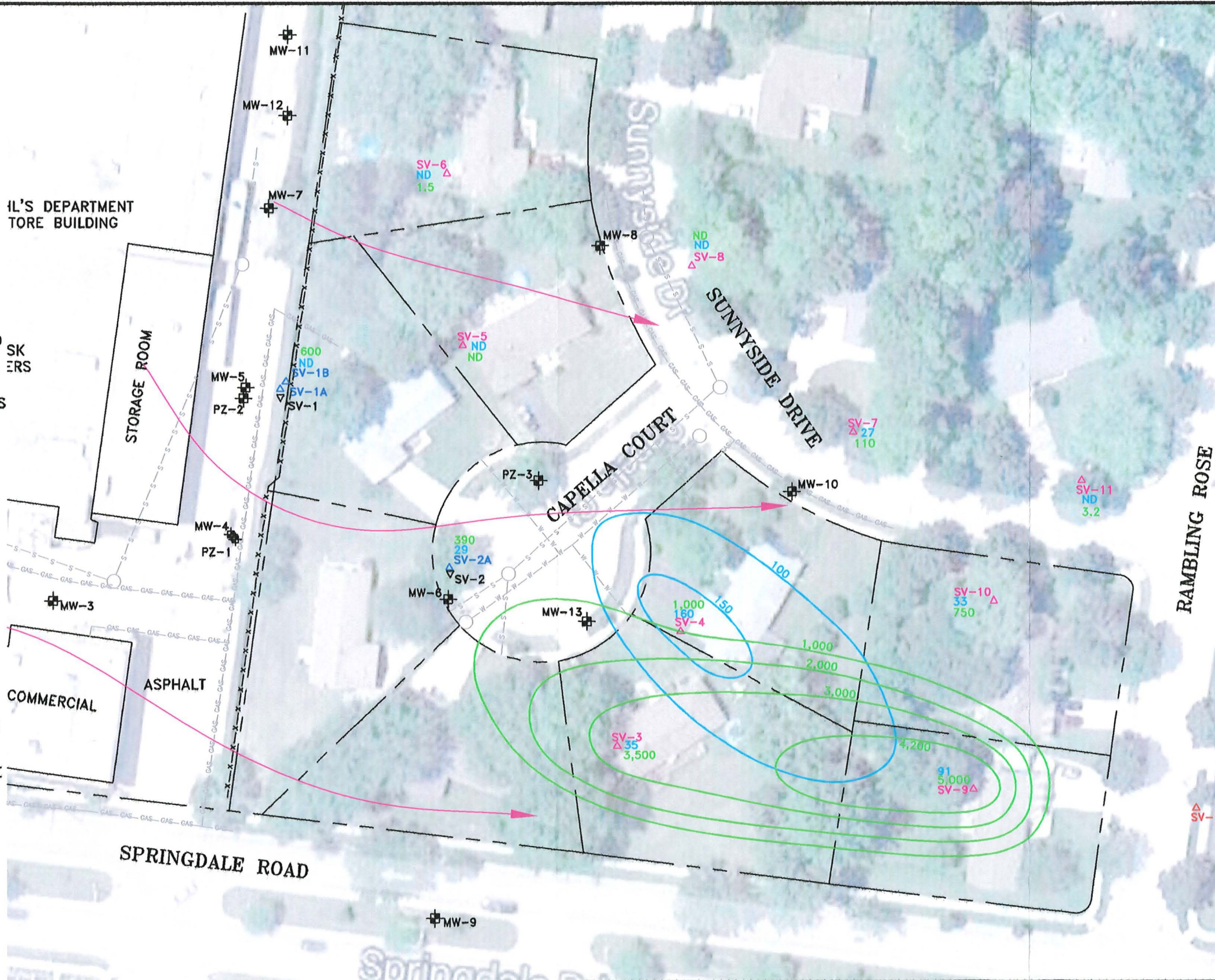
KPRG Project No. 10009

FIGURE 2



LEGEND

- MW-12 MONITORING WELL, PIEZOMETER LOCATION
- SV-1 TEMPORARY SOIL VAPOR PROBE (2005), ABANDONED
- SV-1A SOIL VAPOR PROBE INSTALLED IN 2012
- SV-3 SOIL VAPOR PROBE LOCATIONS INSTALLED IN 2014
- 1,000 PCE CONCENTRATION CONTOUR
- 100 TCE CONCENTRATION CONTOUR
- PCE VAPOR RISK SCREENING LEVEL = 4,200 $\mu\text{g}/\text{m}^3$
- TCE VAPOR RISK SCREENING LEVEL = 210 $\mu\text{g}/\text{m}^3$
- GROUNDWATER FLOW DIRECTION
- SV-12 PROPOSED SOIL VAPOR PROBE LOCATION



ENVIRONMENTAL CONSULTATION & REMEDIATION

K P R G

KPRG and Associates, Inc.

14665 West Lisbon Road, Suite 28 Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

EXTENT OF SOIL VAPOR IMPACTS

WESTBROOK SHOPPING CENTER WAUKESHA, WISCONSIN

Scale: 1" = 60'

Date: February 13, 2015

KPRG Project No. 10009

FIGURE 3

TABLES

Table 1. Water Level Elevation Table - Former Bask Dry Cleaners, Westbrook Shopping Center, Waukesha, WI

WELL	USGS Datum Elevations			3/23/2005		10/19/2005		6/19/2008		8/25/2008		8/20/2009		12/7/2009		3/10/2010	
	Ground	Top of Casing	Bottom of Well	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev
MW-1	941.64	941.25	906.25	27.46	913.79	28.11	913.14	24.31	916.94	24.22	917.03	24.51	916.74	25.10	916.15	25.23	916.02
MW-2	942.41	942.07	907.07	28.45	913.62	29.17	912.90	26.25	915.82	25.20	916.87	25.48	916.59	26.07	916.00	26.21	915.86
MW-3	937.79	937.32	905.32	24.07	913.25	24.90	912.42	20.80	916.52	21.33	915.99	21.68	915.64	22.11	915.21	22.11	915.21
MW-4	932.33	931.89	901.89	19.18	912.71	20.05	911.84	15.54	916.35	16.30	915.59	16.37	915.52	17.00	914.89	16.97	914.92
MW-5	934.42	934.08	909.08	20.82	913.26	21.35	912.73	17.62	916.46	18.15	915.93	18.25	915.83	18.76	915.32	19.90	914.18
MW-6	925.93	925.65	905.65	13.96	911.69	15.15	910.50	10.21	915.44	11.61	914.04	>11.8	NV	11.98	913.67	11.87	913.78
MW-7	935.95	935.58	907.58	21.98	913.60	23.17	912.41	18.85	916.73	19.22	916.36	18.35	917.23	18.89	916.69	18.30	917.28
MW-8	923.36	922.92	900.92	12.58	910.34	14.96	907.96	11.01	911.91	12.88	910.04	12.93	909.99	12.91	910.01	12.90	910.02
MW-9	919.56	919.23	902.23	8.18	911.05	9.50	909.73	4.34	914.89	5.83	913.40	5.81	913.42	6.11	913.12	5.75	913.48
MW-10	918.24	917.88	899.88	15.31	902.57	17.40	900.48	8.24	909.64	12.52	905.36	12.35	905.53	12.51	905.37	11.43	906.45
MW-11	NS	NS	NS	NM	NS	NM	NS	19.42	NS	19.15	NS	19.45	NS	20.00	NS	19.75	NS
MW-12	NS	NS	NS	NM	NS	NM	NS	17.55	NS	17.99	NS	17.96	NS	18.55	NS	17.30	NS
MW-13	NS	NS	NS	NM	NS	NM	NS	9.84	NS	10.93	NS	10.88	NS	11.03	NS	10.43	NS
PZ-1	932.34	931.82	886.82	40.51	891.31	41.20	890.62	40.92	890.90	40.90	890.92	40.46	891.36	40.74	891.08	39.00	892.82
PZ-2	934.27	933.79	873.79	DRY	NV	NM	NV	59.14	874.65	59.30	874.49	58.96	874.83	59.05	874.74	59.00	874.79
PZ-3	NS	922.99	NS	DRY	NV	NM	NV	DRY	NV	DRY	NV	DRY	DRY	DRY	DRY	DRY	DRY

WELL	USGS Datum Elevations			6/4/2010		12/16/2010		6/21/2011		6/20/2012		1/18/2013		10/22/2014	
	Ground	Top of Casing	Bottom of Well	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev	Depth to Water	Water Elev
MW-1	941.64	941.25	906.25	25.03	916.22	25.33	915.92	24.96	916.29	26.58	914.67	27.51	913.74	26.29	914.96
MW-2	942.41	942.07	907.07	24.97	917.10	26.24	915.83	25.92	916.15	27.34	914.73	NM	NM	27.04	915.03
MW-3	937.79	937.32	905.32	21.86	915.46	22.40	914.92	21.87	915.45	23.26	914.06	23.88	913.44	23.12	914.20
MW-4	932.33	931.89	901.89	16.71	915.18	17.33	914.56	16.73	915.16	DRY	DRY	DRY	DRY	17.90	913.99
MW-5	934.42	934.08	909.08	19.15	914.93	18.94	915.14	18.51	915.57	20.18	913.90	21.02	913.06	20.02	914.06
MW-6	925.93	925.65	905.65	11.91	913.74	12.43	913.22	11.71	913.94	13.32	912.33	14.18	911.47	13.35	912.30
MW-7	935.95	935.58	907.58	17.85	917.73	19.40	916.18	18.24	917.34	20.85	914.73	21.96	913.62	20.56	915.02
MW-8	923.36	922.92	900.92	12.58	910.34	13.56	909.36	12.78	910.14	13.88	909.04	14.09	908.83	13.84	909.08
MW-9	919.56	919.23	902.23	5.90	913.33	7.59	911.64	5.76	913.47	7.55	911.68	8.43	910.80	7.11	912.12
MW-10	918.24	917.88	899.88	11.78	906.10	13.73	904.15	12.30	905.58	14.15	903.73	16.02	901.86	14.86	903.02
MW-11	NS	NS	NS	19.55	NS	20.30	NS	19.77	NS	21.32	NS	22.23	NS	21.21	NS
MW-12	NS	NS	NS	18.34	NS	18.75	NS	18.46	NS	19.84	NS	20.96	NS	19.65	NS
MW-13	NS	NS	NS	10.78	NS	11.53	NS	10.62	NS	11.50	NS	12.13	NS	11.72	NS
PZ-1	932.34	931.82	886.82	40.25	891.57	39.18	892.64	40.35	891.47	40.08	891.74	41.23	890.59	39.95	891.87
PZ-2	934.27	933.79	873.79	58.98	874.81	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
PZ-3	NS	922.99	NS	DRY	NV	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Notes: All USGS elevation data in feet above mean sea level.
 All depth to water data in feet below top of casing.
 KPRG and Associates, Inc. data begins 8/20/09

NS- Not Surveyed
 NM- Not Measured
 DRY- Well was dry

Table 3 - Summary of Soil Vapor Data for Detected Chlorinated Compounds Only - Former Bask Dry Cleaners

Sample Name	WDNR Residential VRSL		SV-1	SV-1A	SV-1B			SV-2	SV-2A			
	Parameter	Date	Sub-Slab	Deep Soil	03/02/05	11/02/12	12/11/12	10/01/14	12/27/14	03/02/05	11/02/12	10/01/14
1,1-Dichloroethene	2,100	21,000	ND	16	<0.79	<7.9	<0.79	ND	<0.79	<16	<0.79	
cis-1,2-Dichloroethene	NC	NC	ND	<0.79	<0.79	<7.9	<0.79	ND	<0.79	<16	<0.79	
trans-1,2-Dichloroethene	NC	NC	ND	<0.79	<0.79	<7.9	<0.79	ND	<0.79	<16	<0.79	
Methylene Chloride	6,300	63,000	ND	NA	NA	<6.9	NA	ND	NA	<14	NA	
Tetrachloroethene	420	4,200	29.64	2,000	880	2,800	600	5.03	3.3	4,500	390	
Trichloroethene	21	210	ND	12	1.7	<11	<1.1	ND	<1.1	460	29	

Sample Name	WDNR Residential VRSL		SV-3		SV-4		SV-5		SV-6		SV-7		SV-8	
	Parameter	Date	Sub-Slab	Deep Soil	09/30/14	12/27/14	09/30/14	12/27/14	09/30/14	12/27/14	09/30/14	12/27/14	09/30/14	12/27/14
1,1-Dichloroethene	2,100	21,000	<3.2	<0.79	<40	<0.79	3.3	<0.79	1.3	<0.79	<20	<0.79	<7.9	<0.79
cis-1,2-Dichloroethene	NC	NC	<3.2	<0.79	270	11	<0.79	<0.79	<0.79	<0.79	<20	<0.79	<7.9	<0.79
trans-1,2-Dichloroethene	NC	NC	<3.2	<0.79	310	10	<0.79	<0.79	<0.79	<0.79	<20	<0.79	<7.9	<0.79
Methylene Chloride	6,300	63,000	<2.8	NA	59	NA	0.94	NA	0.8	NA	<17	NA	<6.9	NA
Tetrachloroethene	420	4,200	7,500	3,500	81,000	1,100	4.5	<1.4	8.8	1.5	750	110	<14	<1.4
Trichloroethene	21	210	120	35	6,400	160	<1.1	<1.1	<1.1	<1.1	140	27	<11	<1.1

Sample Name	WDNR Residential VRSL		SV-9	SV-10	SV-11	
	Parameter	Date	Sub-Slab	Deep Soil	12/27/14	12/27/14
1,1-Dichloroethene	2,100	21,000	<6.3	<0.79	<0.79	
cis-1,2-Dichloroethene	NC	NC	180	6.3	<0.79	
trans-1,2-Dichloroethene	NC	NC	<6.3	1.3	<0.79	
Methylene Chloride	6,300	63,000	NA	NA	NA	
Tetrachloroethene	420	4,200	5,000	750	3.2	
Trichloroethene	21	210	91	33	<1.1	

Notes : All values in ug/m³.

VRSL - Vapor Risk Screening Level

NC - Not Calculated

BOLD - Result exceeds the Deep Soil VRSL

ND - Not Detected

It is noted that 111-TCA was detected below standard at SV-7 on 12/27/14.

Table 4. Additional Probe Install and Sampling Budget Summary - Former Bask Dry Celaners, Waukesha WI
 February 16, 2015, Revised March 3, 2015

Task	KPRG Labor	Expenses	Contractors					Totals
			Analytical	SSDS Install Contractor	Driller	IDW Disposal	Surveyor	
1) Site Meetings and Planning	\$3,070	\$240	\$0	\$0	\$0	\$0	\$0	\$3,310
2) Sub-slab Depressurization System Installs and Testing	\$2,836	\$240	\$470	\$7,400	\$0	\$0	\$0	\$10,946
3) Soil Vapor Probe Installation and Sampling	\$3,939	\$830	\$2,820	\$0	\$3,500	\$0	\$0	\$11,089
4) Groundwater Monitoring Well Installation and Sampling (2 rounds)	\$6,940	\$3,630	\$2,970	\$0	\$4,700	\$1,890	\$1,700	\$21,830
5) Additional Reporting	\$1,688	\$0	\$0	\$0	\$0	\$0	\$0	\$1,688
Totals	\$18,473	\$4,940	\$6,260	\$7,400	\$8,200	\$1,890	\$1,700	\$48,863

ATTACHMENT 1
COSTING BACKUP

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 1 Additional Requested Work Planning/Coordination

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>	<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135	12	\$1,620.00
Field Eng./Sci.	\$68	20	\$1,360.00
CADD	\$60	0	\$0.00
Admin. Asst/ Word Proc.	\$45	2	\$90.00
		Total Labor	\$3,070.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	0	\$0.00
Field Vehicle	\$60	Daily	4	\$240.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
		Total Expenses		\$240.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
None.				\$0.00
		Total Contractors		\$0.00

TASK TOTAL:	\$3,310.00
--------------------	-------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 2 Sub-slab Depressurization System Installation/Testing

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>	<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135	4	\$540.00
Field Eng./Sci.	\$68	32	\$2,176.00
CADD	\$60	2	\$120.00
Admin. Asst/ Word Proc.	\$45	0	\$0.00
		Total Labor	\$2,836.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	0	\$0.00
Field Vehicle	\$60	Daily	4	\$240.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
		Total Expenses		\$240.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
RMES	\$3,700	Est.	2	\$7,400.00
Summa Canister Rental	\$60	Each	2	\$120.00
Laboratory Analytical	\$175	Each	2	\$350.00
		Total Contractors		\$7,870.00

TASK TOTAL:	\$10,946.00
--------------------	--------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 3 Additional Soil Vapor Probe Installation, Testing and Sampling

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>	<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135	4	\$540.00
Field Eng./Sci.	\$68	48	\$3,264.00
CADD	\$60	0	\$0.00
Admin. Asst/ Word Proc.	\$45	3	\$135.00
		Total Labor	\$3,939.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Photoionization Detector	\$75	Daily	4	\$300.00
Field Vehicle	\$60	Daily	4	\$240.00
Sub-slab Probes	\$850	Kit	0	\$0.00
Concrete Drill Setup	\$100	Daily	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
Helium Detection Kit	\$145	Daily	2	\$290.00
		Total Expenses		\$830.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Driller	\$3,500	Est.	1	\$3,500.00
Summa Canister Rental	\$60	Each	12	\$720.00
Laboratory Analytical	\$175	Each	12	\$2,100.00
		Total Contractors		\$6,320.00

TASK TOTAL: \$11,089.00

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 4 Additional Monitoring Well Installation and Groundwater Sampling (2 rounds)

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>		<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135		8	\$1,080.00
Field Eng./Sci.	\$68		80	\$5,440.00
CADD	\$60		4	\$240.00
Admin. Asst/ Word Proc.	\$45		4	\$180.00
			<u>Total Labor</u>	<u>\$6,940.00</u>

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	0	\$0.00
Field Vehicle	\$60	Daily	10	\$600.00
Disposable bailers	\$15	Each	38	\$570.00
Drums	\$55	Each	12	\$660.00
Water Meter (W/DO/ORP)	\$200	Daily	9	\$1,800.00
PPE - Level C	\$35	Daily	0	\$0.00
			<u>Total Expenses</u>	<u>\$3,630.00</u>

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Driller	\$4,700	Estimated	1	\$4,700.00
Surveyor	\$1,700	Estimated	1	\$1,700.00
Laboratory Water	\$65	Each	38	\$2,470.00
Laboratory Waste Profile	\$250	Each	2	\$500.00
IDW Transportation	\$300	Each	2	\$600.00
IDW Disposal Soil	\$90	Drum	6	\$540.00
IDW Disposal Water	\$125	Drum	6	\$750.00
			<u>Total Contractors</u>	<u>\$11,260.00</u>

TASK TOTAL:	\$21,830.00
--------------------	--------------------

KPRG TASK COSTING SHEET

Project: Former Bask Dry Cleaner - Westbrook Shopping Center - Waukesha, WI

Task: 5 Additional Reporting

<u>Professional Labor</u>	<u>Rate (\$/Hr.)</u>	<u>Units</u>	<u>Total</u>
Principal/Proj. Mgr.	\$135	2	\$270.00
Field Eng./Sci.	\$68	16	\$1,088.00
CADD	\$60	4	\$240.00
Admin. Asst/ Word Proc.	\$45	2	\$90.00
		Total Labor	\$1,688.00

<u>External Expenses</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
Reproduction	\$50	Est.	0	\$0.00
Field Vehicle	\$60	Daily	0	\$0.00
Sampling Supplies	\$20	Daily	0	\$0.00
Drums	\$55	Each	0	\$0.00
PPE - Modified Level D	\$15	Daily	0	\$0.00
PPE - Level C	\$35	Daily	0	\$0.00
		Total Expenses		\$0.00

<u>Contractors</u>	<u>Rate</u>	<u>Type</u>	<u>Units</u>	<u>Total</u>
None.				\$0.00
		Total Contractors		\$0.00

TASK TOTAL: \$1,688.00

PROJECT TOTAL: \$48,863.00