



PROPOSAL PHASE II SITE INVESTIGATION

ROBINSON CLEANERS 1809 EAST MILWAUKEE STREET JANESVILLE, WISCONSIN

> Prepared for: ROBIN, INC.

JUNE 18, 2001

URS Proposal Number 133-0601-003

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1.1 BACKGROUND

A soil and groundwater investigation has been completed at the Stop-N-Go store, located at 1804 East Milwaukee Street, in Janesville, Wisconsin (see Figure 1). Although this investigation was for a petroleum site, a full analysis of volatile organic compounds (VOCs) was conducted on samples collected. The analyses of groundwater samples yielded chlorinated VOCs, primarily tetrachloroethene (PCE), which is not typically associated with petroleum sites, and was not detected in the soil at the site.

Although an accurate evaluation of groundwater flow direction could not be completed at the site (only two groundwater monitor wells are present), regional data, as well as data from a nearby site indicate that groundwater flow is likely to the southwest in this area. Based upon that assessment, Robinson Cleaners (Site), located at 1819 East Milwaukee Street, would be positioned directly upgradient from the Stop-N-Go facility. Additionally, PCE is the fabric cleaning solvent that has been utilized at the Site. Consequently, the Wisconsin Department of Natural Resources (WDNR) has determined that the Site is the likely source of the PCE detected in groundwater samples at the Stop-N-Go facility. Subsequently, Marilyn Janke of the WDNR issued a "Responsible party" letter to Mr. Brian Fitzgerald, owner of Robinson Cleaners, instructing that a site investigation be carried out to determine the degree and extent of environmental impacts be defined, and a remedial strategy be developed.

1.2 SITE DESCRIPTION

The Site is located in the northeast quarter of the southwest quarter of Section 30, Township 3 north, Range 13 East, in Rock County, Wisconsin. It is positioned on elevated ground, at an elevation of approximately 865 feet. The Rock River is located less than 1.5 miles to the west, and is at an elevation of less than 770 feet. Consequently, groundwater elevations at the site are 80 to 90 feet below ground surface.

SECTIONONE

The existing building houses state-of-the art dry cleaning equipment. It is unlikely that this equipment has caused the release of PCE. However, it is possible that releases occurred from older equipment was used in a building that formerly occupied the site.

1.3 PURPOSE AND SCOPE

Pursuant to the directives from the WDNR, the purpose of the proposed investigation will be to define the degree and extent of soil and groundwater impacts, if any, resulting from past practices at the site. Accordingly, it will be our recommendation to conduct a soil investigation to delineate areas of impacted soil (potential source areas), and to conduct an investigation to evaluate groundwater quality and flow conditions. Because of the great depth to groundwater, and because of the need to evaluate groundwater flow conditions, the groundwater investigation will be conducted utilizing long-term observation wells, rather than temporary wells, or other methods of groundwater sampling.

Upon completion of the field activities, we will produce a report summarizing the field study approach, and the results. In the event that our investigation results in the indication that the site is a source area for impacts to soil and groundwater, our report will also include a summary of remedial alternatives for the site, and our recommendations for the most cost-effective alternative(s).

All studies will be conducted in accordance Wisconsin Administrative Code (WAC) NR 700, which provides guidance with respect to study methods, and remedial alternative evaluation. Our recommendations for remedial alternatives will be offered in light of WAC NR 700, which summarizes soil remedial regulations, and WAC NR 140, which provides the same regulatory framework for groundwater. Additionally, wells will be constructed in accordance with the guidelines of WAC NR 141. Finally, all work and subcontracting will comply with WAC NR 169, which regulates the Drycleaner Environmental Response Program (DERP), which is the cost reimbursement program for environmental repair at dry cleaning facilities. In the event that

SECTIONONE

tasks or procedures are necessary which do not comply with NR 169, we will inform the Client prior to initiation of the task.

SECTIONTWO

URS has reviewed the information provided in the request for proposals, including limited analytical data from the Stop-N-Go site, and the WDNR's evaluation of those data. As an initial task, we will review the WDNR file on the Stop-N-Go site, to collect any information that may be beneficial to our investigation.

From interviews with current employees at the facility, we are aware that there is a history of another structure on the property, which was also used as a dry cleaning facility. Consequently, because the current building houses modern equipment, it is likely that the activities associated with the former building are the cause of much, if not all of the product released to the environment. Therefore, URS will also review Sanborn Fire Insurance maps of the site and, to the extent available, aerial photos, to identify other locations on the property where contaminants could potentially have been released. This approach will result in a knowledgeable, efficient site investigation.

Our experience with dry cleaning facilities has taught us that the source areas are typically quite localized. Often, due to past practices, carried out over a period of years, the source will be associated with a back entrance to the facility, a dumpster location, a discharge vent from the dry cleaning machinery, or on rare occasions, near a sanitary sewer line. Consequently, we will focus the start of our soil investigation on those areas.

Because groundwater is quite deep at the site, the typical approach of advancing a series of borings to the water table would be expensive. Consequently, the soil investigation will consist of two phases, resulting in a more cost-effective approach. First, a Geoprobe investigation will be conducted to identify the source areas. The release of dry cleaning solvent likely occurred at or near the ground surface. Such a release could best be detected by advancing a series of shallow borings in suspected source areas to define the lateral extent of impacted soil. A Geoprobe is a relatively fast and cost-effective approach of collecting soil samples at depths up to about 15 feet. Therefore, a Geoprobe will be utilized to define the lateral extent of contaminants in the soil of the source area(s).



SECTIONTWO

After the Geoprobe work has been completed, and the likely source area(s) has been defined, we will mobilize a drilling rig to assess the vertical extent of impacted soil, and the amount that contaminants have dispersed at depth. Having already defined the source area(s) utilizing a Geoprobe, the more expensive drilling activities will be directed to specific locations to identify the vertical extent of contamination. This phased approach will provide essential site characterization data that could be missed if boring locations are randomly selected. and will not be the trial-and-error type of work, typical of site investigations. In a sandy environment, the migration of contaminants tend to form a cone, with the pointed end at the source, and the contaminants spread with depth. Consequently, it will be important to define the extent of that spreading, so that effective remedial alternatives can be evaluated and implemented.

Because it has been determined that groundwater has been impacted, we will likely install groundwater observation wells under the same drilling rig mobilization as for the soil investigation.

After completion of the site activities, selected soil samples will be forwarded to a WDNRcertified environmental laboratory for VOC analyses. Additionally, a round of groundwater samples will be collected, which will also be analyzed for VOCs. Well locations and elevations will be surveyed, depths to groundwater will be measured, and an accurate water table map will be constructed. This will enable us to evaluate the groundwater flow conditions at the site.

Utilizing all the data that have been gathered, we will prepare a report summarizing our estimation of the degree and extent of soil and groundwater contamination. If necessary, this will then be used to identify feasible remedial strategies for soil and groundwater, and to evaluate those strategies to make a recommendation as to the best approach(es). This information will be provided in the investigation report.

URS is proposing an investigation designed to complete an environmental assessment that will result in a remedial action plan (RAP). The RAP will, in accordance with Wisconsin Administrative Code ch. NR 722, evaluate remedial alternatives for soil and groundwater, if necessary, and make recommendations based upon such factors as technical feasibility, agency and public acceptance, time to completion, and cost. We cannot know what subsurface conditions are present until we commence the investigation. Nor can we be sure until we complete the site investigation if there are off site sources, or if the Agency will require further downgradient groundwater study. However, based upon the data we have reviewed and on our experience with sites such as these, we do not anticipate any site characterization work beyond the tasks summarized in this scope of work, summarized in the following five tasks.

3.1 TASK 1 – PROJECT MANAGEMENT AND PROJECT PREPARATION

In accordance with the letter from Ms. Janke, a work plan will be prepared for submittal to the WDNR project manager. Prior to completing this document, we will review the Stop-N-Go file at the WDNR, and incorporate any useful information into the work plan. Prior to submittal of the work plan to the WDNR, we will provide a draft copy to the Client for review and comment.

Before the start of site activities, URS will prepare a site-specific Health and Safety Plan, in accordance with Federal requirements. URS will also notify Digger's Hotline, to locate underground utilities. We may also contact the City of Janesville, in the event that Digger's Hotline cannot locate all buried utilities.

Finally, project preparation will include the collection of competitive bids for all subcontracted services. URS will select subcontractors with whom we have worked in the past, and with whom we have developed a good working relationship. After bids are collected, we will select subcontractors based upon cost.

3.2 TASK 2 – GEOPROBE INVESTIGATION

After project preparation work has been completed, URS will mobilize to complete the Geoprobe soil investigation. A series of borings will be advanced to a depth of 15 feet, initially in the area shown on Figure 2. Based on field screening of samples, using a photoionization detector (PID), we will make field determinations of additional sample locations. After screening, samples will be placed in an iced cooler, for possible laboratory analyses. Samples will be selected for analyses based on the results of the field screening. A minimum of one sample per boring will be selected for laboratory analyses.

If contaminants are not detected in soil samples collected from these areas, we will expand the investigation to include other portions of the site. Based on our experience, we estimate that we can complete 15 to 20 borings in a single day. Depending on the results we see during the field sampling, the work may be completed in 1 day; however, a second day may be required. Typically, a Geoprobe can collect samples at a rate that is faster than a geologist can screen and log. Consequently, the work that can be completed by a Geoprobe is often limited by the geologist. However, a day of a field geologist's time is a lower-cost item than a Geoprobe. Consequently, to optimize the on-site time for the Geoprobe, we will have two field geologists completing the sample collection and screening, minimizing the likelihood of a second day of Geoprobe sampling.

The field screening will be used to delineate source areas. A field map will be constructed, to scale, showing the source areas. This map will be used to direct the activities of Task 3.

SECTIONTHREE

3.3 TASK 3 – DRILLING AND WELL CONSTRUCTION

3.3.1 Soil Borings

Results of the Geoprobe investigation will be used to select locations for the second phase of the soil investigation to identify the vertical extent of contaminated soil. This work will be done using a truck-mounted drilling rig to advance hollow stem augers. Split spoon soil samples will be collected at 5-foot intervals. As with the Geoprobe work, samples will be screened using a PID. The samples will then be placed on ice in a cooler, where they will be held until the work has been completed and samples are selected for laboratory analysis. Soil borings will be abandoned with bentonite, and WDNR borehole abandonment forms will be completed. All soil samples will be visually classified in accordance with the Unified Soil Classification System and recorded on field logs.

For purposes of this proposal, we are assuming that a single source area will be found, and that a maximum of four soil borings will be advanced to a depth of 85 feet. Additionally, we are assuming that soil cuttings will be stockpiled on site (covered with plastic), for disposal after soil characterization has been completed. This proposal does not include costs for soil characterization or disposal, because those costs cannot be accurately estimated until the results of the investigation have been completed.

3.3.2 Observation Wells

At the time of the mobilization for the deep soil investigation, observation wells will also be installed. To get an accurate determination of groundwater flow conditions, a minimum of three observation wells must be installed. For the purpose of preparing this proposal, we have assumed that one well should be at an upgradient location, as an indication of background water quality. The other wells should be at locations that will provide an indication of downgradient water quality. Observation wells are typically constructed downgradient from the source to evaluate on-site groundwater quality and the potential for off-site migration of contaminants.

SECTIONTHREE

However, additional or alternative well locations may be proposed based on the results of the Geoprobe investigation. Consequently, we propose constructing water table observation wells at the locations shown on Figure 2.

Additionally, the WDNR requires that the vertical extent of impacts be determined. With respect to groundwater, this is typically done by installing a deep well adjacent to a water table well at a downgradient location. URS therefore proposes to construct a deep well (piezometer) at the location shown on Figure 2. This well "nest" will also give us the ability to assess the vertical groundwater gradient (i.e., whether there is an upward or downward component to groundwater flow at the site).

Wells will be constructed of 2-inch flush-threaded PVC with factory-cut PVC wells screens, in accordance with WAC NR 141. Well construction will be documented, and the wells will be developed appropriately. After construction, well locations and elevations will be surveyed with respect to a local datum. At that time, hydraulic conductivity testing (slug tests) will be conducted on all site monitor wells. Because the elevations of the wells at the Stop-N-Go site were surveyed to mean sea level, it is likely that we will shoot the elevations of the new wells off the existing wells. Because the wells will then be referenced to the same datum, we can utilize the Stop-N-Go wells for a more accurate evaluation of groundwater flow conditions.

3.4 TASK 4 – GROUNDWATER SAMPLE COLLECTION

One round of groundwater samples will be collected from the proposed observation wells. Wells will be purged of water in accordance with WDNR regulations, and samples will be collected. Samples will be placed in iced coolers for transport to the analytical lab, for VOC analyses.

SECTIONTHREE

3.5 TASK 5 – REPORT PREPARATION

After the field and analytical tasks have been completed, URS will prepare a report summarizing the work, results, our interpretations, and our recommendations. If the work indicates that soil and/or groundwater contaminants are associated with the Site, our report will include a remedial action plan (RAP), which will include a summary of the remedial options applicable to the situation, a comparative review of those options, and our recommendations. This summary and evaluation will include regulatory acceptance, efficacy, cost, and time for implementation and completion of the process.

SECTIONFOUR

URS will assemble a staff with relevant qualifications and appropriate experience for preparation of the work plan, implementation of the site investigation, and preparation of the report. The Project Manager and Senior Engineer proposed for this project have completed numerous investigation and remediation projects, similar in size and scope to the Robinson Cleaners site. They have a history of working well with the regulatory officials in the area, and have the experience to maintain budget and schedule.

Project Manager. This project will be managed by Robert Nauta, P.G., Senior Hydrogeologist in the URS Madison office. Mr. Nauta is a professional geologist registered in the State of Wisconsin, and has managed and performed all phases of environmental investigations. He will be responsible for day-to-day management of the project, as well as data analysis and report preparation.

Senior Engineer. David Trainor, P.E., P.G., Senior Engineer in the URS Madison office will provide engineering analysis and review relating to remedial options. Mr. Trainor has extensive experience in the design and implementation of soil and groundwater remedial systems.

Curricula vitae for Messrs. Nauta and Trainor are provided in Appendix A.

Field Staff. URS will utilize qualified local staff for field services. Our staff includes geologists and engineers, with experience at numerous sites throughout the region, in both site investigations and remedial system construction and operation.

SECTIONFIVE

URS will begin preparation of the work plan for submittal to the WDNR immediately upon receipt of our authorization to proceed. Within one week, we will submit the work plan to the Client for review and comment. When the work plan is submitted to the WDNR, we will inquire as to if they will be providing comments on the plan. If they will, we will not proceed further until we receive their comments; however, the WDNR typically does not provide comments on work plans. In this event, we will schedule field activities concurrent with our submittal of the work plan to the WDNR.

We estimate that Geoprobe operations will require one day of field work for two people. Subsequent work will not be completed until the laboratory analyses of the soil samples have been completed. Those analyses will be used to guide the next phase of the field work. Laboratory analyses typically take 2 to 3 weeks, and the mobilization for the next phase of work will likely take about 2 weeks.

The drilling activities, including observation well construction, are expected to take about 1 week, followed by the collection and analyses of groundwater samples. Together, these activities are expected to take 3 to 4 weeks. After the analyses are completed, the report preparation will be completed within about 1 to 2 weeks, and will be submitted to the Client for review and comment.

SECTIONSIX

The estimated fees to complete the scope of services outlined in this proposal are summarized in Table 1. The costs summarized in the table are to provide an approximation of the overall project costs. However, because many decisions are made in the field, based on data gathered. Consequently, unit costs are also summarized in Table 2. The fees and expenses include all necessary sampling and monitoring equipment, including photoionization detectors, groundwater sampling equipment, and other environmental monitoring equipment. Note that the fees cited for subcontracted services are based upon a single bid for laboratory, drilling and Geoprobe services. Prior to the selection of subcontractors and the commencement of work, competitive bids will be obtained for all subcontracted services, and the lowest bidders will be selected for each commodity. Consequently, the costs for these services will be at or below those in the tables.

Labor

Projected URS labor is itemized in accordance with the standard Schedule of Charges, a copy of which is attached and made part of this proposal.

Expenses

Expenses include transportation and subsistence. Again, these costs will be applied on a time and materials basis; however, for purposes of cost estimation, we are assuming the following:

- Geoprobe sampling: 2 people for 1 day
- Soil borings and monitor well construction: 1 person for 7 days
- Groundwater sampling: 1 person for 1 day

Equipment

Equipment requirements will include survey equipment, field monitoring equipment (PID), and groundwater sampling equipment.

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Subcontracted Services

Subcontracted services for this project will include Geoprobe, drilling and laboratory services. For this proposal, we have obtained a bid for drilling from Badger State Drilling in Stoughton, Geoprobe work from On-Site Environmental Services in DeForest, and laboratory work from TestAmerica in Watertown. A minimum of two additional bids will be obtained for each of those services prior to the selection of subcontractors.

SECTIONSEVEN

URS proposes to conduct the Scope of Work presented here on a lump sum basis in accordance with our attached Professional Services Agreement (PSA). Attached to the Agreement is a Work Order form for this project. Please sign and return a copy of the signature pages for both the PSA and the Work Order to provide us with authorization to proceed. (Any future work will be authorized by work order only, and reference the PSA.)

TABLE 1 ESTIMATED COSTS ROBINSON CLEANERS JANESVILLE, WISCONSIN

RESOURCE	UNITS	QUANTITY	RATE	COST
Task 1 - Project Management and	Project Preparat	tion		
Senior Hydrogeologist	Hours	4	\$110	\$440
Staff Geologist	Hours	6	\$60	\$360
Expenses	Estimate	1	\$25	\$25
			Subtotal:	\$825
Task 2 - Geoprobe Investigation				
Senior Hydrogeologist	Hours	2	\$110	\$220
Staff Geologist	Hours	24	\$60	\$1,440
Laboratory ^{1,2}	Each	5	\$86	\$430
Geoprobe Contractor ¹	Estimate	1	\$1,500	\$1,500
Expenses	Estimate	1	\$300	\$300
			Subtotal:	\$3,890
Task 3 - Borings and Wells				
Senior Hydrogeologist	Hours	4	\$110	\$440
Staff Geologist	Hours	60	\$60	\$3,600
Laboratory - soil ^{1,2}	Each	5	\$86	\$430
Drilling Contractor ¹	Estimate	1	\$16,160	\$16,160
Expenses	Estimate	1	\$1,050	\$1,050
			Subtotal:	\$21,680
Task 4 - Groundwater Sample Col	lection			_
Staff Geologist	Hours	10	\$60	\$600
Laboratory - groundwater ¹	Each	4	\$86	\$344
Expenses	Estimate	1	\$75	<u></u> \$75
			Subtotal:	\$1,019
Task 5 - Report Preparation				
Senior Hydrogeologist	Hours	24	\$110	\$2,640
Senior Engineer	Hours	12	\$130	\$1,560
Staff Geologist	Hours	8	\$60	\$480
CADD Technician	Hours	8	\$60	\$480
Clerical & Accounting	Hours	8	\$50	\$400
Expenses	Estimate	1	\$250	\$250
			Subtotal:	\$5,810
ESTIMATED TOTAL COST				\$33,224

¹ URS assumes that client will pay subcontractor fees directly. If URS pays subcontractor fees,

15 percent will be added to the estimates presented in the table.

 2 We estimate the analysis of 10 soil samples; however, the actual number will be based on results of the field study.

TABLE 2 ESTIMATED UNIT RATES ROBINSON CLEANERS JANESVILLE, WISCONSIN

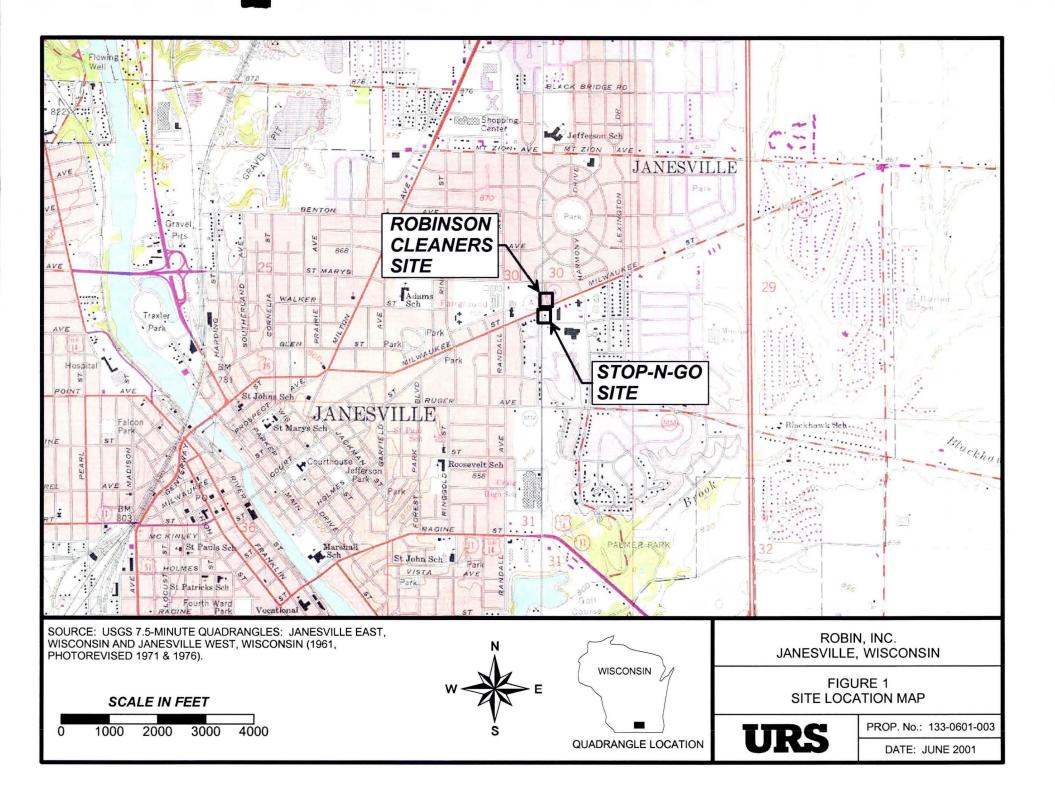
RESOURCE	UNITS	RATE		
Labor:				
Senior Hydrogeologist	Hours	\$110		
Senior Engineer	Hours	\$130		
Staff Geologist/Engineer	Hours	\$65		
CADD Technician	Hours	\$65		
Clerical/Accounting	Hours	\$50		
Subcontracted Services ^{1,2,3} :				
Geoprobe	Day	\$1,500		
Soil Borings ⁴				
0 - 40 feet in depth	Foot	\$15.50		
40 - 80 feet in depth	Foot	\$18.50		
80 - 100 feet in depth	Foot	\$22.50		
Observation Wells ⁴				
Water table observation wells	Each	\$2,280		
Piezometers	Each	\$2,830		
Laboratory analyses (soil or groundwater)	Each	\$86		

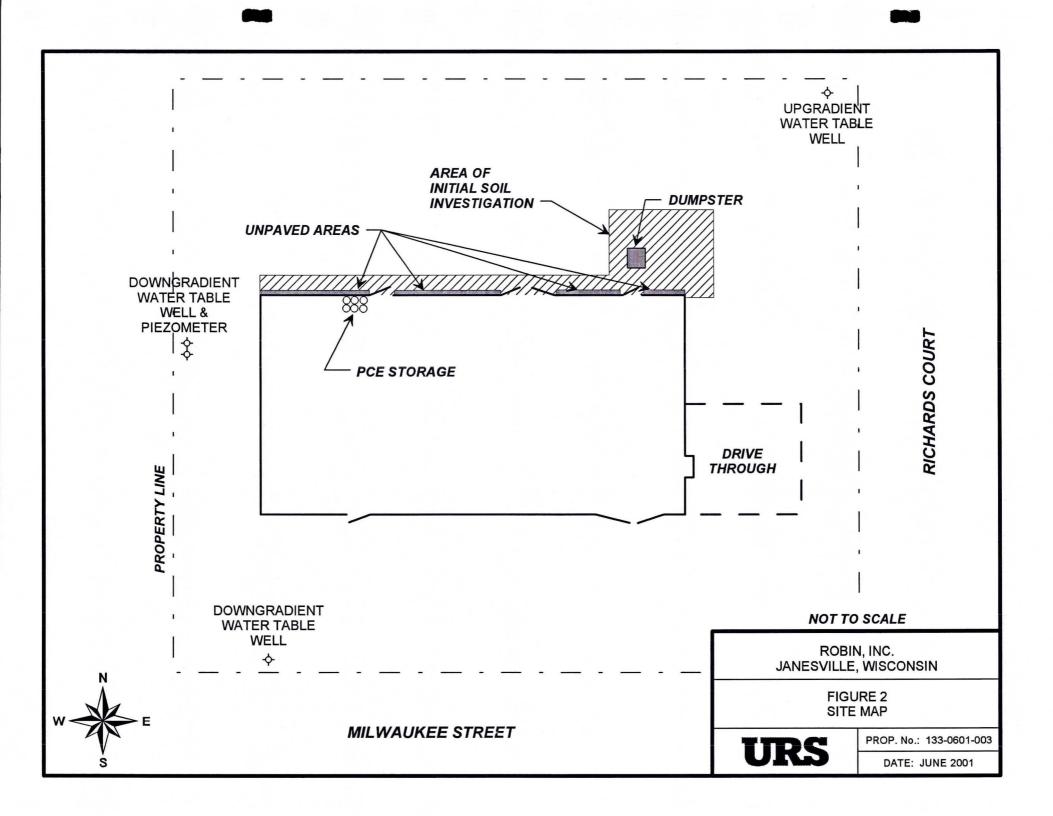
¹ URS assumes that client will pay subcontractor fees directly. If URS pays subcontractor fee, 15 percent will be added to the estimates presented in the table.

 2 Costs are based on a single quote for each service. A minimum of two additional bids will be obtained for each service, and the lowest of the three bidders for each service will be selected.

³ Estimate does not include URS supervision time, which will be assessed on a time and materials basis, in accordance with the hourly rates listed above.

⁴ Estimate does not include mobilization (one-time fee of approximately or standby charges, if necessary. Well charges include 2 hours of development time per well.





AREAS OF EXPERTISE

- Groundwater Flow and Transport Modeling
- Groundwater Resource Evaluation & Wellhead Protection
- Soil & Groundwater Remediation
- Groundwater contamination Assessment

EDUCATION

University of Wisconsin, Madison M.S. Hydrogeology 1987

University of Wisconsin, Madison B.S. Phi Beta Kappa, Geology 1985

REGISTRATION

Professional Geologist No. 35, Wisconsin

PROFESSIONAL HISTORY

URS Corporation, Senior Hydrogeologist, 1989 to Present

James M. Montgomery Consulting Engineers, Inc., Associate Hydrogeologist, 1987 to 1989

Wisconsin Geological and Natural History Survey, Hydrogeologist (part-time) 1986 to 1987

University of Wisconsin, Madison, Teaching Assistant, 1985 to 1986



REPRESENTATIVE EXPERIENCE

Mr. Nauta has 15 years experience in groundwater investigations, remediation and resource development. His background ranges from classical site investigations to advanced numerical analyses. His primary expertise includes extensive use of numerical and analytical applications for groundwater flow and contaminant transport simulations for remedial purposes and groundwater resource development and protection. A summary of representative project experience follows:

- Project Hydrogeologist for the construction and calibration of a three-dimensional flow model of an industrial facility in Marinette, Wisconsin. This model was used to evaluate options for the remediation of contaminated sediments in a boat slip and turning basin of the Menominee River, as well as impacted soil and groundwater on-shore. The model was also utilized to evaluate risks associated with various options.
- Project Hydrogeologist for completion of a groundwater model to size and locate groundwater extraction and injection wells for groundwater treatment at Superfund site, for a confidential client in Clare, Michigan.
- Project Hydrogeologist to complete an analytical groundwater model to obtain high capacity well permit for Wisconsin Power & Light, Company, Madison, Wisconsin.
- Project Hydrogeologist to construct a three-dimensional groundwater flow model for consumptive use permit for a 45 million gallon per day groundwater withdrawal permit for Florida Power Corporation, Polk County, Florida.
- Project Hydrogeologist to construct a three-dimensional groundwater flow and advective transport model for design of a remediation system for TCE contaminated groundwater for a Superfund project in Buena Borough, New Jersey.
- Project Hydrogeologist for the construction of a groundwater flow and transport model to evaluate contaminant migration from a landfill in Eau Clare, Wisconsin.

AFFILIATIONS

Professional Geologist (Wisconsin)

National Water Well Association

- Project Manager for the construction of a groundwater flow model for the design of a groundwater remediation system for a landfill for Dane County, Wisconsin.
- Project Manager for the construction of a threedimensional groundwater flow model to evaluate the feasibility of rehabilitating an out-of service municipal well. Included assessment of well with respect to the proposed Wisconsin wellhead protection plan. Work completed for the Beloit Water System, Beloit, Wisconsin.
- Project manager for the construction of a threedimensional groundwater flow model to evaluate the feasibility of rehabilitating an out-of-service municipal well. Included assessment of well with respect to the proposed Wisconsin wellhead protection plan. Work completed for the Beloit Water System, Beloit, Wisconsin.
- Project Hydrogeologist for the construction of a groundwater flow and particle tracking model for the evaluation of contaminant migration at a landfill site in Tomah, Wisconsin.
- Senior Hydrogeologist for the construction of two groundwater flow and particle tracking models for the development of a wellhead protection program for the Water and Rivers commission of Western Australia.
- Project manager for wellhead protection programs for two Wisconsin cities. These projects included construction of three-dimensional groundwater flow and particle tracking models to delineate wellhead protection zones, and the development of plans and strategies for the future supply needs.
- Associated Hydrogeologist for the construction of a groundwater flow model of Hollywood Basin (Florida), for consumptive use permit for Broward County Office of Environmental Services. Project included saltwater intrusion and wellhead protection evaluation.
- Associate Hydrogeologist for the construction of a groundwater flow model for consumptive use permitting and wellhead protection of a 25 million gallons per day regional wellfield for Broward County Office of Environmental Services.

- Routine wellhead protection services for the Palm Beach County Water Utilities District, West Palm Beach, Florida.
- Staff Hyrodgeologist for completion of a Work Plan for RCRA facility investigation for extensive subsurface creosote contamination for a confidential client, Reed City, Michigan.
- Project Hydrogeologist for a hydrogeologic investigation at three facilities in Massachusetts for Abrasive Industries, Clearwater, Florida.
- Project Manager for an investigation and remediation of chromium contaminated soils for GB Electrical, Inc., Matthews, North Carolina
- Staff Hydrogeologist for contamination investigation at former coal gasification site for Madison Gas & Electric company, Madison, Wisconsin.
- Project Manager for a contamination assessment and remediation feasibility study at the site of a fuel oil spill for Oscar Mayer Foods Corporation, Madison, Wisconsin.
- Project Hydrogeologist for the completion of a current assessment summary of the hydrogeologic conditions and proposal to USEPA for continued hydrogeologic investigation methods for RCRA facility for a confidential client in Windsor Locks, Connecticut.
- Project Manager for the soil and groundwater investigation of TCE and TCA contamination from multiple, unknown sources. Project includes source identification, delineation from chlorinated compound plume from an adjacent site, and remediation system design. Work completed for a confidential PRP group in Edgerton, Wisconsin. Project included expert witness testimony.
- Project Manager for the evaluation of the impacts of a quartzite quarry on an adjacent wetland. Project included consideration of vertical and horizontal groundwater flow and tritium dating to identify source of water in wetland area for a confidential client, Milwaukee, Wisconsin.
- Provide expert testimony at trial for contamination caused by releases associated with agricultural activities in central Wisconsin.
- Project Manager for the investigation and remediation (as



necessary) of approximately 20 underground storage tank projects.

- Project Manager for the completion of a mechanical integrity test of injection well for a private water utility in Venice, Florida
- Associated Hydrogeologist for the investigation of EDB Contamination of Soils and Groundwater.
 - Groundwater contamination from row crop application of EDB near small town in northern Florida. At this site, Mr. Nauta analyzed travel directions and velocities of EDB in groundwater. Mr. Nauta also reviewed and analyzed groundwater treatment options and natural degradation rates of EDB. Project also included an assessment of the potential effects on municipal wells.
 - Soil and groundwater contamination at 22 sites in central Florida. For this on-going project, Mr. Nauta has investigated soil and groundwater contamination of EDB resulting from turf application and from citrus grove application. For this project, Mr. Nauta has conducted a review of past research on EDB fate and transport in soils and groundwater, and investigate of groundwater flow and contaminant transport rates and directions, a review and critique of groundwater treatment options and of groundwater transport modeling completed for each site, the projection of future groundwater contamination levels and expert witness testimony.
- Associated Hydrogeologist for the completion of a groundwater resource supply study for Lee county, Florida. Investigation included:
 - Water-use projections
 - Supply evaluations of 5 aquifers
 - Future wellfield location recommendations
 - Recharge evaluation
 - Water conservation recommendations
 - Wellhead protection



AREAS OF EXPERTISE

- Environmental/Waste Management
- Hydrogeology
- Geotechnical Engineering

EDUCATION

University of Wisconsin, Madison, M.S. Civil and Environmental Engineering, 1983

Ohio State University, B.S. Civil Engineering, 1978

Ohio State University, B.S., Geology, 1975

CERTIFICATION

OSHA 40-hour Hazardous

Certified Professional Geologist, AIPG

REGISTRATION

Professional Engineer, Wisconsin, Michigan, Pennsylvania, California, Idaho, Iowa

Professional Geologist, Wisconsin

PROFESSIONAL HISTORY

URS Corporation, Principal-in-Charge/Senior Engineer, 1987 to Present

RMT, Inc., geotechnical Project Engineer, 1983 to 1984; 1985 to 1987



REPRESENTATIVE EXPERIENCE

Mr. Trainor has over 20 years experience in numerous environmental projects and investigations which include feasibility/plan of operation landfill siting studies, RI/FS programs, groundwater assessments, remedial design, and construction management. He has represented industrial and government clients in technical negotiations and presentations involving state and Federal regulatory agencies. Specific professional experience includes the following:

- Coordinated investigation and developed remedial options for a former manufactured gas plant site currently used as a bulk propane distribution facility. Marshfield, Wisconsin.
- Provided expert testimony at an arbitration hearing on the validity of long-term remedial costs for a landfill (Superfund site) in southeastern Wisconsin.
- Developed remedial options for several Manufactured Gas Plant Sites; New York and Pennsylvania.
- Developed remedial options to expedite closure at a plating facility site contaminating groundwater with chromium.
- Evaluated applicability of past and future costs to validate insurance claims for remedial action at several landfill sites.
- Provide research and expert testimony at deposition for a named party at a Superfund site identifying other PRPs from individual waste stream analyses.
- Provided research and expert testimony at deposition for a named party at a Superfund site identifying other PRPs from individual waste stream analyses.
- Directed ROD implemented remedy including a gas extraction system upgrade and point-of-entry water filter installations for private homes, municipal sanitary landfill; Hudson, Wisconsin. Included expert testimony at trail.
- Provided expert testimony at deposition for a machine parts manufacturer evaluating the identification of manufactured gas plant waste disposed on their property; Milwaukee, Wisconsin.

Northern Engineering and Testing, Geotechnical Project Engineer, 1984to 1985

Terratech, Inc., Staff Engineer, 1978 to 1981

AFFILIATIONS

American Society of Civil Engineers

International Society for Soil Mechanics and Foundation Engineering

American Institute of Professional Geologists

- Oversaw investigation, developed remedial options and directed remedial design for soils and groundwater contaminated with manufactured gas plant waste; Ashland, Wisconsin.
- Provided expert testimony at trial for a paper company providing alternative water supplies for private residences affected by groundwater contamination from an industrial landfill; Eau Claire, Wisconsin.
- Developed strategy for investigating and providing cleanup options for dry-cleaning sites; Stevens Point, Wisconsin.
- Provided Agency negotiation, consultant review and oversight of an investigation and remedial options analysis for an abandoned sanitary landfill; Rice Lake, Wisconsin.
- Directed remedial design and remedial action oversight including final cover and landfill gas control, for an abandoned municipal waste landfill; Wausau, Wisconsin.
- Directed remedial design activities, including final cover and landfill gas control, for an abandoned municipal waste landfill; Rinelander, Wisconsin.
- Performed a groundwater assessment, negotiated Agency approval for a selected remedial option, and directed construction management of a leachate extraction system for a paper waste landfill; Eau Claire, Wisconsin.
- Directed preparation of design plans and specifications, and construction management for remediation of 200,000 cubic yards of mining wastes under the Wisconsin Environmental Repair Program; Mineral Point, Wisconsin.
- Directed work plan development, negotiated USEPA approval, and directed the investigation for an abandoned landfill (Superfund) site; Tomah, Wisconsin.
- Oversaw design and construction of a landfill gas extraction system for an abandoned sanitary landfill; Tomah, Wisconsin.
- Directed investigation and remedial design activities for groundwater contamination from a former truck-trailer manufacturing operation; Edgerton, Wisconsin.



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- Provided expert testimony at trial for food processing company siting a solid waste disposal facility.
- Provided expert testimony at deposition for a defendant for insurance claims at a foundry waste site (contaminated with lead); Milwaukee, Wisconsin.
- Prepared and implemented USEPA-approved RCRA facility investigation work plan for a hazardous waste incinerator (CWM Chemical Services); Chicago, Illinois.
- Directed preparation of Plan of Operation for a 3.5 million cubic yard sanitary landfill, including expert testimony before the Waste Facility Siting Board; Madison, Wisconsin.
- Directed preparation of plans and specifications for landfill cover restoration, state Superfund site; Madison, Wisconsin.
- Directed a remedial investigation and feasibility study for groundwater remediation options for an abandoned landfill; Dane County, Wisconsin.
- Directed remedial investigation for a former wood treatment (creosote) facility; Reed City, Michigan.
- Negotiated language for a voluntary consent order and directed investigation for a landfill remedial investigation (PRP group); Madison, Wisconsin.
- Coordinated design and construction of a landfill gas extraction system; Madison, Wisconsin.
- Directed preparation of a Feasibility Study and hydrogeologic assessment for a 1.5 million cubic yard industrial landfill; Wisconsin.
- Coordinated investigations and developed remediation options for several abandoned city sanitary landfills; Madison, Wisconsin.
- Developed a Feasibility Study for a 4 million cubic yard sanitary landfill, and provided expert testimony at a contested-case hearing; Madison, Wisconsin.
- Supervised subsurface investigations and prepared recommendations for remediation of two chlorinated hydrocarbon spill sites; Wisconsin manufacturing facilities.
- Supervised subsurface investigations and prepared



hydrogeologic reports for several closed municipal landfill sites; Madison, Wisconsin.

- Prepared RCRA facility investigation work plan for a large military defense contractor (Hamilton Standards); Windsor Locks, Connecticut.
- Supervised investigations and developed remedial designs for several tank release sites; Wisconsin and Michigan.
- Developed remediation options for PCB-contaminated soils at an aluminum manufacturing plant; Kentucky.
- Coordinated investigation and developed design for a large demolition waste landfill facility; Portage County, Wisconsin.
- Developed an environmental and economic assessment for a county siting a hazardous waste facility; Minnesota.
- Prepared closure verification report for hazardous waste handling facilities in Wisconsin (APV Crepaco) and Illinois (Chemical Waste Management).
- Prepared feasibility/plan of operation report for a PCB transformer salvage facility; Juneau, Wisconsin.
- Designed a vacuum extraction system for remediation of an underground gasoline spill at a service station; Madison, Wisconsin.
- Designed and supervised construction of clay-lined earthen impoundments with dewatering facilities for foundry process sludge for a large industrial foundry facility; Defiance, Ohio.
- Devised geotechnical testing programs of various waste materials generated from paper manufacturing processes.
- Provided geotechnical analysis and recommendations for repair of a failure in a clay liner sidewall for a sanitary landfill; Minneapolis.
- Designed and implemented a modified multi-unit triaxial device to study the effects of leachate permeants on clay soils.
- Designed and provided construction documentation, kiln dust disposal facility; Alpena, Michigan.
- Designed and provided construction documentation, sanitary landfill; Minneapolis.



- Designed and provided construction documentation, foundry waste landfill; Milwaukee.
- Performed hydrogeological assessment of a solvent spill for an underground storage tank; South Bend, Indiana.
- Determined stability and projected settlements of embankments for bridge foundation; Idaho.
- Designed foundation and retaining structure recommendations for various commercial, industrial and transportation facilities; Idaho, Oregon and Washington.
- Designed foundation systems for residential, commercial and industrial buildings constructed on problem soils; San Francisco Bay area.
- Developed recommendations for the repair of residential structures damaged by soil expansion and settlement; San Francisco Bay area.
- Analyzed static and dynamic seacliff erosion and provided setback recommendations for a coastal development; Aptos, California.

PUBLICATIONS & PRESENTATIONS

Co-author, Isotopic Identification of the source of Methane in Subsurface Sediments of an Area Surrounded by Waste Disposal Facilities, in Applied Geochemistry, USGS, 1998.

Co-author, "Groundwater Remediation at a DeInk Landfill," TAPPI Environmental Conference, 1994.

Author, "Isotope Agine to Determine Methane Gas Sources, Geological Society of America, National Conference, 1992.

Author, "Current Status of Environmental Assessments," Government Institutes Seminar, Madison, 1992.

Author, "RCRA Corrective Action – 1990," paper presented to the Minnesota State Bar Association, Minneapolis, 1990.

Author, "Investigation and Remediation of a Printing Solvent Release," paper presented at the short course Detection and Corrective Action for Leaking Underground Storage Tanks, Department of Engineering-Professional Development, University of Wisconsin, Madison, 1989.

Co-author, "Case Studies in Constructive Use of Foundry Wastes for Landfill Construction," paper presented at the American Foundrymen's Society Casting Conference, 1987.



Author, "Moisture and Saturation Effects on Hydraulic Conductivity Testing," paper presented at the ninth annual Madison Waste Conference, 1986.

Co-author, "Use of Foundry Quenched Slag as a Drainage Medium," paper presented at the ninth annual Madison Waste Conference, 1986.

AGREEMENT FOR PROFESSIONAL SERVICES ("Agreement")

This Agreement between <u>Robin, Inc.</u>, ("Client") and <u>URS Corporation</u> ("URS"), is effective as of <u>June</u> <u>18, 2001</u>. The parties agree as follows:

ARTICLE I - Work Orders. The Scope of Services ("Services"), the Time Schedule and the Charges are to be set forth in a written Work Order to this Agreement. The terms and conditions of this Agreement shall apply to each Work Order, except to the extent expressly modified by the Work Order. Where charges are "not to exceed" a specified sum, URS shall notify Client before such sum is exceeded and shall not continue to provide the Services beyond such sum unless Client authorizes an increase in the sum. If a "not to exceed" sum is broken down into budgets for specific tasks, the task budget may be exceeded without Client authorization as long as the total sum is not exceeded. Changes in conditions, including, without limitation, changes in laws or regulations occurring after the budget is established or other circumstances beyond URS's control shall be a basis for equitable adjustments in the budget and schedule.

ARTICLE II - <u>Payment</u>. Unless otherwise stated in an Work Order, payment shall be on a time and materials basis under the Schedule of Fees and Charges in effect when the Services are performed. Client shall pay undisputed portions of each progress invoice within thirty (30) days of the date of the invoice. If payment is not maintained on a thirty (30) day current basis, URS may suspend further performance until payments are current. Client shall notify URS of any disputed amount within fifteen (15) days from date of the invoice, give reasons for the objection, and promptly pay the undisputed amount. Client shall pay an additional charge of one and one-half percent $(1\frac{1}{2}\%)$ per month or the maximum percentage allowed by law, whichever is the lesser, for any past due amount. In the event of a legal action for invoice amounts not paid, attorneys' fees, court costs, and other related expenses shall be paid to the prevailing party.

ARTICLE III - Professional Responsibility. URS is obligated to comply with applicable standards of professional care in the performance of the Services. Client recognizes that opinions relating to environmental, geologic, and geotechnical conditions are based on limited data and that actual conditions may vary from those encountered at the times and locations where the data are obtained, despite the use of due professional care.

ARTICLE IV - <u>Responsibility for Others</u>. URS shall be responsible to Client for its Services and the services of its subcontractors. URS shall not be responsible for the acts or omissions of other parties engaged by Client nor for their construction means, methods, techniques, sequences, or procedures, or their health and safety precautions and programs.

ARTICLE V - <u>Risk Allocation</u>. The liability of URS, its employees, agents and subcontractors (referred to collectively in this Article as "URS"), for Client's claims of loss, injury, death, damage, or expense, including, without limitation, Client's claims of contribution and indemnification, express or implied, with respect to third party claims relating to services rendered or obligations imposed under this Agreement, including all Work Orders, shall not exceed in the aggregate:

(1) The total sum of \$250,000 for claims arising out of professional negligence, including errors, omissions, or other professional acts, and including unintentional breach of contract; and any actual or potential environmental pollution or contamination, including, without limitation, any actual or threatened release of toxic, irritant, pollutant, or waste gases, liquids, or solid materials, or failure to detect or properly evaluate the presence of such substances, except to the extent such release, threatened release, or failure to detect or evaluate is caused by URS's willful misconduct; or

(2) The total sum of \$1,000,000 for claims arising out of negligence, breach of contract, or other causes for which URS has any legal liability, other than as limited by (1) above.

ARTICLE VI - <u>Consequential Damages</u>. Neither Party shall be liable to the other for consequential damages, including, without limitation, loss of use or loss of profits, incurred by one another or their subsidiaries or successors, regardless of whether such damages are caused by breach of contract, willful misconduct, negligent act or omission, or other wrongful act of either of them.

ARTICLE VII - <u>Insurance</u>. URS agrees to maintain during the performance of the Services: (1) statutory Workers' Compensation coverage; (2) Employer's Liability; (3) General Liability; and (4) Automobile Liability insurance coverage each in the sum of \$1,000,000.

ARTICLE VIII - Client Responsibility. Client shall: (1) provide URS, in writing, all information relating to Client's requirements for the project; (2) correctly identify to URS, the location of subsurface structures, such as pipes, tanks, cables and utilities; (3) notify URS of any potential hazardous substances or other health and safety hazard or condition known to Client existing on or near the project site; (4) give URS prompt written notice of any suspected deficiency in the Services; and (5) with reasonable promptness, provide required approvals and decisions. In the event that URS is requested by Client or is required by subpoena to produce documents or give testimony in any action or proceeding to which Client is a party and URS is not a party, Client shall pay URS for any time and expenses required in connection therewith, including reasonable attorney's fees.

Client shall reimburse URS for all taxes, duties and levies such as Sales, Use, Value Added Taxes, Deemed Profits Taxes, and other similar taxes which are added to or deducted from the value of URS Services. For the purpose of this Article such taxes shall not include taxes imposed on URS's net income, and employer or employee payroll taxes levied by any United States taxing authority, or the taxing authorities of the countries or any agency or subdivision thereof in which URS's subsidiaries, affiliates, or divisions are permanently domiciled. It is agreed and understood that these net income, employee payroll taxes are included in the unit prices or lump sum to be paid URS under the respective Work Order.

ARTICLE IX - Force Majeure. URS shall not be responsible for damages or delays in performance caused by force majeure, acts of God, or other events beyond its control.

ARTICLE X - <u>Right of Entry.</u> Client grants to URS, and, if the project site is not owned by Client, warrants that permission has been granted for, a right of entry from time to time by URS, its employees, agents and subcontractors, upon the project site for the purpose of providing the Services. Client recognizes that the use of investigative equipment and practices may unavoidably alter the existing site conditions and affect the environment in the area being studied, despite the use of reasonable care.

ARTICLE XI - Documents. Provided that URS has been paid for the Services, Client shall have the right to use the documents, maps, photographs, drawings and specifications resulting from URS's efforts on the project. Reuse of any such materials by Client on any extension of this project or any other project without URS's written authorization shall be at Client's sole risk. URS shall have the right to retain copies of all such materials. URS retains the right of ownership with respect to any patentable concepts or copyrightable materials arising from its Services.

ARTICLE XII - <u>Termination</u>. Client may terminate all or any portion of the Services for convenience, at its option, by sending a written Notice to URS. Either party can terminate this Agreement or a Work Order for cause if the other commits a material, uncured breach of this Agreement or becomes insolvent. Termination for cause shall be effective twenty (20) days after receipt of a Notice of Termination, unless a later date is specified in the Notice. The Notice of Termination for cause shall contain specific reasons for termination and both parties shall cooperate in good faith to cure the causes for termination stated in the Notice. Termination shall not be effective if reasonable action to cure the breach has been taken before the effective date of the termination. Client shall pay URS upon invoice for Services performed and charges incurred prior to termination, plus reasonable termination charges. In the event of termination for cause, the parties shall have their remedies at law as to any other rights and obligations between them, subject to the other terms and conditions of this Agreement.

ARTICLE XIII - <u>No Third Party Rights</u>. This Agreement shall not create any rights or benefits to parties other than Client and URS. No third party shall have the right to rely on URS opinions rendered in connection with the Services without URS's written consent and the third party's agreement to be bound to the same conditions and limitations as Client.

ARTICLE XIV - <u>Assignments</u>. Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.

ARTICLE XV - Hazardous Substances. All nonhazardous samples and by-products from sampling processes in connection with the Services shall be disposed of by URS in accordance with applicable law; provided, however, that any and all such materials, including wastes, that cannot be introduced back into the environment under existing law without additional treatment, and all hazardous wastes, radioactive wastes, or hazardous substances ("Hazardous Substances") related to the Services, shall be packaged in accordance with the applicable law by URS and turned over to Client for appropriate disposal. URS shall not arrange or otherwise dispose of Hazardous Substances under this Agreement. URS, at Client's request, may assist Client in identifying appropriate alternatives for off-site treatment, storage or disposal of the Hazardous Substances, but URS shall not make any independent determination relating to the selection of a treatment, storage, or disposal facility nor subcontract such activities through transporters or others. Client shall sign all necessary manifests for the disposal of Hazardous Substances. If Client requires: (1) URS's agents or employees to sign such manifests; or (2) URS to hire, for Client, the Hazardous Substances transportation, treatment, or disposal contractor, then for these two purposes, URS shall be considered to act as Client's agent so that URS will not be considered to be a generator, transporter, or disposer of such substances or considered to be the arranger for disposal of Hazardous Substances, and Client shall indemnify URS against any claim or loss resulting from such signing.

ARTICLE XVI - <u>Year 2000 Compliance</u>. Client acknowledges that URS, including its affiliates and subsidiaries, has no responsibility to independently verify that computers, computer chips, and/or software programs developed by others and used in the performance of, or incorporated into the Services, are Year 2000 compliant. Where such independent verification is required it shall be performed by Client; if required by a written Work Order such verification may be performed by URS.

ARTICLE XVII - <u>Venue</u>. In the event of any dispute between the parties to this Agreement, the venue for the dispute resolution shall be any state or federal court in the United States having jurisdiction over the parties. If the project is located outside the United States, the laws of the State of Colorado shall govern. In such event any dispute under the Agreement not resolved amicably shall be resolved under the binding rules of the American Arbitration Association.

ARTICLE XVIII - <u>Integrated Writing and Enforceability</u>. This Agreement constitutes the final and complete repository of the agreements between Client and URS relating to the Services and supersedes all prior or contemporaneous communications, representations, or agreements, whether oral or written. Modifications of this Agreement shall not be binding unless made in writing and signed by an Authorized Representative of each party. The provisions of this Agreement shall be enforced to the fullest extent permitted by law. If any provision of this Agreement is found to be invalid or unenforceable, the provision shall be construed and applied in a way that comes as close as possible to expressing the intention of the parties with regard to the provisions and that saves the validity and enforceability of the provision.

THE PARTIES ACKNOWLEDGE that there has been an opportunity to negotiate the terms and conditions of this Agreement and agree to be bound accordingly.

CLIENT

Signature

Typed Name/Title

Date of Signature

URS Corporation

Signature

David P. Trainor/Principal

Typed Name/Title 10 200 Date of Signature

TIME AND MATERIALS WORK ORDER

In accordance with the Agreement for Professional Services between <u>Robin, Inc.</u> ("Client"), and URS Corporation ("URS"), dated <u>June 18, 2001</u>, this Work Order describes the Services, Schedule, and Payment Conditions for URS's Services on the Project known as:

Phase II Environmental Investigation, Robinson Cleaners, 1809 East Milwaukee Street, Janesville, Wisconsin

Client Authorized Representative: _ Address: _		
Telephone No.:		· · · · · · · · · · · · · · · · · · ·
URS Authorized		
Representative: _	Robert Nauta	
Address:	5250 East Terrace Drive	
-	Madison, WI 53718	
Telephone No.:	608/245-8084	

SERVICES. The Services shall be described in the proposal attached to this Work Order.

<u>SCHEDULE</u>. The Estimated Schedule is provided in the attached proposal to this Work Order. Because of the uncertainties inherent in the Services, Schedules are estimated and are subject to revision unless otherwise specifically described herein.

<u>PAYMENT</u>. Payment in accordance with <u>the attached table of unit rates</u>, will be applied against the final invoice for this Work Order. URS charges shall be on a "time and materials" basis and shall be in accordance with URS's Schedule of Fees and Charges in effect at the time the Services are performed. Payment provisions and URS's current Schedule of Fees and Charges are attached to this Work Order.

<u>TERMS AND CONDITIONS</u>. The terms and conditions of the Agreement referenced above shall apply to this Work Order, except as expressly modified herein.

ACCEPTANCE of the terms of this Work Order is acknowledged by the following signatures of the Authorized Representatives.

<u>CLIENT</u>

Signature

Typed Name/Title

Date of Signature

URS Corporation

Signature

David P. Trainor, Principal

Typed Name/Title 2001 10. Date of Signature