



Division of Public Works .
1000 South Houser St.
Muscatine, IA 52761

Recycling Center and Transfer Station

Phone (563) 263-9689
Fax: (563) 263-9689

MEMORANDUM

To: Mayor and City Council Members
Cc: Gregg Mandsager, City Administrator
From: David Popp, Solid Waste Manager
Date: September 13, 2019

Recycling Center
Transfer Station
Landfill Operations
Refuse Collection

Re: Barker Lemar proposal # 195979, Request to Approve additional monitoring well installation and reporting as required by Iowa DNR to complete the Corrective Measures Report which is due December 30, 2019.

Introduction:

The City owns and operates the Muscatine County Sanitary Landfill. The City and Barker Lemar have an existing agreement in place to provide annual sampling of the monitoring wells at the Landfill in the spring and fall. Additional monitoring wells have been installed under the direction of the Iowa DNR in April and May of 2018. This proposal for services will provide the installation of additional sampling wells and additional sampling as required by the Iowa DNR.

Background:

The propose this proposal is to provide additional ground water sampling as required by the Iowa DNR to verify compliance of groundwater contamination management at the Muscatine County Sanitary Landfill. This proposal will approve the installation of additional sampling wells to provide data that is necessary to complete the Corrective Measures Report that is required by the DNR to verify leachate migration limits in the northeast landfill boundary.

Recommendation/Rationale:

Staff recommends that the council approve this request for additional charges related to ground water sampling wells as proposed by Barker Lemar for the estimated cost of \$15,090.00. This cost will need to come out of the Solid Waste/landfill Budget.

Background Information:

Barker Lemar Engineering Consultants proposal no. 195979



August 16, 2019

Dave Popp, Solid Waste Manager
Muscatine County Area Solid Waste Agency
1000 S. Houser St.
Muscatine, IA 52761

Re: Proposal: Vertical Bracketing Well Installation Proposal
Muscatine County Sanitary Landfill Well Drilling Services
Permit No. 70-SDP-02-75P
Proposal No. 195979

Dear Dave:

BARKER LEMAR ENGINEERING CONSULTANTS (BARKER LEMAR) appreciates the opportunity to provide consulting services to the Muscatine County Solid Waste Agency (Client) for the Muscatine County Sanitary Landfill (Landfill).

1.0 PROJECT UNDERSTANDING

A meeting with the Iowa Department of Natural Resources (DNR) and BARKER LEMAR was held on July 26, 2019 to review the status of the bracketing wells at the Landfill. It was determined that the extent of the elevated arsenic, benzene, and vinyl chloride concentrations have been horizontally and vertically bracketed at this time. However, horizontal and vertical bracketing efforts in the vicinity of monitoring wells MW-38 and MW-39 need further evaluation.

A vertical bracketing monitoring well is needed in the vicinity of monitoring wells MW-38/MW-44 due to the barium background concentration lowering resulting in the vertical extent of the elevated barium concentrations no longer being bracketed. A vertical bracketing monitoring well is needed in the vicinity of monitoring wells MW-39/MW-45 to further evaluate the vertical extent of the elevated cobalt concentrations. Additionally, it is proposed to hand auger two water level measurement wells next to the pond to further evaluate the groundwater flow directions. The approximate locations of the proposed monitoring wells are shown in Figure 1.

2.0 SCOPE OF SERVICES

Based on the above information, BARKER LEMAR proposes the following scope of services by task:

1. Drilling Activities
2. Monitoring Well Development and Low-Flow Equipment Installation
3. Survey Activities/DNR Reporting
4. Bracketing Sampling Event

Task 1 – Drilling Activities

BARKER LEMAR will:

- Install monitoring well MW-54 within 10 feet of monitoring wells MW-38 and MW-44. Monitoring well MW-54 will be approximately 50 feet deep and have a 10-foot pre-packed screened interval.
- Install monitoring well MW-55 within 10 feet of monitoring wells MW-39 and MW-45. Monitoring well MW-55 will be approximately 50 feet deep and have a 10-foot pre-packed screened interval.
- Hand auger two water level measurement wells (MW-56 and MW-57) next to the pond. These wells will be approximately 8 feet deep and will have 5-foot pre-packed screened intervals.
- Install protective casings and padlocks or flush mounts around the newly installed monitoring wells.
- Log the soil borings and submit well installation documentation to DNR.

Note: The client is responsible for obtaining off-site access for well installation and sampling.

Task 2 – Monitoring Well Development and Low-Flow Equipment Installation

BARKER LEMAR staff will perform the monitoring well development and low-flow equipment installation in a separate mobilization to the Landfill following the installation of monitoring wells. Monitoring wells will be developed using a stainless steel non-dedicated submersible pump to remove excess sediment at the bottom of the monitoring well. Development will be considered complete once five well volumes have been purged or the water becomes clear, whichever is earlier.

Based on the locations of monitoring wells MW-54 and MW-55 and the groundwater elevations measured in existing monitoring wells in the area, well tubing and submersible pumps will be installed. Wellhead assemblies will be installed on newly installed monitoring wells to accommodate low-flow groundwater sampling.

Low-flow equipment installation will not be performed on wells observed to be dry at the time of performing this work. Low-flow equipment may be required to be installed at a later date if well conditions change. Well development will take place in the same mobilization as low-flow equipment installation and will be performed using a non-dedicated stainless-steel submersible pump.

Task 3 – Survey Activities

Following completion of the well installations, BARKER LEMAR staff will perform a GPS survey to document the as-constructed location and elevations of the newly installed monitoring wells. The current site map will be updated to reflect the location of the new wells. Additionally, boring logs and monitoring well construction documentation will be prepared and submitted to the DNR after the survey activities are completed.

Task 4 – Bracketing Sampling Event

BARKER LEMAR staff will perform the following subtasks:

- Mobilize to site including mileage, travel time, expenses, and field services administrations for a sampling event following the installation of the bracketing wells.
- Two (2) monitoring wells, MW-54 and MW-55, will be sampled for the constituents of concern, barium and cobalt, respectively.
- Two (2) monitoring wells, MW-56 and MW-57, will be measured for static water levels.

Please note that there will be additional analytical costs associated with this sampling. The Client will be billed by the laboratory directly for these fees.

3.0 LIMITATIONS

Services not set forth in section 2.0, scope of services, are excluded from this proposal. BARKER LEMAR has no responsibility to perform such excluded services and has no liability associated with the non-performance of such services.

4.0 SCHEDULE

BARKER LEMAR will begin these services subsequent to receiving the signed confirmation of notice to proceed, or the Client's verbal authorization followed by the signed notice to proceed. Barring circumstances beyond BARKER LEMAR's control, BARKER LEMAR anticipates completing the scope of services prior to September 30, 2019, if notice to proceed and access are provided by August 30, 2019.

5.0 COMPENSATION

The fees for the proposed scope of services are shown in the Table 1 are valid for 60 days following the date of this proposal. Although the fees are shown by task, the compensation for individual tasks are not independent of each other and elimination of any task or part of a task shall justify a review and potential adjustment of the compensation for this proposal. Our invoices will be submitted monthly and will reflect the percentage complete of each task as of the date of the invoice.

**TABLE 1
COST ESTIMATE**

TASK	SCOPE OF SERVICES TASK	UNIT PRICE	UNIT	FEE
Task 1 Drilling Activities				
	Project Coordination	\$115/hour	3	\$345
	Mobilization	\$2,485/mobilization	1	\$2,485
	Monitoring Well Installation	\$2,565/well	2	\$5,130
	Hand Augered Water Level Well Installation	\$650/Well	2	\$1,300
	Well Protection	\$470/well	4	\$1,880
Task 2	Monitoring Well Development and Low-Flow Equipment Installation		Lump Sum	\$815
Task 3	Survey Activities/DNR Reporting		Lump Sum	\$1,750
Task 4	Bracketing Sampling Event		Lump Sum	\$1,385
Total				\$15,090

Payment terms are to be followed as stated in the attached terms and conditions. Should conditions be encountered that require significant changes or an increase in the scope of work, we will contact you and proceed further only with your authorization, followed by a signed Change Order.

6.0 HEALTH AND SAFETY

This proposal assumes that Level D safety precautions are adequate and confined space entry is not required. Level D safety attire generally consists of a normal work uniform including safety shoes, hard-hat where required, and appropriate eye protection. The costs will be adjusted accordingly if site-specific conditions require more stringent health and safety procedures.

7.0 CONDITIONS

Items to be provided by the Client include the right-of-entry to conduct monitoring well modifications. The Client is responsible for making BARKER LEMAR aware of any restrictions or special requirements regarding the site and its required activities prior to the commencement of the fieldwork. We have enclosed our Terms and Conditions that should be considered part of this proposal.

CONFIRMATION OF NOTICE TO PROCEED

Proposal No. 195979

The above proposal and attached Terms and Conditions are understood and accepted.

BARKER LEMAR agrees to perform and complete the following Scope of Services for the Client at its facility located near Muscatine, Iowa.

The scope of services is described as monitoring well installation, sampling, and reporting as further defined in Section 2.0 in this proposal.

BARKER LEMAR agrees to perform the above scope of services for compensation estimated to be \$15,090. Our invoices will be submitted monthly and will reflect the percentage complete of each task for lump sum items, actual quantities for unit priced items, and actual labor and expense for other items as of the date of the invoice. The compensation for the proposed scope of services is valid for 60 days following the date of this proposal.

If this proposal meets with your approval, sign two originals of this Confirmation of Notice to Proceed, retain one original for Client files, and return one original or copy via email, fax to 515.256.0572, or U.S. mail to BARKER LEMAR ENGINEERING CONSULTANTS, 1801 Industrial Circle, West Des Moines, IA 50265.

If you have questions regarding any of the information above, please contact one of the authorized signers below at 515.256.8814, or 800.707.4248.

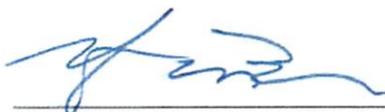
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BARKER LEMAR ENGINEERING CONSULTANTS

MUSCATINE COUNTY SOLID WASTE MANAGEMENT AGENCY



Lauren P. Norland, P.E.
Project Engineer
8/16/2019
lnorland@barkerlemar.com



Timothy C. Buelow, P.E.
Principal Engineer
8/16/19
tbuelow@barkerlemar.com

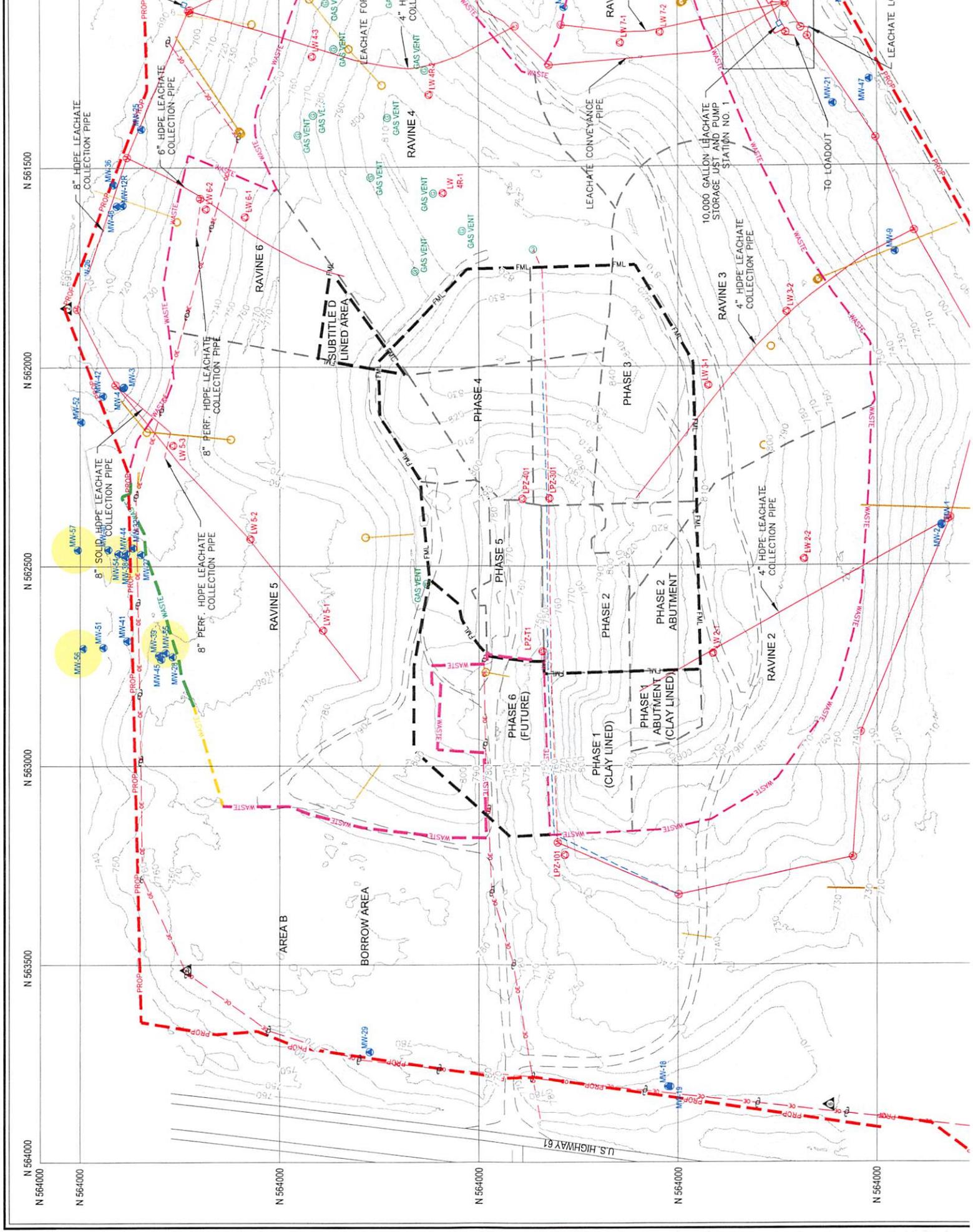
Dave Popp

Solid Waste Manager

Date:

dpopp@muscatineiowa.gov

Copies: Addressee (via email)
Electronic File



TERMS AND CONDITIONS

PAYMENT TERMS

Payment is due upon receipt of our invoice. If payment is not received within 30 days from the invoice date, Client agrees to pay a finance charge on the principal amount of the past due account of 1 ½% per month. If 1 ½% per month exceeds the maximum allowed by law; the charge shall automatically be reduced to the maximum legally allowable. In the event the Client requests termination of the services prior to completion, a termination charge in an amount not to exceed 30% of all charges incurred through the date services are stopped plus any shutdown costs may, at the discretion of Barker, Lemar & Associates, Inc., be made. If during the execution of the services, Barker, Lemar & Associates, Inc., is required to stop operations as a result of changes in the scope of services such as requested by the Client or requirements of third parties, additional charges will be applicable. Client is responsible for all cost of the collection of unpaid accounts, including reasonable attorney fees.

INSURANCE

Barker, Lemar & Associates, Inc. maintains Workers' Compensation and Employers Liability Insurance in conformance with applicable state law. In addition, we maintain Commercial General Liability Insurance with combined Single Bodily Injury and property damage limits of \$1,000,000 and Automobile Liability Insurance with combined Single Bodily Injury and property damage limits of \$1,000,000. A certificate of insurance can be supplied evidencing such coverage, which contains a clause providing that 10 days written notice be given prior to cancellation. Cost of the above coverage is included in our quoted fees. If additional coverage or increased limits of liability are required, Barker, Lemar & Associates, Inc. will endeavor to obtain the requested insurance and charge separately for costs associated with additional coverage or increased limits.

LIMITATION OF LIABILITY

In recognition of the relative risks and benefits of the Project to both the Client and Barker, Lemar & Associates, Inc., the risks have been allocated such that the Client agrees, to the fullest extent permitted by law, to limit the liability of Barker, Lemar & Associates, Inc. and Barker, Lemar & Associates, Inc.'s officers, directors, partners, employees, shareholders, owners and sub consultants for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorney's fees and costs and expert-witness fees and costs, so that the total aggregate liability of Barker, Lemar & Associates, Inc. and Barker, Lemar & Associates, Inc.'s officers, directors, partners, employees, shareholders, owners and sub consultants shall not exceed the applicable insurance coverage available at the time of settlement or judgment. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

Client agrees that Barker, Lemar & Associates, Inc.'s liability for any damage on account of any error, omission, or other professional negligence by Barker, Lemar & Associates, Inc. will be limited to a sum not to exceed \$50,000 or the amount presently due Barker, Lemar & Associates, Inc. for services rendered hereunder, whichever is greater.

Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the Client nor Barker, Lemar & Associates, Inc., their respective officers, directors, partners, employees, contractor or sub consultants shall be liable to the other or shall make any claim for any incidental, indirect or consequential damages arising out of or connected in any way to the Project or to this Agreement. The mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation and any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract and breach of strict or implied warranty. Both the Client and Barker, Lemar & Associates, Inc. shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and sub contracts with others involved in this project. Barker, Lemar & Associates, Inc. is not liable for consequential damages.

Barker, Lemar & Associates, Inc. shall not be responsible for any acts or omissions of the Contractor, any sub contractor, any entity performing any portions of the Work or any agents or employees of any of them. Barker, Lemar & Associates, Inc. does not guarantee the performance of the Contractor and shall not be responsible for the Contractor's failure to perform its Work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.

POLLUTION CLAIMS

Client hereby understands and agrees that Barker, Lemar & Associates, Inc. has not created nor contributed to the creation or existence of any or all types of hazardous or toxic wastes, materials, chemical compounds, or substances, or any other type of environmental hazard or pollution, whether latent or patent, at Client's premises, or in connection with or related to this project with respect to which Barker, Lemar & Associates, Inc. has been retained to provide professional engineering services. Barker, Lemar & Associates, Inc.'s total liability to Client resulting from any release or threatened release of any hazardous waste, substance, pollutant or contaminant, whether or not directly or indirectly generated by Barker, Lemar & Associates, Inc.'s performance of the work hereunder (including any injury to persons or property or death resulting therefrom), shall not exceed the amount due Barker, Lemar and Associates, Inc. for services rendered hereunder. This limitation applies to all liabilities, including indemnification liabilities, whether based on contract, tort (including negligence), and strict liability or otherwise. This limitation of liability does not in any way limit or affect Client's obligations to indemnify and hold Barker, Lemar & Associates, Inc., its owners, officers, directors, and employees harmless. This limitation of liability shall not apply to the extent it is held that the loss or damage arose from Barker, Lemar & Associates, Inc.'s gross negligence or intentional misconduct. In addition, Client agrees to limit Barker, Lemar & Associates, Inc.'s liability to the same extent that Client's liability is limited pursuant to its contract with its client (if one exists).

DOCUMENTS

Barker, Lemar & Associates, Inc.'s liability to Owner for any computer programs, software products, or related data furnished hereunder is limited solely to the correction of residual errors, minor maintenance, or update(s) as agreed. Barker, Lemar & Associates, Inc. makes no warranties of any kind, including any implied warranty of merchantability or of fitness for any particular purpose, or against infringement, with respect to computer programs, software products, related data, technical information, or technical assistance provided by Barker, Lemar & Associates, Inc. under this Agreement. In no event shall Barker, Lemar & Associates, Inc., its officers, agents, or employees be liable under or in connection with this Agreement under any theory of tort, contract, strict liability, negligence, or other legal or equitable theory for incidental or consequential damages relating to any computer programs, software products, or related data furnished hereunder.

STANDARD OF CARE

In providing services under this Agreement, Barker, Lemar & Associates, Inc. shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same or similar locality. Barker, Lemar & Associates, Inc. makes no warranty, express or implied, as to its professional services rendered under this Agreement.

RIGHT-OF-ENTRY

Unless otherwise agreed, Client will furnish right-of-entry on the property for Barker, Lemar & Associates Inc. to make the planned borings, surveys, tests, and/or explorations. Barker, Lemar & Associates Inc. will take reasonable precautions to limit damage to the property caused by our operations, but we have not included in our fee the cost of restoration of damage that may result. If Client desires Barker, Lemar & Associates Inc. to restore the property to its former condition, we will accomplish this, to the extent reasonably possible, and add the cost to the proposed fee.

SITE VISITS

Barker, Lemar & Associates, Inc. shall visit the site at intervals appropriate to the stage of construction, or as otherwise agreed to in writing by the Client and Barker, Lemar & Associates, Inc., in order to observe the progress and quality of the Work completed by the Contractor. Such visits and observation are not intended to be an exhaustive check or a detailed inspection of Barker, Lemar & Associates, Inc.'s work but rather are to allow the Consultant to become generally familiar with the Work in progress and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. Based on this general observation, Barker, Lemar & Associates, Inc. shall keep the Client informed about the progress of the Work and shall advise the Client about observed deficiencies in the Work.

If the Client desires more extensive project observation or full-time project representation, the Client shall request that such services be provided by Barker, Lemar & Associates, Inc. as Additional Services in accordance with the terms of this Agreement.

Barker, Lemar & Associates, Inc. shall not supervise, direct or have control over the Contractor's work nor have any responsibility for the construction means, methods, techniques, sequences or procedures selected neither by the Contractor nor for the Contractor's safety precautions or programs in connection with the Work. These rights and responsibilities are solely those of the Contractor in accordance with the Contract Documents.

SAMPLING OR TESTING OF LOCATION

The fees do not include costs associated with surveying of the site or the accurate horizontal and vertical locations of tests, unless otherwise specifically agreed to by the parties. Field test or boring locations described in Barker, Lemar & Associates, Inc.'s report contemplated by these Terms and Conditions or shown on sketches are based on specific information furnished by others or estimates made in the field by our technicians. Such dimensions, depths, or elevations should be considered as approximations unless otherwise stated in the reports contemplated by these Terms and Conditions.

The Client shall furnish, at the Client's expense, all information, requirements, reports, data, surveys and instructions required by this Agreement. Barker, Lemar & Associates, Inc. may use such information, requirements, reports, data, surveys and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. Barker, Lemar & Associates, Inc. shall not be held responsible for any errors or omissions that may arise as a result of erroneous or incomplete information provided by the Client and/or the Client's consultants and contractors.

SAMPLE DISPOSAL AGREEMENT

Unless otherwise requested, test specimens or samples will be disposed of immediately upon completion of tests unless otherwise regulatory required. Upon written request, Barker, Lemar & Associates, Inc. will retain test specimens or drilling samples for mutually acceptable storage charge and period of time.

DAMAGE TO EXISTING MAN-MADE OBJECTS

It shall be the responsibility of the Client or his duly authorized representative to disclose the presence and accurate location of all hidden or obscure man-made objects and underground utilities relative to field tests or boring locations. Barker, Lemar & Associates, Inc.'s field personnel are trained to recognize clearly identifiable stakes or markings in the field and without special written instruction to initiate field testing drilling and/or sampling within a reasonable distance of each designated location. If Barker, Lemar & Associates, Inc. is cautioned, advised, or given data in writing that reveal the presence or potential presence of underground or over ground obstructions, such as utilities, Barker, Lemar & Associates, Inc. will give special instructions to its field personnel. As evidenced by Client's acceptance of this proposal, Client agrees to indemnify and save harmless from all claims, suits, losses, personal injuries, death, and property liability resulting from unusual subsurface conditions or damages to subsurface structures, including utility lines, owned by Client or third parties, occurring in the performance of the proposed services, whose presence and, exact locations were not revealed to Barker, Lemar, & Associates, Inc. in writing, and to reimburse Barker, Lemar & Associates, Inc. for expenses in connection with any such claims or suits, including reasonable attorney fees.

DISPOSAL

Barker, Lemar & Associates, Inc. is not, and has no authority to act as, a handler, generator, operator, treated, storer, transporter or disposer of hazardous waste, substances, pollutants or contaminants found or identified at the site. Barker, Lemar & Associates, Inc. shall have no responsibility for the transportation, storage, treatment or disposition of contaminated or potentially contaminated waste materials of any kind, which are directly or indirectly generated from Barker, Lemar & Associates, Inc.'s performance of the work in accordance with these Terms and Conditions. Client shall be responsible for the disposal of any such waste materials.

SAFETY

Should Barker, Lemar & Associates, Inc. provide periodic observations or monitoring services at the job site during construction, Client agrees that in accordance with generally-accepted construction practices, the contractor will be solely and completely responsible for working conditions on the job site, including safety of all persons and property during the performance of the work and compliance with OSHA regulations, and that these requirements will apply continuously and not be limited to normal working hours. Any monitoring of the contractor's procedures conducted by Barker, Lemar & Associates, Inc. is not intended to include review of the adequacy of the contractor's safety measures in, on, adjacent to, or near the construction site.

CONSTRUCTION COST OPINIONS

Opinions of probable cost for the facilities considered and designed under this Agreement are prepared by Barker, Lemar & Associates, Inc. through exercise of its experience and judgment in applying presently available cost data, but it is recognized that Barker, Lemar & Associates, Inc. has no control over costs of labor and materials, or over the construction contractor's methods of determining prices, or over competitive bidding procedures, market conditions, and unknown field conditions so that Barker, Lemar & Associates, Inc. cannot and does not guarantee that proposals, bids, or the project construction costs will not vary from Barker, Lemar & Associates, Inc.'s opinion of probable construction costs.

OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, drawings, specifications, reports, boring logs, field notes, laboratory test data, calculations, and estimates, prepared by Barker, Lemar & Associates, Inc., are instruments of service pursuant to these Terms and Conditions and shall be the sole property of Barker, Lemar & Associates, Inc. Client agrees that all documents of any nature furnished to Client or Client's agents or designees, if not paid for, will be returned to Barker, Lemar & Associates Inc. upon demand and will not be used by Client for any purpose whatsoever. Client further agrees that under no circumstances shall any documents produced by Barker, Lemar & Associates Inc., pursuant to these Terms and Conditions, be used at any location or for any project not expressly provided for in these Terms and Conditions without the written permission of Barker, Lemar & Associates, Inc. At the request and expense of Client, Barker, Lemar & Associates, Inc. will provide Client with copies of documents created in the performance of the work for a period not exceeding five years following submission of the report contemplated by these Terms and Conditions.

SUCCESSORS AND ASSIGNS

All of the terms, conditions, and provisions hereof shall inure to the benefit of and are binding upon the parties hereto and their respective successors and assigns, provided, however, that no assignment of this Agreement shall be made without written consent of the parties of this Agreement.

SEVERABILITY

If any provision of this Agreement is declared invalid, illegal, or incapable of being enforced by any court of competent jurisdiction, all of the remaining provisions of this Agreement shall nevertheless continue in full force and effect, and no provision shall be deemed dependent upon any other provision unless so expressed herein.

WAIVER

Barker, Lemar & Associates, Inc.'s waiver of any term, condition, or breach of any term, condition, covenant, shall not constitute a waiver of any other term, condition, or covenant, or the breach thereof.

GOVERNING LAW

These Terms and Conditions shall be governed in all respects by the laws of the State of Iowa. Any litigation to be filed by either party to the contract shall be filed in Polk County, Iowa District Court or Federal Court for the Southern District of Iowa.

ENTIRE AGREEMENT

This Agreement, and its attachments, contains the entire understanding between Owner and Barker, Lemar & Associates, Inc. relating to professional engineering services. Any prior or contemporaneous agreements, promises, negotiations, or representations not expressly set forth herein are of no effect. Subsequent modifications or amendments to this Agreement shall be in writing and signed by the parties to this Agreement.