RAMBOLL

ENVIRONMENT
& HEALTH

Mr. John Stibal
The City of West Allis
7525 W. Greenfield Avenue
West Allis, WI 53214

**PROPOSAL FOR SITE INVESTIGATION ACTIVITIES AT THE PROPERTY AT 3601 SOUTH 116TH STREET IN WEST ALLIS, WISCONSIN**

Dear Mr. Stibal:

In response to your recent request, Ramboll US Corporation (Ramboll) is pleased to present the City of West Allis (the "City") with this proposal to conduct Site Investigation (SI) activities at the property located at 3601 South 116th Street in West Allis, Wisconsin (the "site" or "property"). The property consists of an approximately 14-acre parcel.

The following sections of this proposal contain site background, recommended scope of services, proposed schedule, cost estimate, and contract terms for this project.

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## BACKGROUND

In January 2010, AECOM conducted a Phase I Environmental Site Assessment (ESA) of the site and identified two recognized environmental conditions (RECs) as summarized below:

- **Landfills at Adjacent Properties:** The site is surrounded on three sides by documented landfill sites. Exceedances of soil and groundwater quality standards have historically been noted at these adjacent properties that could potentially impact the subject property.
- **Chlorinated Volatile Organic Compounds (CVOCs) Reported East of the Site:** CVOCs (including cis-1,2-dichloroethene, trichloroethene, and vinyl chloride) have historically been reported in wells located along the eastern boundary of the subject property. The source and extent of these impacts was historically not identified based on the available information.

In October 2019, Ramboll conducted Phase II ESA field activities in order to address the findings identified in the 2010 Phase I ESA that had not been investigated. Eight soil borings were advanced, and soil sampling activities were conducted on October 3, 2019. The eight soil borings were converted into temporary monitoring wells, and grab groundwater samples were collected on October 4, 2019. VOCs, polycyclic aromatic hydrocarbons (PAHs), and metals were detected in soil above Wisconsin Administrative Code (WAC) NR 720 Residual Contaminant Levels (RCLs). Petroleum VOCs (PVOCs) were detected in groundwater samples at two temporary monitoring wells on the western portion of the site above WAC NR 140 groundwater quality standards.

## PROPOSED SCOPE OF SERVICES

In order to address the findings identified during the 2019 Phase II ESA, Ramboll proposes to conduct a SI in accordance with WAC NR 716. The objective is to evaluate the degree and extent of impacted soil and groundwater identified on site during the October 2019 Phase II ESA. Ramboll proposes to advance 12 soil borings, install 10 permanent WAC NR 141 compliant groundwater monitoring wells, and conduct two rounds of groundwater water monitoring at the property. The proposed soil boring and monitoring well locations will be focused around previous soil borings that identified soil and groundwater impacts at that property. The specific tasks proposed are outlined below.

### Task 1: Notification for Hazardous Waste Discharge and WAC NR 716 Work Scope Development

Based on the detection of VOCs, PAHs, and metals identified in soil during the October 2019 Phase II ESA, the Wisconsin Department of Natural Resources (WDNR) will be notified of a hazardous substance release by submitting a *Notification for Hazardous Substance Discharge* (Form 4400-225). Subsequently, the WDNR will issue a responsible party letter and a Bureau of Remediation and Redevelopment Tracking System (BRRTS) number. A Work Plan will be prepared and submitted to the WDNR in accordance with WAC NR 716. At this time, we do not anticipate requesting WDNR's review and concurrence of the Work Plan.

### Task 2: Site Investigation Activities

#### Health and Safety

Prior to initiating field activities, a site-specific Health and Safety Plan (HASP) will be updated and followed by all field personnel for the on-site work. Additionally, Ramboll will notify Digger's Hotline to identify public utilities. A private utility locator service will be retained to verify the absence of undocumented utilities or other underground lines. To obtain subsurface clearance for private utilities on site, Ramboll will also discuss proposed boring locations with knowledgeable site personnel, if available, prior to advancement of borings and monitoring well installation.

#### Soil Borings and Monitoring Well Installation

The SI will include soil and groundwater sampling at the site. Based on the October 2019 Phase II ESA results, Ramboll proposes to advance 12 soil borings and permanent WAC NR 141 compliant groundwater monitoring well at 10 locations. The boring and monitoring well locations will be primarily located on the west and south areas of the site to define the extent of impacts discovered during the Phase II ESA. Final boring and well locations and elevations will be surveyed using a subcontract surveyor.

Advancement of the soil borings will be performed using direct-push technology (DPT) to depths of approximately 5 feet below the water table and 2 feet into native soil, or to a depth of 30 feet below ground surface (bgs), whichever is reached first. Soil samples will be continuously collected from the borings for classification and field screening. Soil characteristics (e.g., texture, color) along with visual and/or olfactory evidence of impacts will be noted on soil boring logs. The samples will be screened for VOCs using a photoionization detector (PID) with a 10.6 electron volt (EV) lamp. PID readings will be recorded on the soil boring logs. Two to three soil samples will be collected from each soil boring for laboratory analysis. If evidence of impacts is observed, a sample will be collected from the interval at which the most significant impacts are observed, one sample will be collected below observed impacts, and one sample will be collected from the upper 4 feet of the soil column. If no evidence of impacts is observed, one sample will be collected from the upper 4 feet of the soil column and one at the approximate depth of the water table.

Following soil sampling activities, 10 of the 12 soil boring locations will be converted to permanent WAC NR 141 compliant groundwater monitoring wells. The boreholes will be over-drilled using 4.25-inch inside diameter hollow stem auger and the wells will be constructed using a 2-inch diameter polyvinyl chloride (PVC) riser with a 10-foot 0.010-inch slot size well screen. The wells will be installed with a sand filter pack around the well screen and bentonite seal to the ground surface. Monitoring wells will be completed with "stick-up" locking steel protective casings. The monitoring wells will be developed in accordance with WAC NR 141.21. A submersible pump will be used to remove residual sediment remaining in the wells after installation and to re-establish the natural hydraulic flow conditions of the formations, which may have been disturbed by the well construction. The soil borings not completed as monitoring wells will be properly abandoned with bentonite and completed with a surface patch matching the surrounding material, in accordance with WAC NR 141.25.

The soil samples will be containerized in laboratory-provided sample containers, preserved appropriately, and kept on ice, cooling to 4 degrees Celsius. Following sample collection, each sample container will be labeled with the sample location identification, date of sample collection, and intended analysis. The sample containers will then be placed in re-sealable plastic bags and packed in an iced, insulated container.

**Investigative Waste Management**

While drilling residuals (i.e., soil cuttings, wash water, purge water) are expected to be minimal, excess materials and other investigative-derived waste (IDW) will be staged on site in clean, labeled, 55-gallon drums and/or sealed in 5-gallon plastic buckets for future disposal pending the laboratory analytical results. The costs of the IDW disposal are not included in this proposal.

**Laboratory Analysis**

The soil samples will be collected, labeled, and placed in appropriately preserved, laboratory-supplied containers. After the samples have been collected, they will be sealed, labeled, and placed on ice pending delivery under chain-of-custody procedures to the laboratory for analysis.

Soil samples collected within the direct contact interval (within the upper 4 feet) will be analyzed for the following parameters:

- VOCs – United States Environmental Protection Agency (USEPA) SW-846 Method 8260;
- PAHs – USEPA SW-846 Method 8270; and
- Select Metals (arsenic, cadmium, chromium, and lead) – USEPA SW-846 Method 6010/7470.

Soil samples collected below 4 feet will be analyzed for VOCs using USEPA SW-846 Method 8260. The soil samples will be submitted to a Wisconsin-certified laboratory for a standard turnaround time (10 business days).

## Task 3: Groundwater Monitoring

The groundwater monitoring wells will be sampled following installation and development to assess groundwater quality. A second groundwater sampling event will be conducted approximately 3 months after the initial sampling. Prior to the groundwater sampling activities, depth to groundwater measurements will be collected using a Heron electronic water level sensor, Model ET-94 (accuracy 0.01 feet) or similar

equipment. The depth to groundwater, as well as the total well depth, will be recorded in a bound field notebook.

Ramboll will collect groundwater samples using low-flow sampling via peristaltic pump with disposable polyethylene tubing. Field parameters including dissolved oxygen (DO), pH, specific conductance, and oxidation reduction potential (ORP) will be measured at each well and recorded. Non-dedicated groundwater sampling equipment will be thoroughly decontaminated between each sampling location using an Alconox© solution and rinsed in deionized water. New disposable polyethylene tubing will be utilized for sample collection for each well location. A new pair of nitrile gloves will be used during the collection of each sample to minimize the potential for cross-contamination.

The groundwater samples will be collected, labeled, and placed in appropriately, and kept on ice, cooling to 4 degrees Celsius. Following sample collection, each sample container will be labeled with the sample location identification, date of sample collection, and intended analysis. The sample containers will then be placed in re-sealable plastic bags and packed in an iced, insulated container.

**Investigative Waste Management**

Purge water produced during monitoring well development and groundwater sampling will be staged on site in clean, labeled, 55-gallon drums and/or sealed in 5-gallon plastic buckets for future disposal pending the laboratory analytical results. We anticipate that the purge water may be discharged to the sanitary sewer. The costs of the IDW disposal are not included in this proposal.

**Laboratory Analysis**

The groundwater samples will be collected, labeled, and placed in appropriately preserved, laboratory-supplied containers. Groundwater samples obtained for metals analysis will be field-filtered. After the samples have been collected, they will be sealed, labeled, and placed on ice pending delivery under chain-of-custody procedures to the laboratory for analysis.

Groundwater samples will be analyzed for the following parameters:

- VOCs – USEPA SW-846 Method 8260;
- PAHs – USEPA SW-846 Method 8270; and
- Select Metals (arsenic, cadmium, chromium, and lead) – USEPA SW-846 Method 6020.

The groundwater samples will be submitted to a Wisconsin-certified laboratory for a standard turnaround time (10 business days).

## Task 4: Reporting

Upon completion of the field activities described above and review of analytical results, a *Site Investigation Report* (SIR) will be prepared in general accordance with WAC NR 716.15. The SIR will include the subsurface assessment results, documentation of field activities, soil boring logs, site and boring location figures, tabulated analytical laboratory results, an evaluation of the data, and Ramboll's conclusions and recommendations for additional investigation and/or remedial activities, as appropriate.

## SCHEDULE

The SI activities described in this proposal will be initiated within 1 week of receiving authorization to proceed. We anticipate that the soil boring and well installation will be conducted within 2 to 3 weeks, depending on subcontractor availability. Groundwater sampling will be conducted approximately 1 week after well installation and results will be available approximately 2 weeks after that. Verbal results can be provided once received by Ramboll. The second groundwater sampling event will be conducted approximately 3 months after the first event. A draft report will be submitted approximately 4 to 6 weeks after receiving the results of the second groundwater sampling event.

## PROJECT COST

The scope of services described herein will be completed on a time and materials basis in accordance with the Master Contract with the City, dated March 8, 2017. The total estimated cost to complete the SI scope of services as presented herein is $67,000. Additional services, if requested, will be considered out of scope and will result in additional costs that will be billed on a time and materials basis, in accordance with the unit rates that are attached to this proposal and incorporated into the Master Contract.

Thank you for opportunity to be of service. If you find this proposal acceptable, please provide a Proceed Order using the City's standard procedure and referencing this proposal. If you have any questions or need further information, please contact us.

Yours sincerely,

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# ATTACHMENT

## RATE SCHEDULE

| Ramboll US Corporation<br>2016 Rate Schedule<br>City of West Allis<br>US$ | |
|---|---|
| Principal | 185 |
| Principal Consultant | 165 |
| Manager 10 | 150 |
| Manager 9 | 135 |
| Manager 8 | 120 |
| Sr. Assoc. 7 | 115 |
| Sr. Assoc. 6B | 110 |
| Assoc. 6 | 100 |
| Assoc. 5 | 90 |
| Assoc. 4 | 85 |
| Assoc. 3 | 70 |
| Drafting | 75 |
| Support | 55 |